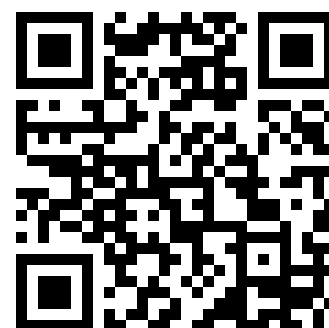
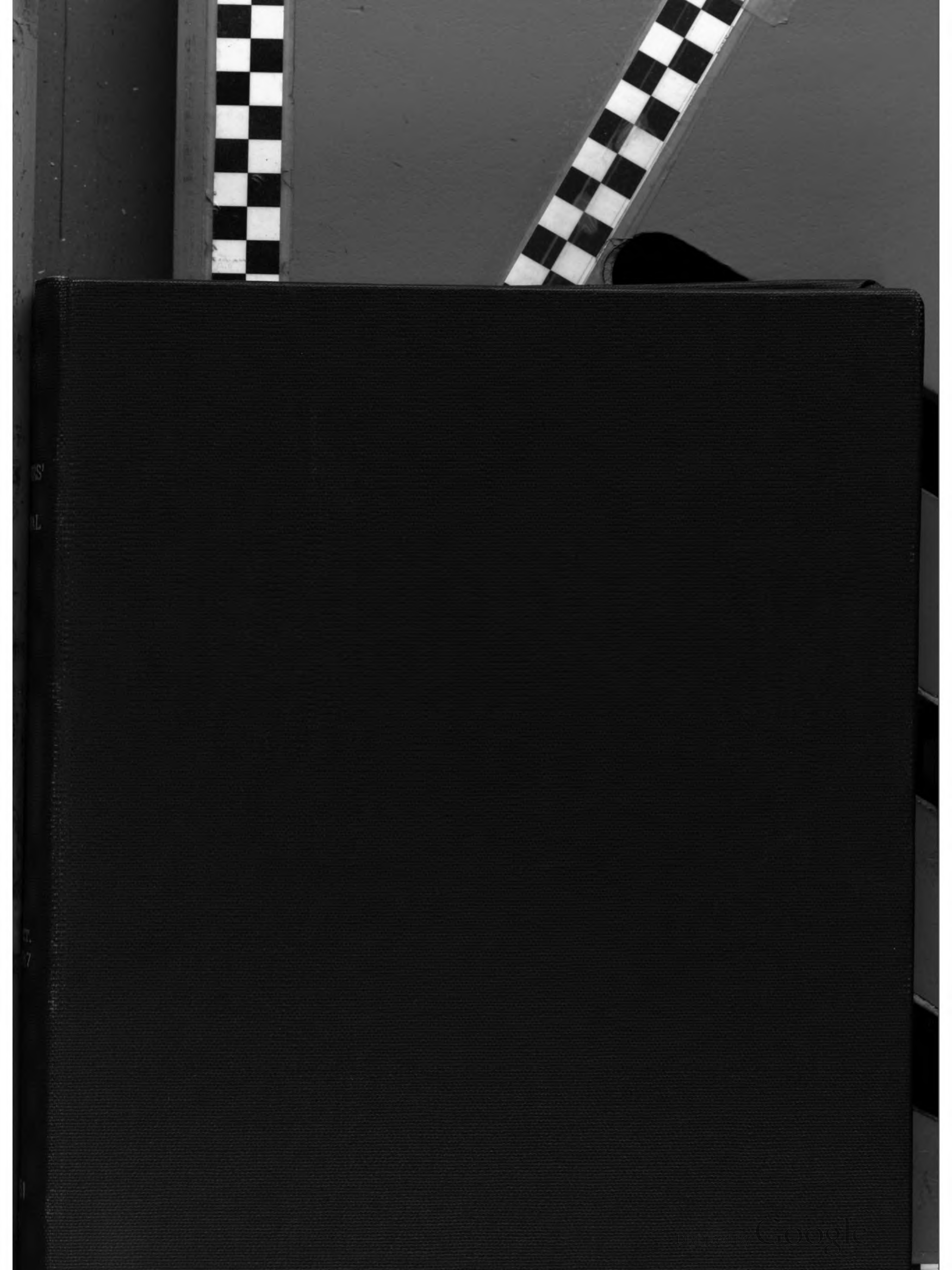

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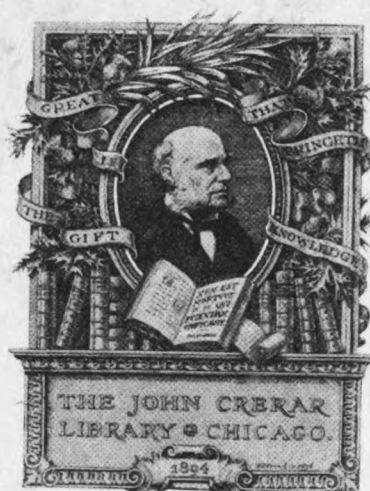






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THE BREWERS' JOURNAL

AND

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AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

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Our Forty-First Anniversary.

With this new volume THE BREWERS' JOURNAL enters upon the forty-first year of its successful work for the interests, welfare and development of the American brewing industry.

We have grown up with this important and civilizatory industry in this country. When this trade journal was founded by A. E. J. Tovey, forty years ago, the total output of the American breweries amounted to 9,159,654 barrels. Now it is over 60,000,000 barrels. It has increased more than six times. That its popularity, and with it its beneficent influence upon the economic, moral and social condition of the American people, has grown in a larger proportion than the population itself is attested by the fact that, forty years ago, the population of the United States was a little over 40,000,000, and to-day it exceeds 101,150,000. The population has been a little more than doubled.

The brewing industry of this country has also outdistanced that of all other countries. We are brewing more good and nutritive beer than any other country in this world.

This is a matter of congratulation for the American brewers as well as for THE BREWERS' JOURNAL, the trade paper which, in bona fide circulation, advertising, patronage and popularity, has outgrown all of its competitors, here and abroad.

That we shall continue to serve the trade as loyally and energetically as ever before goes without the saying.

With pride and our old-time vigor we go to work upon our forty-first volume, to assist our friends and fight their foes, whose number, although it has apparently increased of late, will, this we not only hope, but confidently expect, gradually decrease again with the enlightenment and education the trade and its journal are spreading among the American people.

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Use of Enzymes and Special Yeasts in Carbohydrate Analysis.

By A. W. DAVIS.

In investigating the carbohydrates present in plants it has been found necessary to adopt processes based on the use of special enzymes, or selective yeasts, instead of purely chemical methods, since this procedure enables the individual constituents of a complex mixture of carbohydrates to be estimated.

Estimation of Saccharose.—In the usual method, the presence of sodium acetate (from the use of lead acetate and sodium carbonate) adversely affects the inversion of the saccharose by dilute citric acid; and on this account the use of invertase is preferable. The invertase for this purpose is prepared by treating washed beer yeast with toluene in a bottle at 25–30° C., autolysis being complete in about a fortnight. The filtered liquid from this treatment forms a clear and highly active solution of invertase, free from maltase and zymase. The method of inversion adopted consists in treating a solution of the plant material under examination with a slight excess of basic lead acetate, precipitating the lead with sodium carbonate, diluting the solution to known volume (say 500 cc.), and taking 50 cc. for inversion. This is neutralized with sulphuric acid, and treated with 1 cc. of autolyzed yeast and a few drops of toluene. After standing 24 hours at 38° C. and filtering, the solution is treated with 5 to 10 cc. of alumina cream and made up to 100 cc. The reducing power is determined, gravimetrically or volumetrically (Ling method), and the rotatory power measured in a 400 mm. tube. The saccharose is calculated from the change of rotatory or reducing power, as usual. When only 1 cc. of the invertase solution is used, no correction for its optical activity or reducing power is necessary. When raffinose is present, the autolyzed yeast from top fermentation yeast converts this sugar into levulose and melibiase only, but the preparation from bottom yeasts also contains melibiase and converts the raffinose into levulose, galactose and dextrose.

Action of Basic Lead Acetate on Reducing Sugars.—Although it is generally considered that basic lead acetate precipitates reducing sugars when used in purifying and decolorizing sugar solutions containing such, the author attributes the loss sustained to be due to a transformation of the sugar by the alkaline lead solution, rather than to precipitation. In sugar analysis any considerable excess of basic lead acetate should be avoided, and in any case should be removed before the polarization readings are taken, since it combines with any reducing sugars present to form soluble lead compounds which have an entirely different rotation from the sugars themselves, especially in the case of levulose, the negative rotation of which may be rendered positive.

Estimation of Raffinose.—The polarimetric estimation of this sugar gives quite unreliable results, especially in presence of glutamic and aspartic acids and their amides. Bau, some 22 years ago, introduced a method of determining this sugar by means of the differential fermentative

power of top and bottom yeasts, the reducing and rotatory powers in both cases being determined, and the raffinose calculated from the difference. Kluyver has applied the same principle to the estimation of raffinose in complex mixtures of sugars. He measures the volume of carbon dioxide liberated by the action of different yeasts in a special eudiometer. Small quantities of material can be used, and the method is far more rapid than Bau's, the fermentation being complete in 60 hours. The yeasts employed at bottom yeast U (Berlin collection) and distillery yeast or Schizos-Pombe. The organisms free from melibiase always liberate a little over one-third more carbon dioxide than the bottom yeasts, possibly owing to the presence of a little emulsin in the former; but this does not interfere with the accuracy of the determination of raffinose. Although Lindner has shown that certain top yeasts contain melibiase, the author does not think there is any reason to fear that yeasts which are free from melibiase will ever produce this enzyme under cultural conditions. Hudson and Harding use preparations of autolysed yeasts for the determination of raffinose, measuring the differences between the two changes polarimetrically at 20° C. The method is accurate to within 0.03–0.07 per cent. (in the case of 1.5 per cent. of raffinose), and is therefore applicable for such materials as low grade beet sugars and molasses.

Estimation of Maltose.—This is impossible by the hydrolytic method with acid when saccharose or levulose is present, the use of maltose-free yeast being essential. Davis and Daish have found that every trace of dextrose, levulose, or saccharose can be completely eliminated by fermentation with either Sacch. marxianus, S. exiguus, or S. anomalous, the residual maltose (i. e., the whole originally present) being estimated by measuring the reducing power. Fifty cc. of the sugar solution (purified with basic lead, acetate, etc.), faintly acid to litmus, are treated with 5 cc. of yeast water. After sterilization by heat, the liquid is inoculated with a trace of maltose-free yeast and incubated at 25 deg. C. for three to four weeks. After treating the completely fermented solution with 5 cc. of alumina cream, boiling, filtering and washing till the filtrate measures 100 cc., an aliquot portion is tested for reducing power. For the yeasts to grow satisfactorily, all lead must first be removed with sodium carbonate and finally with hydrogen sulphide. When pentoses are present, a correction is necessary, which is obtained by fermenting out the maltose in a check experiment with pure ordinary yeast, and determining the pentoses left.

Kluyver estimates maltose in presence of other sugars by the same gasometric method as employed for raffinose, the organisms employed being special yeasts and torulae, e. g., bottom yeast U, ordinary press yeast, *Torula datila* and *T. monosa*. When applied to raffinose, cane sugar and monoses, the difference between the results with the first two yeasts gives the raffinose, the cane sugar being estimated from the volume of gas given by *T. datila* (after allowing for the raffinose), whilst *T. monosa* ferments only such hexoses as are present. Bertrand and others have found that *Bac. acidi lactici* Massol converts hexoses into

lactic acid, but only acts on one of the disaccharides lactose in this way. Saccharose and maltose being unattacked, Margaillan has suggested that this organism should be used to separate cane sugar from lactose and *d*-glucose; and Testoni has worked out on this principle a method for estimating cane sugar in condensed milk, etc.

Estimation of Starch.—The modified Sachsse method, in which the starch is hydrolysed with boiling acid is useless for plant materials containing pentosans, hemicelluloses and other which yield reducing sugars that count as dextrose. The author recommends taka-diastase, the dry material (freed from sugars, gums, amylans, etc), is gelatinized with 200 cc. of water by heating for half an hour on the boiling water bath. After cooling to 38 degrees C., 0.1 gm. of taka-diastase is added, with 2 cc. of toluene, and left for 24 hours for conversion, the diastase being then destroyed by heating in a boiling water bath. The solution is filtered and the residue washed by decantation until the liquid measures about 475 cc., the tannins, etc., present being thrown down with basic lead acetate (5.25 cc.), any large excess being avoided. The solution is made up to 500 cc., 100 cc. of this being taken, freed from lead by sodium carbonate and made up to 100 cc. at 15 deg. C. Fifty cc. of this are used for the reduction, and another portion is polarized in a 400 mm. tube.

The method of Ewers, which is used for determining starch in brewers' materials, is subject to the disadvantage that the hydrochloric acid breaks down pentosans and hemicelluloses having a dextro rotation, these then counting as starch. The method also gives higher starch values for wheat and other grains than are furnished by the diastase method, and is therefore untrustworthy for the determination of the true starch present.—("Journal of the Society of Chemical Industry.")

ELECTRICAL EFFECTS ACCOMPANYING THE DECOMPOSITION OF ORGANIC COMPOUNDS. M. C. Potter some years ago showed experimentally that the disintegration of organic compounds by micro-organisms is accompanied by the liberation of electrical energy. The instances studied were the action of yeast on dextrose, the hydrolysis of cane sugar by invertase and by sulphuric acid, the hydrolysis of starch by diastase, and the growth of *B. Coli* in a nutrient medium. A special type of galvanic cell with platinum electrodes was employed to investigate the difference of potential; the electrical charges set free in the vital processes were collected and transferred to a condenser. The charge corresponded to an E.M.F. of 0.3 to 0.5 volt between the fermenting and non-fermenting fluids or during hydrolysis. The electrical effects measured express the activity of the micro-organism or enzyme; they are influenced by temperature, concentration of food, and the number of organisms present, and they only take place between the limits of temperature favorable to enzymic activity. A voltage of the order of 0.3 to 0.5 was never exceeded in any of the experiments. In further experiments the author finds that a metal plate suspended above a fermenting solution of commercial glucose and charged to a potential of 110 or 220 volts is slowly discharged by the fermenting gases, whether its original charge was positive or negative. The author concludes that the carbon dioxide evolved during fermentation of glucose by yeast carries both positive and negative ions. It is also suggested that the gases produced during the putrefaction of organic matter are ionised, and the ionisation of the atmosphere may be due in part to the presence of such gases escaping from the soil and water.—("Pres. Royal Society.")

The Work of a Brewery Cooperage.

From a paper read at a meeting of the London Section of the Institute of Brewing,

by H. C. SWEATMAN.

(Continued from page 469.)

Having got your cask, the first question is "seasoning" or (otherwise) preparing it for use, and, if you will pardon me, I will again refer to the meeting of November, 1906. The Chairman that evening said, after recounting the many and various methods recommended, "he wished the question of cask seasoning could be put on something like an intelligent basis, and for some expert to come along and point out the happy medium." I do not claim to be the long-wished-for unhappy expert, for the impossibility of treating all kinds of oak in the same way is apparent to any cooper of average intelligence, but I will endeavor to give you the method adopted more than 26 years ago in the cooperage where I have been for that number of years so happily engaged, and which method has not a failure recorded against it, either with new casks or repairs. During that period, something like a million new casks and repairs have been treated.

Our plan is to use a 10 per cent. solution of commercial alkali at the rate of 1½ gallons per barrel, the casks being filled up with hot liquor at a temperature of not less than 180° F. We allow the filled casks to lie—new ones for at least 12 hours, repairs 7 to 8 hours—then drain off and refill; 5 to 6 hours will be sufficient for the second liquor. When drained, cold and dry, and the hoops well driven, they will be ready to fill, preferably with running beers first.

The life of a cask will depend on:—(a) The quality of the material used in the manufacture, the workmanship in the making in the first instance, and afterwards in repairing. It is quite as needful to have your casks well and substantially repaired as to have them well made. (b) The particular class of trade it is used for. (c) The care exercised by customers in corking and shiving as soon as empty and in. (d) Handling generally, and storing.

The tendency of transportation men is to consider empties of no value, and treat them accordingly. A question I have frequently asked is, "Would you treat casks in that way if they were your own?" and the answer is invariably "No, sir."

For some years our brewery has been in a state of transition. Extensions, curtailments, and re-arrangements have been the order of the day. The object has been to devise means whereby the work can be done economically and efficiently. We do not claim that ours is the best system and should be adopted by all and sundry, but we do claim that it has proved to be eminently suited to the requirements of our particular class of trade, the position of the brewery, and the restrictions imposed by the Local Authorities.

I have great sympathy with some of the brewery coopers in various large cities in the North whom I have been privileged to meet, and who, during a tour made in the autumn of 1911, gave me every facility to see by what methods and economics, with restricted and often very inconvenient premises, they endeavor to fulfil the demands of their respective employers, whilst others in country districts, with almost unlimited space, have frequently said to me, when looking over our cooperage arrangements, "How on earth do you do it?"

Let me then describe how it is done; 3,000 casks per day received and treated is quite an ordinary occurrence, and with our present plant we could manage, in ordinary working hours, 4,500.

Our drays returning from customers, railway depots, shipping wharves and bottling stores draw in alongside a raised staging or bank, where a checking clerk is ready to receive and check the empties. This staging, being on a level with the bed of the drays and wagons, has been the means of very considerably reducing the cost of our repairs. Our drays, being without sides, are able to unload overside without having to back in, a process so dearly loved by the average drayman.

It is surprising how quickly the operation is performed; four drays can draw in, unload, and make room for four more in $2\frac{3}{4}$ minutes.

Our washing shed and apparatus have been designed to do the work quickly and efficiently, at the same time without an expensive water cooling plant, which is often a necessity where large quantities of hot liquor have to be disposed of to bring it down to the limit allowed by the local bye-laws; that end is gained by the quantity of cold liquor used in the process.

As soon as the casks arrive at the washing shed the tap corks and shives are removed; they are then placed bung down on a stillion or thrawl and rinsed with cold liquor through the tap hole, by means of a specially designed sprayer. The casks are then rolled along the stillion, the heads and outsides mopped, and then placed over steaming nozzles. Our steaming nozzles have also been specially designed, and are automatic in action. After steaming for a few minutes, the casks are then rolled under hot liquor taps, where they are partly filled, and, after being bunged up, are allowed to lie for from one to three hours, according to the weather and the condition in which they arrive at the brewery. After draining, they are stowed up to cool and dry, ready for the next day's racking.

The object of steaming before liquoring is not only, or in particular, for the purpose of sterilisation, but to warm the cask so that the full benefit of the hot liquor may be utilized, allowing the latter to remain in the cask long enough to dissolve (and not bake on) all sediment left.

Casks taken from stock, that is, those that have been stowed away for two or three months, or longer, without washing, are filled with hot liquor to which $\frac{1}{2}$ to 1 gallon of 10 per cent. solution of alkali per barrel is added, and left to soak for some hours, and are afterwards passed through the same process as fresh casks.

When required for the racking-room every cask is examined by a cooper and corked up; it is then passed on to a "smeller," who, after smelling, examines the inside with a light and removes any corks that may be left in, and, if in good condition, it is then ready to be sent to the cellar for filling. Electrically driven lowering machines, capable of taking 500—600 casks per hour, are provided for this purpose.

The casks rejected amount to about 10 per cent. of those washed, and include wet, dirty, foul, acid, stinkers, and those which require repairing. The wet and dirty ones are returned to the washers to be put through the same process again, the acid and foul to be scrubbed, steamed, treated with alkali, or put through machines as may be deemed best, and the stinkers, of which fortunately we have very few, sold or burned. The repairs are sent by lift to an upper floor, where our coopers' shops are situated.

Surplus casks not required for present use are stowed, after being corked and shived, as near the washing shed as possible. It often happens, after a holiday trade, we have a much larger surplus than can be left in the yard; these are removed to any storage room that may be available, and, if put into a cool dry place in fairly dry weather, will keep

without any preservative for several years, a little extra acidity only being the result.

Stinkers.—A stinking cask, requires some definition, as it is a common practice to call anything foul a stinker. In my opinion, a "stinker" is a cask more or less in a state of decay, caused, as we all know, by neglect and exposure. My experience of stinking casks goes back to 1870-71, when I had several months shaving out stinkers preparatory to treatment with carbon enamel. In shaving, I found that very frequently only the bottom or back head and an inch or two of the staves were affected, but in most cases the decay had penetrated the softer tissues of the wood nearly through the whole thickness of the stave. Is it possible to cure this; can rotten wood be made whole? was the question which came uppermost to my mind, and I came to the conclusion that in any case the cask could only be restored to its work temporarily, as no amount of doctoring or covering up could make it sound again, and it is not worth the trouble; there is no economy in it, and the only course to take is to dispose of them to the best advantage or burn them out of the way.

It is claimed by some, and in a general sense it is true, that prevention is better than cure, and enthusiastic "fad-dists and patentees" will tell you that by their particular means of prevention of cure, mustiness, fustiness, mouldiness, rottenness, and all the other ills the cask is heir to will be a thing of the past, the expense of washing will be nearly done away with, and the cask will be absolutely perfect for all purposes. My experience runs counter to most of their assertions. I will only say that unless you are careful you may find yourselves let in for a much larger expense in the end.

"Beware, then, of the enthusiasm of inventors and patentees, and the vendors of cure-alls."

General.—With regard to making the best use of your premises and arranging every process so that the most of the work can be accomplished in a given time, it is surprising how much can be done with a certain amount of forethought and a thorough knowledge of every detail of your work; for instance, a difference in the levels of your flooring may be a means of saving labor. We have endeavored to do this in arranging our cooperage yard and washing plant. From the time our casks leave the drays, until the washing is completed, we are able to take advantage of having them deposited on the staging 4 feet above the general yard levels, and throughout the whole process the casks are, to a certain extent, inclined to follow their natural tendency to roll. Even in this, a very considerable improvement could have been obtained if the whole site had been available from the first. Very much, of course, will depend on whether your floor space is in one large area, or cut up into numerous small ones with intervening walls, columns and pillars; in every case, the aim should be to make your whole process continuous.

One thing I think of supreme importance in the management of a brewery cooperage, and that is, no casks should be allowed to stand about, without prompt attention; any surplus should be stored as soon as possible, thereby saving a vast amount of time and anxiety.

Your coopers' shop should be in the most convenient place, where supervision can be easily given, and with proper and sufficient room for the storage of materials; needless to say, every part should be well lighted.

Your staff must be the best procurable; you all know quite well the advantage of this. Harmonious working also should be insisted on between various sections.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

September 15th to October 15th.

The total number of samples analyzed and reported upon during the month was 918. These samples are classified as follows:

Barley	5	0.5%
Malt	161	17.6%
Unmalted cereals and sugar.....	44	4.7%
Colorants	6	0.7%
Hops	12	1.3%
Grains	2	0.2%
Waters	10	1.1%
Worts	55	5.9%
Yeasts	227	24.7%
Ales and beers.....	321	35.1%
Temperance beverages	15	1.6%
Coals and ashes.....	28	3.1%
Miscellaneous	32	3.5%

918

Barleys.

The malting barleys of this year's crop submitted for examination were Minnesota, Wisconsin and South Dakota. While some are rather lean and their berries show an uneven development, the Wisconsin sample was superior in general. The bushel weight could be determined only of one sample, and this was found to be 44½ lbs.

The germinating capacity varied from 89% to 99%, with an average of 95%. The 1000-kernel weight, calculated on dry basis, ranges from 20 grammes to 26 grammes, the latter being the Wisconsin type.

Malts.

Of 161 samples analyzed, 159 were Barley Malts, one sample of Malted Oats, and one sample of Caramel Malt.

The Barley Malts show a better yield of extract than for the last period reported; while the lowest yield, 66.6%, was lower than previously, the average yield of 69.7% was almost 1% higher; the highest yield was 71.6%.

The amount of moisture shows a slight decrease; the average being 4.76%; the lowest and highest being 2.80% and 9.30% respectively.

In regard to growth of acrospire and mellowness, this month's Malts were inferior to last month's; the total number of samples criticized from this point of view was 12, of which 4 showed a degree of mellowness below 80%. One sample of Malted Oats yielded 53.6% of extract and was generally satisfactory. The sample of Caramel Malt was of excellent quality in every particular.

Malt Adjuncts.

Forty-four samples were analyzed; of these 42 were unmalted cereals, namely:

Corn grits	18
Corn meal	15
Refined grits	9
Brewing sugars	2

One sample of Corn Grits was so mouldy that it was considered unfit for use; one sample contained an excessive

amount of moisture, 16%; the remaining 16 samples were entirely satisfactory.

The Meal samples showed abnormally high percentages of oil, which in 8 samples exceeded 2%.

The samples of Refined Grits were generally satisfactory, although one sample showed an excessive amount of moisture.

One sample of 70 Sugar and one of 80 Sugar were quite satisfactory. It is very significant to note in this department the complete absence of Rice samples, emphasizing the scarcity of this brewing material.

Colorants.

Six samples of Sugar and Malt Color were tested, and found satisfactory for the purposes indicated.

Hops.

As the new crops are being marketed, the number of samples are steadily increasing. Of the 12 samples received, 9 were 1916 Pacifics, all of satisfactory quality, the only criticism being a rather careless picking.

One sample was 1915 Pacifics of fair quality, while two samples were from older crops, both containing a considerable percentage of mouldy cones.

Grains.

Two samples of Wet Grains were analyzed. Their composition was entirely satisfactory, proving a proper extraction of the brewing materials.

Waters.

All samples of Water were examined as to their biological purity and fitness for cleaning and washing purposes; 4 samples were also subjected to a complete chemical analysis in order to determine their suitability for mashing and boiler feeding purposes.

Worts.

Fifty samples of Lagerbeer Wort and 5 samples of Ale Wort were submitted for analysis. Two samples were also examined biologically in order to ascertain the sanitary conditions during cooling operations.

Yeasts.

Fifty-two samples of Ale Yeasts were examined; with the exception of one sample, which contained an excessive amount of lactic acid ferments, they were all satisfactory. Of a total number of 165 Lager Beer Yeasts, 12 samples were pure culture yeasts; these were all entirely free from infection with a characteristic clean flavor and excellent fermenting power.

Eleven samples of brewery yeast were contaminated by *Sarcina* and *Saccharobacillus Pastorianus* above the permissible limits; the remaining 151 samples were satisfactory in health, purity and development of their cells.

Ales and Beers.

Of the total number of samples received, 124 consisted of Ale and Porter; 13 samples were pasteurized, of which one showed metal turbidity; 1 sample was deteriorated by various secondary yeasts and *Saccharobacillus Pastorianus*.

Fifty-two samples of Ale and Porter were subjected to a complete chemical analysis, showing an average original gravity of 13.9° Balling, and an alcohol content of 4.47% by weight, or 5.59% by volume. A total of 197 Lager Beers were examined in the chemical as well as biological laboratories. Nineteen samples were pasteurized; of these two showed a decided turbidity due to metal-albuminates. Two samples were considerably infected by wild yeasts and *sarcina*.

A complete chemical analysis was made of 69 samples, showing an average original gravity of 12.6° Balling, with an alcohol content of 3.56% by weight, or 4.45% by volume.

Temperance Beverages.

All samples, with the exception of one, were pasteurized. The samples received were classified as follows:

Temperance ale	4
Temperance beer	11

The original gravity of all samples averages about 6° Balling, and the alcohol content 0.64% by weight, or 0.78% by volume. The lowest amount of alcohol was 0.32%, and the highest 0.96% by volume.

Coals and Ashes.

The fuel laboratory received 27 samples of Coal and 1 sample of Ash. The Coals were all of the semi-bituminous character. Twelve samples showed excessive amounts of ash and a proportionately low heating value.

Miscellaneous.

The 32 samples reported under this heading were classified as follows:

Filtermass	7
Soaking solution	6
Ginger beer	5
Cider (fermented)	3
Cleansers	3
Pitch	2
Lime	1
Varnish	1
Disinfectant	1
Gypsum	1
Crown Seals	1
Wine residue	1

THE SOLDERING OF ALUMINIUM. Numerous mysterious mixtures have been advertised for the so-called soldering of this metal. In nearly every case the result is that, while fairly satisfactory for a short time, the join failed after a time, varying from a few days to some months. One of the most severe tests to which such joins in aluminium can be subjected is that of warm steam. Joins which look well and are apparently mechanically strong, fail rapidly when submitted to this test. In all soldering it is obvious that the flux used must efficiently clean the surfaces of the metals to be joined, otherwise no alloying of the solder used with the surfaces is possible. In the case of aluminium very few materials adapted for such fluxes are available, the requirement being that they shall absorb oxide of aluminium. Another detail of importance is the great heat conductivity of the metal. A consideration of the results obtained with all the so-called solders of aluminium shows that the metal is so susceptible to electrical action and oxidation that the use of any metal in which aluminium itself does not preponderate is hopeless. The best results have invariably been obtained when the solder was of the same composition as the material to be joined. This condition involves the principle of autogenous soldering. The best flux used is a mixture of alkaline aluminium chloride, with the addition of fluorides, such as potassium fluoride or calcium fluoride. When these are mixed in suitable proportions and damped with alcohol, and heated on a strip of aluminium, the surface of the metal is cleaned perfectly. It therefore follows that if two surfaces of aluminium are so cleaned, and an alloy containing a high percentage of aluminium, with such addition of other melted metal as will reduce its melting point slightly below that of pure aluminium, applied with the flux named, that a very satisfactory join will be obtained. The heat such as from a spirit-lamp or bunsen burner must, however, be applied from below the work. Joins so made over a spirit-lamp have stood every test, including that of the steam test.—("Journal of the Operative Brewers' Guild.")

Alcohol and Aldehyde Content of Yeasts Changed by Storage and Autolysis.*

By CARL NEUBERG and ERWIN SCHWENK.

Modern Chemistry attributes an important part to acetaldehyde as an intermediary product appearing during the course of alcoholic fermentation. It therefore is of value to the brewers to know something about the presence and action of acetaldehyde in yeasts and yeast preparations.

As it has been shown that under the influence of yeasts in various conditions acetaldehyde and yeasts may be transformed into each other, an investigation in regard to acetaldehyde in yeasts and the amounts in which it is present can only be conducted when the behavior of ethyl alcohol in the presence of acetaldehyde is considered.

Neuberg and Kerb have found that the commercial pressed yeasts always contain alcohol, generally 0.8 to 0.9 per cent.

But E. Buchner, K. Langhelfm and G. Skraup have demonstrated that the formation of acetaldehyde as reported by Kostyschew was due only to a secondary oxydation of alcohol.

However, we cannot agree with the supposition that the presence of acetaldehyde in yeasts is always due to oxydation by atmospheric oxygen, be it through the cooperation of oxydases or without them. C. Neuberg and Joh. Kerb have demonstrated that acetaldehyde is formed under aerobic conditions and their evidence proving the fact that oxygen was absent, is as follows:

Fresh yeasts never contain any acetaldehyde and from yeasts having absorbed acetaldehyde while in storage the acetaldehyde content may be readily eliminated by washing with water and subsequent centrifuging.

When living yeasts which have not been thoroughly washed are kept in air-proof packages at 5° to 10° C., their acetaldehyde and alcohol contents are steadily increasing.

During the autolysis of fresh yeasts and of dry yeasts in water saturated with carbonic acid, the content of acetaldehyde also increases.

GALACTOBIOSE. At a recent meeting of the Academie des Sciences, Paris, a communication was made on the researches of Bourquelot and Aubry, which resulted in the biochemical synthesis of a new sugar of the saccharose group. The sugar-galactobiose was prepared by the action of emulsin on a concentrated aqueous solution of galactose for several months at ordinary temperature, the effect being to combine two molecules of the sugar in a similar manner to lactose.

THE QUALITY OF MALT fluctuates in every season. But the careful maltster can produce good malt even from inferior barley. Increased care and attention are necessary in connection with prolonged sweating and cleansing and grading of barley, for these influences, prior to storage, constitute the preliminary essential. The service of compressed air is well worth attention in connection with steeping, while the question of liquor temperature and its bearing upon the duration of the steep is far too frequently ignored. If attention be given to all these preliminary points, and a slow cool floor insisted upon, we contend that the modification of barley extract by vegetative influence would be much more satisfactory than is commonly the case, while if skilful kiln-drying and curing follow, the maltster is able to hand over to his customers distinctly useful brewing material, carrying modified albumens in a form admitting of easy assimilation by yeast.

* "Wochenschrift für Brauerei."

Aluminium.*

By H. VUYLSTEKE.

Recently I have been engaged on a critical study of various metals and materials used by brewers. My investigations have led me to inquire very closely into the properties of aluminium and its suitability for brewing purposes, and, in view of the comparative lack of definite information on this metal existing amongst brewers, I propose in the following notes to communicate the result of my inquiries. Before doing so I propose to give a very short history of the metal, as I find that many brewers are uninformed on this part of the subject.

Comparatively speaking, aluminium is a very young metal, as it was only studied and classified in the sixteenth century. However, the search for aluminium only truly began in 1754 with the work of Margraff, Macquer and Baron. The latter, who was a professor of chemistry in Paris, communicated a memoir on his attempts to isolate aluminium in the year 1760. Berzelius in 1809, Sulliman in 1813, Oersted in 1824, and Sir Humphry Davy in 1825, all attempted to solve the aluminium problem, but it was not until 1827 that Frederic Wöhler, professor at the University of Göttingen, first obtained from clay a gray metallic powder which was finely divided metallic aluminium. In 1845 Wöhler obtained the metal in the form of small malleable beads on which he was able to determine the principal properties of the metal. It was, however, H. St. Claire Deville, at that time professor of chemistry at the Ecole Normale of Paris, to whom the honor belongs of having isolated aluminium in the state of almost perfect purity in 1854. If it is true that Wöhler was the discoverer of aluminium it is equally true that Deville was the founder of the aluminium industry, and we have the best proof of this fact in the paper which he read before the Academy on February 6th, 1854, and which was entitled "Aluminium and Its Chemical Composition." Later in the same year Deville read a second paper before the Academy describing his electrolytic methods of preparation, and he showed several ingots of the metal and informed the Academy that he had caused a medal of aluminium to be struck which he had presented to the French Emperor, Napoleon III. Therefore we are correct in stating that the commercial metal aluminium was really born in 1854, and that from this date the aluminium industry began. A factory was equipped at Rouen and the first metal put upon the market in 1855, when it sold for £40 per kilogram. Technical improvements were rapidly introduced and only a year later the price came down to £12 per kilo. Deville truly perceived the future which lay before the metal he had been instrumental in giving to the world when he wrote in September, 1859: "As to the place which aluminium may occupy in our daily life that will depend upon the estimation of the public and its commercial price." What was scientific curiosity as recently as 1854 had in 1914 become one of the most important industrial metals in common use. The part it has played since then can scarcely be estimated at the present time. Having in the foregoing lines given a very short account of the history of aluminium I will now pass on to a few of the most important physical properties of the metal.

Color.—The color of aluminium is now well known to be a metallic white, next approaching in lustre and appearance to silver. An important point is that all the salts and compounds of aluminium are also white so that aluminium is never responsible for any discoloration as is the case with almost all other metals in use.

Hardness.—Pure aluminium estimated on Mohs' scale of hardness would show 2.5. The presence of impurities rapidly increases the hardness, as also does cold drawing or rolling, in fact by suitable mechanical treatment the hardness may be increased almost to that of brass.

Atomic Weight.—Very wide differences occur in the figures given for the atomic weight of aluminium. This is probably due to the variation in the samples experimented on by various workers. The figure adopted by the International Commission is 26.9.

Fusibility.—Aluminium melts at the comparatively low temperature of 657° Centigrade, equivalent to 1,214° Fahrenheit. Although the melting point is lower than that of many other metals, aluminium is distinguished by the fact that it is not easily burnt. Therefore up to the temperature at which it loses cohesion no wastage of the metal takes place as is the case with both iron and copper. Even very long exposure to furnace gases does not affect aluminium provided that the temperature of the metal does not approach melting point.

Odor.—Aluminium is both odorless and tasteless. To this is ascribed the importance which the metal has obtained in the production of all types of foodstuffs, because materials prepared, carried, or stored in aluminium do not acquire any metallic taste or objectionable odor.

Malleability.—The malleability of aluminium is extremely high, and in fact the metal stands next to gold in this respect. To this is due the fact that aluminium can so readily be shaped to suit the most divergent requirements. With proper treatment it can be hammered, rolled, spun, or pressed with great facility.

Expansion by Heat.—In this respect aluminium is a difficult metal to deal with, because the expansion due to rise in temperature is very much larger than that of other metals. This fact has to be carefully borne in mind in designing all aluminium vessels especially where steel or structures of other metal are used in conjunction with aluminium. Fezeau states that a bar of aluminium 1 foot long at 0° C. would be 1.00222 feet long at 100° C.

Specific Heat.—The specific heat of aluminium is high, and is given by Tilden as 0.2189. This means that a considerable amount of heat is required to melt aluminium or conversely that hot aluminium takes a long time to cool.

Thermal Conductivity.—Professor Carhart, of the University of Michigan, has determined the thermal conductivity of aluminium when annealed as 38.87. Lees has compared the thermal conductivity of aluminium with that of silver and finds the conductivity of aluminium as 51.7 if that of silver is taken at 100. From this it follows that with the exception of copper, aluminium is the best heat conductor amongst the common metals.

Galvanic Action.—Aluminium being the most electro positive of the metals used in the industries is the one to suffer corrosion if galvanic action takes place. Therefore in breweries it is necessary to protect aluminium from contact with other metals.

These are the most important physical properties as applied to the use of aluminium in breweries.

I will now treat of the chemical properties in the same way.

Action of Air.—Dry air has absolutely no action on aluminium. Professor Carhart has recorded the fact that beams of balances, weights, sheets, etc., of the metal exposed for months to air even containing sulphur vapors show no trace of alteration. Damp air causes the growth of a protective film on the surface of the metal, which, whilst it does not seriously affect the life of the metal, should in the

* London "Brewing Trade Review."

case of brewery plant be prevented, because the surface thus coated becomes rough and consequently not so clean as the bare surface of the metal. Therefore the outsides of vessels which are not in contact with liquids and which may be subject to the damp air of a brewery should be protected by some coating such as a good varnish or suitable paint.

Action of Water.—Soft or distilled water has no action on aluminium either at ordinary temperature or at 100° C., or even at a temperature bordering on the melting point of the metal. Hard waters alone are bad for aluminium, but this does not apply to the case of wort or beer made with hard waters, because it is the alkaline constituents of hard waters which cause trouble, and these are always more than neutralized by the slight action of the other ingredients of the wort. Aluminium should not be used for the storage of hard waters alone.

Sulphurous acid and sulphuretted hydrogen are without any action on aluminium.

Nitric acid, whether weak or concentrated, does not attack aluminium at ordinary temperatures. Consequently this material is one of the most suitable with which to clean aluminium vessels.

Hydrochloric acid whether hot or cold, concentrated or dilute, attacks aluminium very rapidly, and the metal must in no circumstances be brought in contact with this material.

Fatty Acids.—Of all the common metals aluminium is the least attacked by the higher fatty acids of which the bulk of the vegetable and animal oils is composed. Some of the lower acids, such as acetic acid, do attack aluminium, but in a very slight degree, and as a consequence the naturally occurring organic acids have from a practical point of view no effect on aluminium containers. Tartaric acid, as Paul Morin found, has also no effect on aluminium at ordinary temperatures.

Sodium Chloride.—Common salt does not when molten corrode aluminium, but a solution of common salt does act on the metal especially in the presence of air.

Caustic Alkalis.—Solutions of caustic potash or caustic soda act with great energy on aluminium. Mallet found that whilst pure aluminium resists the action of alkalis better than commercial metal, yet even the purest metal obtainable is attacked. Consequently aluminium must not be treated with caustic alkalis in the same way as some other metals are.

Salts of Aluminium.—Morin is also responsible for the statement, which has been confirmed by a large number of investigators, that the salts of aluminium are absolutely without effect on the human body, so that even in those cases where the metal passes into solution no danger is to be expected from the consumption of such solutions. This is the basis of the use to which aluminium has been put in the manufacture of household and culinary articles. In the early days of the industry Professor G. Lunge, of Zurich, assisted by E. Schmidt, made a most careful and scientific examination of the application of aluminium to such purposes. Ordinary commercial sheet aluminium of which the purity was found by analysis to be 99.2 was cut into strips of a definite size and these were immersed for six days in the various liquids at ordinary temperatures. The following results were obtained showing the weight dissolved per day in milligrammes per square metre of surface exposed:—

Ordinary claret.....	47.3
Ordinary hock.....	51.2
Brandy	18.0

Pure alcohol 50 per cent.....	10.2
Tartaric acid 5 per cent.....	28.2
Tartaric acid 1 per cent.....	43.0
Acetic acid 5 per cent.....	64.2
Acetic acid 1 per cent.....	73.0
Lactic acid 5 per cent.....	79.5
Butyric acid 5 per cent.....	21.8
Salicylic acid ¼ per cent. solution.....	105.8
Tea (hot).....	nil
Beer	nil

It was on the results of these experiments that the German Ministry of War subsequently adopted the use of aluminium for military canteens and equipment.

I should like now to give my views as to the use of aluminium for brewery plant. Before doing so I should like to draw attention to a paper by A. Chaston Chapman, entitled "An Investigation of Aluminium with Special Reference to its Suitability for the construction of Brewery Plant." I should recommend all brewers to read this remarkable paper, when they will, I am certain, come to the same conclusion as I have done, that aluminium is a metal which in future will be very largely used for brewery plant.

As a result of my critical study of this metal I was not surprised to read in a book by Moissonier, published in 1903, "Aluminium is therefore the metal of the future, and that future promises to be very brilliant as Wickersheim foretold as early as 1886."

At the normal price of 3 frs. per kilo as it was in 1914 before the war aluminium owing to its light weight is equivalent to copper or tin at 1 fr. per kilo. It must also be remembered that aluminium is a metal that requires no tinning, enamelling or, with regard to the surfaces exposed to liquids, painting, and when scrapped old aluminium will, like copper, fetch in the neighborhood of 50 per cent. of the original value of the plant. Therefore I hold that aluminium of sufficient purity, say of about 99½ per cent., should take the place of copper in a great many cases, and in some cases even of cast iron. When good fortune permits me to return to Belgium and take my share in the reconstruction of the many breweries there destroyed, burnt, or sacked, I shall certainly induce those of my brewing friends who rely on me, to make their mash tuns, mash filters and "coppers," which in my country are almost entirely steam "coppers," of aluminium, and for fermenting vessels, whether lined or made throughout of metal, I shall in no case use anything but aluminium. I am convinced, and I hope that I have convinced my readers by the statements which I have made, that the ordinary conditions met with in brewing practice will not in any way affect the metal nor will the beer be affected by the metal during its production. Alkalis, the great enemies of aluminium, cannot in my opinion constitute a drawback to its use for the construction of brewery plant, because no brewer who knows his business will use alkaline waters for brewing, without correcting their alkalinity. As regards the organic acids which are contained in the worts or beers, we may conclude from the above notes that they can certainly have no effect on the metal. Knowing as we now do that aluminium salts are harmless to yeast and harmless to the consumers of beer even if taken in larger quantities than 0.38 grains per gallon, which is the largest quantity Chaston Chapman found, we can conclude that from this point of view also the use of aluminium is not open to any objection. I am convinced that the place which aluminium at present occupies in breweries is neither the one it deserves nor the one to which it is destined in the near future.

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

T. W. The sample of water you have sent us is very hard and we cannot understand how any chemist could have advised you to use it for making steam. It contains sulphates of lime and magnesia to the extent of 44 parts per 100,000, and therefore its scale-forming capacity is considerable. We should advise you to use your city water exclusively for boiler-feeding; this water, according to our knowledge, is very soft, containing only about 4 parts per 100,000 of scale-forming salts.

P. C. L. We strongly maintain that brewery fermentation gas is not only equal, but far superior, to the commercial product for carbonating purposes. If collected from the fermenters at the proper stage, it will be practically free from air; it also contains the aromatic ethers, which have developed during fermentation and are subsequently re-introduced into the beer. From the information you give us, it is plainly evident that there are several grave mistakes in your methods of collecting and handling the gas. You are collecting the gas at too high temperatures and for too long a period. You also store it too long before using it. For carbonating purposes you should collect only the gas from the first stages of fermentation, as the gas from the last stages of fermentation generally develops a peculiar, yeasty flavor, which is undesirable in the finished beer. You must collect the gas while the fermentation temperatures range from about 8.5 to 10.5 degrees R., and for no longer period than 2½ days. The gas should then be used as soon as possible, because if stored longer than a week or ten days, it will undergo material changes in its character.

F. B. We have carefully looked into your brewing process and find that your yield of extract is extremely low, which is chiefly due to the very small quantity of water you reserve for sparging. We advise you to make both your malt mash and converter mash much thicker so as to have at least 55% of the total water left for sparging. You should also strive to remove your wort from the spent hops in a shorter time; the somewhat harsh, bitter, after-taste of your beers must be attributed to a too prolonged contact with the hops. The capacity of your cooler should be increased to at least 100 bbls. per hour, and we advise that you employ the services of a first class consulting refrigeration engineer, or if you so desire, we can refer this question to our Engineering Department.

R. D. The degree of attenuation is not dependent only upon the type of yeast, but also on the composition of the wort. On the other hand, we quite agree with you that the stability of a beer depends largely on its degree of attenuation, provided, of course, that it is satisfactory in all other respects. We are of the opinion, and it is our experience that high saccharification temperatures do not always produce the desired low attenuation for the reason that most malts contain much more diastase than is required to convert all the starch, and by the time the desired temperature is attained, the greater part of the fermentable sugars, which can be formed, is already produced. The composition of

your brewing water does not, in our opinion, noticeably affect the degree of attenuation.

H. K. The amount of refrigeration required to cool your brew of approximately 300 bbls. depends among other factors upon the temperature with which the wort strikes the first ammonia pipe. The time in which the wort is to be cooled is another important factor upon which depends the size of the refrigerating machine required. In good practice, it should never take longer than three hours to cool off a brew of 300 bbls., and, assuming that your wort strikes the first ammonia pipe at 72 degrees F. and you wish to reduce it to 47 degrees F., then the capacity of the ice machine should be about 60 tons. If your wort strikes the ammonia pipe at a higher temperature than 72 degrees F. and you wish to reduce its temperature for the same number of degrees during the same length of time, it becomes self evident that the capacity of the machine must be increased accordingly.

P. R. M. You have evidently been misinformed about the term "Quarter" of Malt, which is an English volume measure, but has never been in use in this country. Its weight as malt is 336 lbs., and the English brewer figures his extract obtained in the brewery by multiplying the saccharometer indication in degrees Long by the number of barrels in the fermenting tun, and divided by the number of Quarters. The results are expressed as total pounds of extract per quarter, but cannot be compared with our figures, which are based entirely on the percentage by weight of extract. We advise you to strictly adhere to our method of calculating your yield of extract, as it is extremely simple and more accurate than the above.

A. K. R. Your sample of yeast has been received by mail, together with your letter of explanation. The yeast was found to be a very badly contaminated lager yeast and should be rejected without delay. We fail to see how this yeast could have been recommended to you for use. Its cells are very poorly developed with a granular protoplasm, and it is grossly infected by *Sarcina* and *Mycoderma*. We suggest that you consult one of our well-known brewers' laboratories and do not depend upon the advice of inexperienced and unreliable persons so as to obviate any damage to the reputation of your product.

H. T. P. The apparatus you mention consists of a perforated copper drum, mounted on rollers, with a fixed head on one end and a removable head on the other. A centrally located screw shaft runs through the entire length of the drum, engaging with the fixed head by means of a spiral clutch. On the other end of said shaft a worn gear is fixed which engages with a worm, the latter being actuated by motor power. A plunger head and a sparge pipe are also contained within the drum. The wort containing the hops enters through a centrally located sleeve and connection with the sparge pipe is made through a sleeve stuffing box. The entire apparatus is contained within a suitable tank. As far as we know, the apparatus is protected by U. S. Patent, and you cannot therefore manufacture it yourself. If you wish any further information, we shall gladly refer you to the proper place.

J. G. B. The advantages of the use of a hop-separating machine may be briefly enumerated as follows: First, you are able to separate the hops into its component parts, such as hop leaves, lupuline, seeds, spindles and stems; this enables you to regulate the boiling process and obtain the best results from the hops by subjecting the more volatile and aromatic constituents to an abbreviated period of boiling. Secondly, you will be in a position to eliminate the undesirable parts of the hops, such as the seeds and stems, which are known to give a disagreeable, bitter flavor to the beer.

— THE —

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The Brewers' Coming Convention.

The annual convention about to be held by the United States Brewers' Association should be attended by every American brewer who can get away from his business for a few days, because that convention will be of eminent importance to the brewing industry of this country.

The brewers all know that their trade is threatened by a host of enemies and they will have to agree upon some plan which is to warrant their ultimate victory over their malignant assailants. And this can be done only by the organization whose convention will shortly take place.

From the deliberations of a great convention those who attend it gather knowledge, courage and friendship, the three most important requirements in a struggle against powerful foes.

There are still many brewers who erroneously believe that they can do without an organization of their trade. To attend the convention will convince them of their fatal mistake.

Every trade, every industry throughout the civilized world is organizing to not only hold its own, but to perfect its processes and methods, to adapt them to the requirements of progress and industrial development.

The time of individualism is past. We are living in the age of cooperation. Competition has been superseded by it. Only by uniting their forces can men pursuing the same business still prevent their being submerged, left behind and wiped out.

There is still another consideration which should induce all brewers to attend the coming convention; and it is this: The European war has very injuriously affected the American brewing industry. It has raised the brewers' taxes and enormously increased the price of brewing materials, while at the same time it greatly decreased the consumption of beer which is only now slowly increasing again. No one knows how conditions may be when the war will be over. Some political economists assert that after the war we will have a very long period of unheard-of prosperity, while others predict many years of awful depression. If the latter condition were to overwhelm the American people, hundreds of small and medium-sized breweries would have to close their doors. It is for this emergency the convention will have to prepare if it wants to continue its existence. The number of small and medium-sized breweries is much larger than those producing more than 100,000 barrels per year, and upon that number depends the life of the organization.

One for all and all for one. This must be the battlecry of the brewers of this country. They must raise it at this convention and pledge themselves to stand by each other. United they will win, divided—many of them will fall!

"PURITANISM HAD ITS SWAY IN ENGLAND, and then came the rebound. The exasperated people turned on their oppressors, and woe and bloodshed befell the land. What ensued is still the darkest page in England's history. Should the Anti-Salooners and the Prohibitionists have their way to-day there would be a period of oppression, for there is abundant proof that the zealots among them consider the enactment of prohibition laws but a stepping-stone to further regulation of morals and personal liberty. Anyone who knows the virility of the American people knows that the reaction from that oppression would be terrible in its form. Let the fanaticism snake be killed now, lest every true patriot of the future have cause to mourn the fate of his country."—"Wholesalers' and Retailers' Review.")

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

The Annual Battle of Ballots.

This trade journal is interested in political matters only as far as they relate to the interests of the American brewing industry; it, therefore, cannot advise its readers in regard to the question as to who is, or who is not, to be President of the United States unless either of the candidates were an outspoken Prohibitionist. It does not appear that the candidates of the Democratic or the Republican parties have uttered any decided opinion upon the subject of Prohibition. Consequently, THE BREWERS' JOURNAL has no choice between them. Preferences among its readers are a matter of conscience, duty to party affiliation and many other considerations, to be decided according to individual conditions, circumstances, views, ideals, personal friendship and personal interests.

But in regard to the choice of Representatives in Congress, United States Senators, State Legislators, Judges, Governors, Mayors and other executive officers, the duty of all those who are engaged in the brewing industry and its affiliated trades is perfectly clear: On election day they are bound to vote only for men who are known to be opposed to Prohibition, known to have the interest of all American trades and industries at heart.

The Prohibition party is making war to the knife to the American brewing industry. Its official organs and agitators have declared that the enemy whom they are determined to crush before all others is the American brewer.

For this reason the Prohibition vote must be kept down on Tuesday, November 7th, to its lowest level possible. That vote has never amounted to much more than 250,000 votes at any preceding presidential election, and it should not rise above that figure this time.

The Prohibitionists are exceedingly active in politics; far more so, as an organization, than those whose property and personal liberty they are threatening. It therefore behooves the trade to exert itself to the utmost to limit the vote for Prohibition candidates to the number of actual and incorrigible idealists, utopians, fanatics and professional political tools, of whom there are not many and who, we know, have not increased to any considerable extent ever since the Prohibitionists organized their political machine. Keep them down!

The most stupid thing the Prohibitionists can do is to make war upon clubs in the States where they succeeded in having their political tools pass "dry" laws. The clubs represent the most intelligent part of the population and whenever the intellectuals are deprived of their personal liberty and personal pleasure, the fate of the unintelligent is sealed.

"Pairing Agreement."

Some smarty among the Prohibitionists has hit upon a nice little scheme how to increase their vote next week to several millions. The scheme is this: They sent out blanks to hundreds of thousands of voters in all States asking them to sign the subjoined "agreement":

PAIRING AGREEMENT

We, the undersigned, respectively a Democrat and a Republican, in view of our recognition of the importance of the Prohibition issue and the desirability that the Prohibition vote shall be of sufficient magnitude to challenge the attention of the American people, hereby agree with each other that, at the coming November election, we will PAIR and both of us vote for the Prohibition candidates for President and Vice-President, Hanly and Landrith.

.....Democrat.Republican.

It is not expected that many Democrats, or Republicans, will be sufficiently foolish to sign an agreement of that kind.

If a man recognizes the Prohibition "issue" to be important enough to support it one way or other he will vote for it straight, without going to the trouble of finding some opponent to his own party and asking him to pair off and both vote the Prohibition ticket.

The speculation of the Prohibs is childish and ridiculous. It only shows that their party is composed of political infants who do not know what they are doing. They have no knowledge of human nature. They do not know how politics have developed and why men belong to political parties. They simply think that all other men are fools like the Prohibitionists themselves. The idea has never occurred to them that, if any considerable number of Democrats, or Republicans, were to sign and keep a pairing agreement like the one proposed, the pairers would disorganize, demoralize and ruin their own party organizations and that a conscientious citizen, who believes in parties, who knows that under the present conditions of political development government cannot yet be administered without party organization, cannot and will not throw away the vote he has for his own party in order to boost up and, possibly, place the government of his country into the hands of a party which is composed of political ignorami, adventurers, covetous theologians, and their credulous victims and designing political tools.

The American Issue Publishing Co., a concern which publishes several Prohibition weeklies and other hypocritical and truth-hating literature, was recently mulcted in \$8,533, a federal jury at Columbus, Ohio, having convicted the concern of slandering Thomas L. Sloan, of Pender, Neb., by telling lies about him when he was a candidate for the office of Commissioner of Indian Affairs. If every one who has been slandered and libeled by Prohibition sheets and agitators were to sue them, they would not be able to pay the damages, accruing against them, as there are not enough fools in this country to replenish the coffers of these slanderers and maligners, who are mainly supported by unsophisticated church people, whom they cajole and deceive into collecting pennies for them.

Vote Down the Crazy Faddists!

"Suppose an artist were to draw a picture of men and women standing on their heads and trees and houses upside down. Suppose a cook were to serve oysters stewed in sugar, or ice cream in the soup. Suppose a publisher were to print a paper with crooked columns and type reversed. You would think the artist, the cook and the printer had gone crazy. Because they had upset things in disregard of all the rules of art, taste and right living. Suppose the moon should shift from place to place, the sun appear at odd moments and the planets turn into shooting comets. You should believe that nature had gone crazy. Yet while we believe that art, customs and nature should not be turned aside from their courses, there are those who think that economic laws can be repealed by legislation. Peril exists when we sit by idly and observe these seething currents of unreason and unrest and do nothing to check them. It is still worse when we see public men, educators, pulpit orators, thoughtless writers and notoriety-seeking legislators apologizing for and sometimes defending the disturbers who are heading the nation straight toward anarchy. Isn't it time that the thinking men and women of this country should think a little harder and then vote as they think?"—"Leslie's")

The man who tries to force his own crude and unscientific social and political "ideals" down the throats of his unwilling neighbors is a social quack and a political ass.

A man can not, as a Christian citizen, vote for the liquor traffic.—*Prohibition Organ*.

Stuff and nonsense! Hundreds of millions of Christians the world over drink "liquor," millions live by the "liquor" traffic; hundreds of thousands of Christian clergymen would be deprived of large part of their income if it were not for the beverage industries by which the millions of church people, who support these pastors, are making their living. And the millions of Americans who drink, produce and sell alcoholic beverages, are Christian citizens, no matter what gibbering fanatics may call them. Go to, you fool, and assert what you know is not so!

It is not the saloon nor the distiller but the brewery that is the greatest evil of all the liquor traffic agencies; it owns the fixtures of the saloon, and all too often it owns the mayor and Legislature also."—*Dr. Landrith, Prohibition Candidate for Vice-President*.

The hatred of the Prohibitionist for the brewery is not caused by an alleged injury it does to anybody, nor by the fact that some breweries own saloons or saloon fixtures, but by the fact that he knows that beer drives out spirits, that it makes people temperate and thus deprives the wily agitator of his stock in trade, the argument that alcohol causes crime. As soon as beer predominates as a nation's principal beverage, so soon the Prohibitionist's occupation is gone. And only therefore the brewery is his most dangerous enemy. If the agitators' attack upon brewers' political influence were sincere, they would far more vehemently attack the railroad companies, oil, steel and other monopolies whose political influence upon national, state and local legislators, justices and executive officers is hundreds of thousands of times more powerful than that of the brewers. But an attack like that would decrease the contributions the agitators receive from monopolists who are eager to make their employes abstemious because they can then exploit their labor power more cruelly than when they spend some of their scanty wages for the little enjoyment of life that their miserable compensation affords them.

Just What We Have Said Many Times.

Discussing the question raised by a writer in one of the monthly magazines, who expressed his surprise at a large prohibition vote having been polled in Alaska, and then added that "new and rough communities are generally strong for liquor, while older and more civilized countries are not," the Pacific Coast "Wholesalers' and Retailers' Review" remarks:

"Just the contrary is true. It is the crude and raw States in America that vote dry: States like Georgia, where there is a lynching every week; like North Carolina; where children of ten labor twelve hours in cotton mills; Forest States like Oregon, maniac States like Kansas; mining and cowboy States like Idaho; States like Colorado, where armed men by thousands shoot down other men and burn tents over women and children.

"The older and more civilized States are wet. In the older and more civilized countries, the consumption of wine grows apace. France is more civilized than Maine. When the State of Washington outgrows its crudity, when its inhabitants become appreciative of the fine arts, when music and painting and poetry and the drama are produced in Seattle besides lumber, then the State of Washington will be wet and not dry.

"Prohibition is an illogical crudity found only in ignorant and insular communities."

It is peculiar that the views here expressed and insisted upon by ourselves for many years are not adopted more generally by our contemporaries who profess that they are laboring solely for the interests of the trade. They are too timid. They do not call things by the names that fit and correctly describe them. There is too much truckling and hedging among our journalistic confreres.

In a fight like the one in which the American brewing industry is at present engaged, we need audacity, hitting from the shoulder, bold words and bold deeds.

Tell the masses the why and wherefore and then you may expect them to act. The daily newspapers dare not speak up. They are too much engaged in trying to extend their circulation; they are coddling and pampering all interests; they are pussy-footing it. And so are some of our colleagues in the trade journals. May be they will come out in the open gradually, as the fight waxes hotter—as soon it undoubtedly will.

The governments of Europe which have resorted to Prohibition as a war measure are now experiencing that human nature cannot be made over by dictatorship and sumptuary legislation. After the war official Prohibition will disappear as quickly as it made its hideous appearance.

One of the Total Abstinence Unions of America recently adopted resolutions in opposition to the growing use of intoxicants by women and girls. The question now arises: Will the American women and girls be deterred from consuming cocktails, champagne, whiskey or—what is worse—beer? Simply on account of that resolution? We seriously doubt it. Women, like men, will eat and drink what best appeals to their palates. In Europe, women and girls have been accustomed to drink with their husbands, fathers, brothers and sweethearts, for hundreds of generations, and the women and girls of all other countries will do so as civilization, prosperity and the desire to fully enjoy life and the good gifts of nature, industry and art are progressing and becoming more and more universal. The few total abstainers may resolve and resolute as much as they will; they cannot stop the wheels of progress.

Liquor Not Cause of Crime.

More and more facts are being piled up by the searchers for truth that the Prohibitionists are telling a falsehood when they assert that "all crimes are caused by liquor."

Recently Robert Blackwood, an impartial investigator of renown, has published what he found when he investigated the question of the relation of crime to alcohol and this is what he has said, in part:

"Convincing proof that liquor drinking does not cause crime is found in the statistics relating to the number of persons who drink, and the number of criminals. At least eighty per cent. of the adult male population of New York State uses liquor. There are nearly 3,000,000 adults in that State, of whom 2,400,000 drink. The report of the State Commission of Prisons (Page 554) for 1914, gives the number of males sentenced to imprisonment after conviction during that year as 19,293, or less than one per cent. Two million four hundred thousand men drink. Of these less than one per cent. commit crimes. If liquor makes criminals of the one per cent. why does it not have the same effect on the ninety-nine per cent.? Or to put it another way: If the use of liquor causes one per cent. of the drinkers to become criminals, does it keep the ninety-nine per cent. virtuous? How can drink be held to be the cause of crime, if it affects less than one per cent. of the men who use it?

"In recent years the concensus of opinion among criminologists is that the chief causes of crime are: Defective mentality, inherited weakness of will; malnutrition; insufficient or improper feeding in childhood; lack of proper moral training in youth; unwise selection by parents of unsuitable trades or vocations; and very largely, to poverty.

"The claim that liquor drinking is the cause of seventy or ninety per cent. of crime is clearly disproved by a brief examination of the more serious offenses against the laws. There are no complete statistics on this subject for the whole country, but those of New York State, with 10,000,000 population, may be regarded as fairly representative. The report of the State Commissioner of Prisons for 1914, pages 949-946, gives the following record of admissions to all the State prisons for that year: Total number of prisoners admitted, 3,368. Males, 3,327; females, 41. Convicted of abandonment, 24; abduction, 32; arson, 47; bigamy, 25; burglary, 780; carrying concealed and dangerous weapons, 127; extortion, 23; forgery, 106; larceny, 658; receiving stolen property, 100; robbery, 318.

"These offenses constitute nearly seventy per cent. of the total number. It will not be seriously pretended that any considerable proportion of them are due to the use of liquor or committed while under the influence of liquor. Men do not engage in burglary while drunk. It is impossible to conceive of men planning to commit forgery or grand larceny while intoxicated. Drink has no relation to the carrying of concealed weapons, nor is it responsible for receivers of stolen property.

"Another important fact bearing on this question is found in the report of the Secretary of State for New York on "Statistics of Crime" for 1914, which gives detailed records of 9,088 convictions for criminal offenses in that year. Of this number the records show that 8,351 convicts were of temperate habits; 707 intemperate, and 300 'unknown.' The percentage of intemperate was only 7.77; instead of the alleged 70-90 per cent."

Whenever facts like these are presented, the "organs" and agitators of the Prohibition outfit, the pious but ignorant preachers who only repeat what the agitators tell them, remain silent. They cannot contradict the statements of scientists and official statisticians. But they keep on shouting that "all crime is caused by liquor!"

A Powerful Object Lesson.

That the motion picture is a very effective means of education and enlightenment has been acknowledged by all sensible persons, and it has, therefore, also been used by the organized brewers of this country in their campaign against ignorance and systematic falsification.

The pictures that so far have been shown in this campaign were splendid and convincing, but now there is one great picture which is better and more instructive than anything that has yet been produced in this line. We mean the picture known as "Intolerance," now being presented in New York by the Triangle Moving Picture Corporation. It should be shown in every town and hamlet of this country.

David Ward Griffith, who has staged "Intolerance," says of it: "I believe what I'm preaching in this picture. We have too many laws—too many professional reformers. They have tried to tell the whole people what they shall do. It's time the public told the reformers what is to be done.

"'Intolerance' brings up the liquor question. For myself, I have no doubt whiskey and strong liquors are bad for the system, but here's a fact to be considered: the study of history indicates that not a single race not addicted to liquor has shown itself a strong people.

"The Chinese and Hindus are cases in point. Neither have used liquor to any great extent. On the other hand, the Goths, the strong men of Europe; were the sturdiest drinkers of their time.

"Take temptation away from America and you deprive men of the thing which makes them strong—give them the strength to withstand that same temptation. The man who is never tempted is never a strong man."

What has been the cause of crime in the State of Washington? Prohibition! There the police act like vandals. They wantonly destroy property, assassinate citizens, instigate violation of law and terrorize the entire community. The only redeeming feature in the making of "dry" States is that a reaction will soon set in and make them "wet" again.

Beer of low alcohol content, or "no alcohol" content is well enough for those who cannot make, or get, anything else; but the real brewer and the man who is accustomed to drinking *real beer* resent the proposition of "near beer." That sort of drink is a makeshift and it will disappear with Prohibition when the masses have found out what Prohibition really means.

The unthinking theologians who tell their credulous followers that the brewery, the distillery and the saloon must be closed to make the people of the United States prosperous, happy and moral are not aware of the fact that nowadays the laws of any church, wherever it may be located, have just about as much weight as a puff of tobacco smoke. And no more. Church laws are made for the government of members of the particular church that makes the laws, and amount to nothing more than an agreement between a number of persons that they will not do a certain thing—and then some of them break the agreement at the first opportunity. So-called canon law is in the nature of a bluff. It represents what a crowd of preachers, priests or prelates wish done or wish not done, and that is all. It may be ignored, and should be ignored in the matter of eating and drinking. The law of the land permits its citizens to make their choice in this respect. Church law is not binding upon Americans. They make their laws themselves. They need no theological tutors.

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

WASHINGTON, D. C. Congressman Robert L. Henry, of the 11th Texas district, now in Washington, has been giving out some rather lurid interviews, in which he does quite a lot of talking but says very little. He gives notice that within the first ten days of the next session of Congress, which will convene in December, he will introduce in the House two measures, one a resolution for a constitutional amendment for national prohibition, and the other a bill for prohibition in the District of Columbia. He claims that he is acting in concert with the "organized and unorganized forces favoring prohibition," and feels "assured that the time has now come to strike the blow which will free the country of the liquor curse."

Of course, this will be recognized as the usual, stereotyped, cut-and-dried vocal gymnastics of the prohibition fanatic so well known all over the country. But there's another side of the story, and it comes in the shape of a little item clipped from the *Waco (Texas) News*:

"Bob Henry is up in Washington giving out a series of interviews intended to put him solid with the prohibition element hereabouts, and (which is probably his chief concern) win him a lot of votes he needs to get back to Congress. Of course, these interviews are being sent back here for consumption among prohibitionists only. He doesn't dare risk losing what following he has, even though it be small, among the fair-play advocates who know what prohibition really means."

Mr. Henry seems to be one of those statesmen who do a lot of talking between sessions, but keep still in several languages when Congress is in action.

The Anti-Saloon League here announces that it will vigorously oppose the granting of liquor licenses to practically every club in the city of Washington. The excise board made a change in the laws restricting the granting of bar-room licenses on any side of a street where less than fifty per cent. of the foot frontage between intersecting streets, excluding the parts of buildings wherein bar-room licenses are held, is used for business purposes. It eliminated the proviso at the end of the section that "this restriction shall not apply to hotels and clubs." In making this elimination the board has changed the regulation to conform more strictly with the wording of the Jones-Works law in force here.

This action immediately opened up an avenue through which the Anti-Saloon League intends, so it says, to strike with all its power at the granting of licenses to all clubs and hotels. The position of the league is that, under the amendment, clubs and hotels are placed in exactly the same position as bar-rooms. An official of the league estimates that the ruling will affect all but four clubs in the city. The exceptions, it is said, are the National Press Club, Jolly Fat Men's Club, Cosmos Club, and Eagles' Club. It is considered certain now that the old fight between the ultra-swell Metropolitan Club and the excise board will be renewed on this ruling. This was the bitterest contention the board had to deal with last year, but the fight was finally won by Metropolitan Club.

Assurances have been given the excise board that counsel for the better class of liquor dealers here would cooperate in every way to search out violators of the excise law in an effort to have the licenses of such dealers revoked. Attorney A. H. Bell, counsel for certain liquor interests, addressed the board with this assurance, and asked for an amendment to a recent ruling that written protests be filed at least five days before the opening of the hearings, to the effect that as long as a written protest involved an actual violation of the excise law, it may be filed at any time before or during the hearings. Mr. Bell presented W. D. Barry, president of the Retail Liquor Dealers' Association, who gave his promise of cooperation in "cleaning up" the liquor trade here. The board accepted these assurances and adopted the amendment suggested.

Following the action of the British government in prohibiting the sale in that country of "immature spirits," the United States Department of Agriculture has served notice on importers that entry of these spirits into the United States will be strictly prohibited. This action, it is understood, was taken under the provision of the food and drugs act, that any article prohibited or restricted in the country of manufacture shall be refused admission to this country during the existence of such prohibition.

William D. Barry, 2024 Fourteenth Street, Washington, has been appointed by Neil Bonner, president of the National Liquor Dealers' Association of America, to succeed the late Hugh F. Harvey as chairman of the Associations Congressional Committee. Mr. Bonner also says: "It has been suggested by Mr. Harvey's many friends that some suitable memorial should be erected over his last resting place and as his work was for the benefit of the many dealers throughout the country, doubtless many would desire to contribute their mite to the memory of so worthy a man. I am pleased to say that several of our State organizations have contributed as a body and some of his friends as individuals. I most heartily endorse the movement and would suggest that any desiring to contribute should remit direct to Mr. Barry, who is the treasurer of the fund."

SPRINGFIELD, ILL. Control of the next Illinois House of Representatives is claimed by the "wets," who ridicule boasts of "dry" gains in the primaries. On the Senate side the "wets" say they will suffer no losses and, while possibly not in absolute control, will be able to prevent the passage of "dry" measures. Ninety-two Republican and Democratic nominees for the 153 seats in the House are "wet." At least 82 of these will be elected, 77 being a majority of the House. Contrary to the general impression that the next Senate will be "dry," the situation will be such that county option, residence district and other "dry" bills cannot be passed. The big fight of the "wets" in the next session will be for a bill which will give home rule to Chicago in the matter of Sunday closing. To help their cause, the "wets" propose to couple the Sunday closing proposition with other home rule measures.

Interpretation by the Judiciary—Municipal Action—Local Option Elections, etc. Action by Civic Bodies and Others For or Against Prohibition.

ALABAMA. Birmingham has been practically bankrupted by Prohibition and the city commissioners have imposed an annual street tax of \$5 per capita. They will impose a monthly tuition fee upon every boy and girl attending the public schools of the city. They will also place a tax on every owner of a private cow, and increase the amount of licenses on businesses and professions, generally. In addition to all of this, tax values on real estate are being raised to such an extent as to amount to almost confiscation. The city tried another bond issue, but was so much in debt already that the courts would not allow it to go through. The city just had to have some money, so the officials sent collectors from door to door to get \$2.50 from each male over 21 years of age. Birmingham is also having an epidemic of typhoid and tuberculosis, its public hospitals are filled and no money to run them with. Doctors and nurses are going unpaid. Those who paid the so-called liquor inspection fees upon the receipt of liquors for their personal use in Birmingham, while the invalid inspection fee ordinance was being enforced, are entitled to a refund, and are to receive their money back, but goodness knows when. Since Prohibition went into effect, the city's population has decreased about 40,000.

ARKANSAS. Next Tuesday the people of Arkansas will vote for a total repeal of the odious Prohibition law which oppresses them and the Liberals are confident that the State will return to the license system.

In Texarkana the local Masonic Lodge has preferred charges against a number of its most prominent members for having signed a petition for the repeal of Prohibition.

CALIFORNIA. The organized wine growers of California have issued an address to the voters of this State, saying that if the 2 Prohibition amendments placed on the ballots for next Tuesday are adopted "it would force California to brand as outlaws the owners of 170,000 acres of wine grapes. And yet, for sixty years the State has fostered and protected the wine industry; it has been instrumental in inducing thousands of people from abroad to reclaim its hillsides; it has peopled our valleys and mountain slopes with men and women of thrifty and temperate habits, and has accorded to them an equal place among the foremost citizens of the land. The four years' period of grace given our growers to pull up their wine grapes and plant something else, is a hollow concession, for much of the land used for viticulture is reclaimed hillsides and desert wastes, where nothing but the wine will grow without irrigation. It is unthinkable that the voters of the great State of California will lend themselves to such a confiscation. This prohibitive amendment would make any person liable to a fine of \$1,000, a year's imprisonment or both, for offering—in his own home—a glass of light wine to any guest or visitor. It would plunge the State into an endless turmoil of law-breaking, bootlegging, spying, prosecution, perjury, secret drinking of vile liquor, body and soul-destroying drug habits, and many other evils such as long have cursed every other State where prohibition has been attempted, such as continue in Maine down to the present day despite the most drastic prohibitory law-making and pretense of enforcement for a long period." Vote "No" on both amendments!

The Rev. Newton E. Clemenson, for 35 years pastor of the Presbyterian Church, has asked the Synod of California to release him from the ministry, declaring that "ecclesiastical politicians are making the prohibition dogma a test of orthodoxy" and are "turning the churches into political convention halls for campaigns of enmity and hate."

COLORADO. Although prohibition in Denver has been in force less than a year, Denver already has been hard hit financially as a result of the dry law. Not only are men and women who were formerly employed in the liquor industry, out of work, but persons heretofore engaged in allied trades are jobless. Parades of the unemployed may be witnessed often in Denver and contrary to the prediction of prohibitionists, hundreds of buildings once occupied by saloons are vacant, with no prospect of being rented. Of the brewery employes thrown out of jobs by the dry law, 47 have left Colorado and many have secured work in Denver at about 12 hours a day for \$12 a week, when they formerly received \$18 and \$20 a week. There are approximately 100 homes of former brewery workers who are trying to sell them at a sacrifice so they can leave the State, as it is impossible for them to secure work of any kind in Denver. During the first six months of 1915, when Denver was "wet" and liquor was being sold under strict regulation, there were 136 arrests for drunkenness, and during the first six months of 1916, when Denver was supposed to be "dry" and no liquor was supposed to be brought into that city, unless for personal consumption, there were 568 arrests for drunkenness.

Trying a number of alleged bootleggers, Police Magistrate Rice, of Denver, recently said: "The bootlegging liquor being sold in Denver is rank poison, and the public should be warned against its use. No wonder my docket is crowded with cases of drunkenness. One drink of that filthy concoction peddled by bootleggers is enough to make a man crazy."

In a complaint filed in the Denver district by E. M. Sabin, attorney for Mrs. Emma Showers, an invalid who has for many years been confined to her home, Arthur J. Finch, superintendent of the Colorado branch of the Anti-Saloon League, and G. Arthur Holloway, secretary of the same organization, are charged with using the name of the league, that of its organizer and of Denver ministers of the gospel to induce her to buy stock in a mining company they had organized and which has proved worthless.

CONNECTICUT. The so-called "little town elections" in Connecticut were featured by lively contests over the excise questions, and the "dry" forces made a gain of four towns. Of the 168 towns in the State, 91 are now no license. Fifty towns voted on the issue, six changing from license to no license and two changing from "dry" to "wet."

GEORGIA. George K. Vason, doorkeeper of the Georgia House of Representatives, who, in a controversy over Prohibition, seriously stabbed attorney Thomas N. Felder, of Atlanta, has been sent to the chaingang for one year, after which he will pay a fine of \$1,000.

IDAHO. From Pocatello comes the following wail: "That prohibition does not prohibit is conclusively shown, so far as the experience of this city is concerned. Pocatello is a 'dry' town, technically, and was 'dry' long before State-wide prohibition was voted in last year. But of a town's 'dryness' or 'wetness' is to be judged by the quantity of bad red liquor sold within its confines then Pocatello will qualify as a very 'wet' town. It remained 'wet' under local option, and though Statewide prohibition carried by a comfortable majority in Idaho, Pocatello is still 'wet.' In witness whereof the police court records of Pocatello, which is a railroad town of some 16,000 population, have for several months during the past year shown that there are more cases of 'drunks' registered on the police blotter than in any city of Salt Lake, which has a population of 125,000. Bootlegging is one of the principal occupations of the residents of the so-called Greek colony, and thou-

sands of cases of exceedingly bad whiskey are monthly imported and disposed of at exorbitant prices, ranging from \$1.50 to \$3 per pint, depending on the degree of thirst exhibited by the purchaser."

ILLINOIS. Consequent upon a complaint made by the Fecker Brewing Co., Danville, whose posters and other advertising matter had been destroyed upon order of some local insect authorities, the Supreme Court of Illinois has decided that municipalities have no power to pass ordinances prohibiting advertising. The exercise of the police power is limited to enactments tending to promote the public health, safety, morals or general welfare. It is for the Legislature to determine when an exigency exists for the exercise of the police power, but what is the subject of such exercise is a judicial question. Under the guise of police regulation the personal rights of liberties of citizens can not be arbitrarily invaded.

Mayor Beal, of Alton, by closing the saloons on Sunday thought that he would add another star to his diadem and now he's run afoul of the Anti-Saloon League, who charge him with playing favorites in his Sunday closing crusade. Mayor Beal offered to bet \$100 that all saloons are closed. Rev. S. D. McKenny offered to put up the \$100, with the sarcastic remark for Beal to put up or shut up. No takers as yet.

George Bauer, an Austrian, was admitted to citizenship in Judge Browning's division of the East St. Louis city court on condition that he does not keep open a saloon on Sunday. Commissioner Willson and Judge Browning held that a man could not be a good citizen and keep open a saloon on Sunday. There is also a decision of the Illinois Supreme Court to that effect, they said.

INDIANA. Mrs. F. T. Hart, policewoman in Muncie, addressing a convention of the Municipal League of Indiana, recently held at Columbus, Ind., has said: "I know enough about the people of Muncie to tear the town wide open. Christ forgave every sin save that of being a hypocrite. Some of the leaders in the prohibition cause at Muncie drink wines and liquors at home, and then want the saloons closed to keep the poor man from having a drink. I positively know and can prove that some of the leaders of the prohibition movement at Muncie get drunk and have been brought home drunk."

Bloomington, Greenfield and Columbia township, outside of Columbia City, have voted "dry."

IOWA. Many Iowa cities are already feeling the pinch administered to their revenues by the recent return to Prohibition. Municipal taxes are going up rapidly. Schools are closing and insane asylums are overflowing. Drunkenness prevails to an alarming extent and seizures of contraband liquor are of almost daily occurrence everywhere in this State.

KANSAS. Not only the city officials but state officials as well now are prohibited from interfering with beer deliveries in Kansas City, Kans., providing the orders are *bona fide*. Judge John C. Pollock of the federal court has enjoined Roy Hubbard, assistant attorney general, from interfering with such deliveries. The judge says, the law on which he based his ruling is clear, as legitimate beer deliveries can be made in any community under the interstate commerce law, despite the local ordinances which make such deliveries an offense.

The Atchison "Globe" recently said: "It is difficult to understand prohibitionists. When they organize a campaign they tackle Kansas, first jump out of the box. The Flying Squadron devoted as much time to Atchison as to Kansas City, which has so many saloons and liquor-em-

ployed as Atchison has people. When the itinerary of the national Prohibition party's special train was made up this week, particular attention was paid to Kansas, and stops in twenty or more towns arranged for. Why waste sweetness on the desert air? Desert, is good. Probably the reason is that the party wants a million votes for president this year, and believes Kansas will be easy picking. It always has been. Why not?"

Ed Howe, the celebrated newspaperman, the other day, declared that "Topeka is hypocrite headquarters of the United States." In Topeka there is more talk of temperance and less seen of it than in any other city of equal size beneath the rolling sun.

KENTUCKY. The Kentucky Supreme Court has declared the so-called locker law of this State to be unconstitutional.

In a case involving the sale of liquors on premises located on the border line of Kentucky and Tennessee, the Kentucky Court of Appeals has declared that trickery to evade the local option law in Kentucky will not be countenanced. In this case, one Huddleston, who resides in Kentucky within six feet of the Tennessee line, was charged with violation of the Kentucky law. The evidence showed that, while the alleged sale of whisky was contracted for over on the Kentucky side of the border, delivery was made some twelve feet across the line in Tennessee. The Court said the transaction, if it took place, was consummated in Kentucky, notwithstanding that delivery was made in Tennessee, and that, therefore, if the sale was made as alleged, there was a violation of the Kentucky statute. Shortly after this decision, Huddleston, his wife and several others were attacked by deputy sheriffs while carrying moonshine whiskey over the Cumberland mountains. There was a fight with guns and revolvers and Mrs. Huddleston and one man were killed, while Huddleston and another received fatal injuries.

Gracey precinct, Christian County, has voted to retain saloons. In Cumberland County the "drys" had a majority of 811. Marion County is to vote on County option next month.

LOUISIANA. Several breweries have been fined \$150 to \$300 in the New Orleans Federal Court for having, it is alleged, shipped beer to Mississippi in packages which were not labeled as prescribed by law.

MAINE. As the candidates of the Republican party polled only 249 votes in Maine last year, their names will not appear on the official ballot on November 7th.

MICHIGAN. Amendments providing for Prohibition and a new local option unit by which every city, every incorporated village and every township in Michigan shall have the right to vote on local option, instead of an entire county as one unit as now, are to be voted upon in this State next Tuesday. The Democrats have not committed themselves in regard to these questions, while the Republican politicians are evidently inclined to favor Prohibition. Organized labor is opposed to it.

An alleged wave of crime in Detroit has caused a shake-up in the local police. Mayor Marx is confronted by the theory held by many Detroiters, that the crimes are a result of loose enforcement of the law. Police Commissioner Gillespie has resigned and in his place Mayor Marx has appointed James Couzens, a former officer of the Ford Motor Car company. On taking office Mr. Couzens said: "There will be no compromise with morals in my administration of the police department. Gambling, crime of all sorts, will be made the target of a war that will play no favorites. The Sunday saloon is another question; taking a drink is not a crime, and it may be that, in a growing city

like this, there is logical excuse for keeping the saloons open after hours and on Sundays. I will have to look into that." Detroit has also had some fun during the last few weeks, as "Billy" Sunday was there, howling against "Demon Rum" and the "Devil," with the usual pleasant result that he raked in a pile of coin.

Following a raid at Ford City, where the police seized a quantity of beer, a riot broke out and special guards and militiamen, at the point of the bayonet, arrested nine persons.

MINNESOTA. An early decision in regard to the liquor question in the Indian Territory of Minnesota has been urged in the U. S. Supreme Court at Washington by the breweries and railroads interested in the matter. The breweries contend that the old Indian contracts have expired and, therefore, the shipping of beer to former Indian reservations no longer be prevented.

The St. Paul and Minneapolis Aldermen are still bothering their heads about the brewery-saloon question, Mayor Irvin, of St. Paul, trying to save some new licenses which may be reserved for a number of hotels which might be built in the near future.

Duluth is undergoing the hardships that have been endured by other cities which abolished the saloons and the revenue that the saloons give. Facing a reduction of \$180,000 in the income of 1917, due to the city having "gone dry" is the reason given by the authorities of Duluth, Minn., for failing to indicate whether that municipality will be represented at the convention of the National Alliance of Legal Aid Societies in Cincinnati, Ohio.

MISSISSIPPI. The new one-quart-at-a-time whiskey law has been in effect in Mississippi only a few weeks, and already the whiskey houses that have an order business in the State have revised a scheme of getting to their thirsty patrons more than a quart of cheer every fifteen days. This is the way they are doing it: They ship to the purchaser one quart of whiskey, all that is allowed under the law, and along with this quart, in the same carton, a quart of distilled water, with the instructions to mix the two together, and the purchaser is guaranteed to have two quarts of good liquor. The sheriff of the county is holding up some several of these bi-quart shipments until it can be determined whether or not the liquor dealer can evade the one-quart law by this ruse.

Police Court Judge Manship, of Jackson, in dismissing a case against a negro drayman charged with violating the Weakley liquor law, has held that it was not necessary for a person receiving a legal shipment of liquor to carry it home personally or in his own vehicle, but he may have it transported by a drayman if he accompanies the liquor. The judge ruled that it would be a violation of the law to have a drayman take a package of liquor from one point to another without accompanying it.

MISSOURI. The report of State Beer Inspector Speed Mosby on taxes levied on beer consumed in Missouri during September shows it amounted to \$40,696.67, an increase over the total for September, 1915, of \$1,122. The beer tax has been increasing all this year and there has been collected \$31,000 more during the first nine months of 1916 than was collected during the corresponding period of 1915.

Judge Charles D. Stewart, Monticello, has ruled out the case against railroads and express companies which the prosecuting attorney of Lewis County desired to enjoin from shipping "liquor" into "dry" districts of this State, the judge declaring that the prosecutor's contention had not been proved.

The Missouri Pacific Railroad Company recently in-

structed its agent at Butler to deliver all shipments of liquor coming to consignees in that city for personal use, and to ignore an ordinance recently passed by the Butler City Council to prohibit the delivery of liquor in that city.

Sunday lid lifters, lid clubs, and saloons which break ordinances regulating them are to be closed in St. Joseph, a delegation from the Retail Liquor Dealers' Association was told by Mayor Elliot Marshall and James L. Davison, president of the police board, sitting as the excise board, it being desired to as rapidly as possible reduce the number of dramshops from 165 to 150.

MONTANA. The saloonists of Missoula are shipping \$1,000 worth of beer and whiskey each day to what is known as "dry" territory, and the express companies are simply overwhelmed with shipments to the states of Washington and Idaho, and the business is steadily on the increase.

NEBRASKA. The decent and intelligent people of Nebraska are beginning to find that Prohibition would be intolerable and they are going to vote for Keith Norville for Governor who is opposed to Prohibition.

NEW JERSEY. Since saloons were voted out at Bridgeton, the number of "speak easies" has increased to such an extent that it is proposed to replace the present municipal administration by commission government.

One Harry Williams, who sold liquor from a boat at Penn's Grove to workmen employed in a Du Pont powder mill, where strict Prohibition is practiced, has been fined \$1,000 by County Judge E. C. Waddington.

NEW MEXICO. Shipments of "liquor" from Lordsburg, Grant County, into neighboring "dry" territory have become so heavy that the Wells Fargo Express Co. is unable to load the bottled goods and barrels during the five-minute stop made by fast Southern Pacific trains at that point, and wholesale liquor dealers of Lordsburg have appealed to the State Corporation Commission in behalf of those for whom the shipments are intended.

NEW YORK. "Billy" Sunday has again been invited by New York City "Reverends" to fight "Demon Rum" in the Metropolis, but as no reliable monetary guarantee has come forth so far, "Billy" is holding back his acceptance.

NORTH CAROLINA. Charging a grand jury at Elizabeth City, Judge Harry Whedbee recently said: "It is against the law in North Carolina to sell anything that intoxicates, no matter what name it is sold under. The man who sells a chemical concoction that will eat the lining of a man's stomach deserves more punishment than one selling straight beer or whiskey. When you buy blind-tiger liquor, you do not know what you are getting. Several instances have come under my observation where the blind-tiger stuff contained cocaine or some other deadly dope. The man who drinks this stuff takes his life in his hands."

OHIO. Although neither the Democratic nor the Republican party have mentioned the "liquor" question in their respective platform, Governor Willis was making stump speeches attacking the trade and making a bid for anti-saloon votes.

The Hamilton County Grand Jury has discovered evidence that the name of Rudolph A. Mack, of Cincinnati, had his name placed upon the Prohibition ballot as candidate for Governor of Ohio, by a large number of fraudulent petitions.

The Ohio State Liquor Licensing Board had ruled that cognizance may be taken of violation of the Federal laws by saloonkeepers, and that this may constitute sufficient ground for revoking a license.

Mayor George J. Karb, of Columbus, acting on petition,

has issued a decree making a "wet" district of the territory in that city, in which is located the home of the Columbus Lodge of Elks, but which has been under prohibition for several years.

Port Washington and Wharton, Wyandotte County, have voted "dry"; Manchester, Adams County, went "wet."

OREGON. The campaign for the Brewers' Amendment to the Constitution of Oregon has been fought valiantly by the Liberals and it is confidently expected to be carried. One of the best arguments for the amendment has been made by A. O. Yates, of Oregon, who said, among other things: "The brewers' amendment, if adopted, will be one of the best that has been framed, for the manufacture of 4 per cent. beer will be the means of cutting out a very great deal of strong liquor drinking and much of the money going out now for its purchase will be kept in this State. It will also be the means of stopping much of the bootlegging and smuggling that will continue under the present dry laws. It will be the means of employment in various trades connected with its manufacture. As a mild stimulant the beer thus authorized will help counteract the cravings for strong liquors, which is acquired now by secret drinking because, in the purchase of liquors under the present laws, the buyer has to buy by the quantity, of so much in so long a time, requiring more money to purchase and entirely leaving this State. Those who indulge in very moderate use of liquors have to buy by the quantity now, and this increases the temptation to drink, because it is on hand. A mild, stimulating beer will counteract it much, and at the same time be healthful instead of the reverse. Saloons are not necessary to the sale of it, either. The use of it could be restricted just as now, if necessary, and delivery made direct from the brewery to the producer."

PENNSYLVANIA. The Prohibitionists of Pennsylvania have circulated a mass of misleading campaign literature to induce citizens to vote for legislative candidates favoring local option. To show that prohibition or its make-shift, local option, have proven failures wherever tried, and if it were not for the agitation of professionals to make money out of such outcries there would be no call for prohibitory laws in this or any other State. The Pennsylvania Brewers' Association and the Allied Manufacturers' and Dealers' Association of Pennsylvania also flooded the State with enlightening pamphlets and they sent out a large number of speakers to expose the fraudulent doings of the enemies of industry and personal freedom. Among the leading articles circulated by the Brewers' Association were these: "Facing Local Option Pretense"; "The Challenge of an Editor"; "Saloons in Counties and Cities"; "Clergy Vote Opposes Prohibition"; "Great Growth of Liquor's Use"; "Insane Growth of 'Dry' Kansas"; "Alcohol an Energy Builder."

United States District Attorney E. Lowrey Humes, who has been with the army on the Mexican border, has been relieved from his duties as Major and, having returned to Pittsburgh, has announced that on November 6th he will resume the prosecution of breweries, indicted for alleged violations of the Federal corrupt practices act.

SOUTH DAKOTA. Notwithstanding that the city of Lennox at the spring election voted "wet," the town now finds itself "dry." This is due to the fact that the County Commissioners of Lincoln County have refused to grant licenses there for the year ending July 1st, 1917.

TENNESSEE. Local Option Clubs have been organized in Tennessee, for the purpose of agitating for the repeal of the four-mile law and to have it replaced by county option.

TEXAS. The "Young Men's Democratic League" is another name for the Anti-Saloon League. Its members are trying to have men elected to the Texas Legislature who will vote for submission of State-wide Prohibition to be voted upon in July, 1917.

Special Federal government agents who have been in Texas during the last few months to collect evidence against breweries suspected of having violated the Texas Anti-Trust law, have left the State and they are said to be now operating in Missouri and several other States.

Tarrant County, with Fort Worth as county seat, has voted to retain saloon licenses, by a majority of more than 1,000.

UTAH. At Ogden an ordinance to permit hotels and restaurants to sell "liquor" until midnight, while saloons must close at 9 P. M., has been defeated.

VIRGINIA. As this State will become Prohibition territory to-day, the Attorney General has been requested to rule whether "near beer" could henceforth be sold in Virginia and he rendered the opinion that any liquor containing malt, whether the same was considered as intoxicating or not, cannot be legally sold in Virginia after November 1st. In support of this opinion, the decision of the Supreme Court of Appeals of Virginia, written by Judge John A. Buchanan, was cited, in which the court said: "It seems to be well settled that the general term, malt liquors, includes both intoxicating and non-intoxicating malt liquors." The court further quoted from another authority, who said: "If the statute specifically forbids the unlicensed sale of malt liquors, the question of the intoxicating properties of the liquors sold is immaterial. It is only necessary to determine whether it is a malt liquor."

WASHINGTON. Mrs. Hanna Wood, describing the condition to which Seattle has been reduced by Prohibition, says: "Everywhere you go in the city of Seattle to-day you see the sign 'For Rent.' Any person seeing so many signs can come to one conclusion—that something is wrong. Tourists are not very many this year and they make connections so closely that Seattle does not see them. Many go by way of Vancouver to Alaska and return home by way of Canada. Thousands of people have left Seattle; had to leave; could not get any work, as the work was taken from them. Times are dull and taxes are awful."

WEST VIRGINIA. In Martinsburg, where over 100 persons were recently indicted for violations of the West Virginia Prohibition and Federal Internal Revenue laws, forty-six were convicted.

WISCONSIN. The Attorney General of Wisconsin has ruled that a town, city or village in this State, where licenses have not been prohibited, may issue as many wholesale liquor licenses as it desires.

In Delawan an ordinance to raise saloon licenses from \$500 to \$800 per year, has been defeated by a vote of 154 against 71.

"THE IDEALS AND INSTRUMENTS OF PURITANISM are simply unworthy of a free people, and, being unworthy, are soon found intolerable. Its hatreds, fanaticisms, inaccessibility to ideas; its inflamed and cancerous interest in the personal conduct of others; its hysterical disregard of personal rights; its pure faith in force, and, above all, its tyrannical imposition of its own Kultur; these characterize and animate a civilization that the general experience of mankind at once condemns as impossible, and as hateful as it is impossible."—(Albert Jay Nock in "The North American Review.")

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, Room 1313 People's Life Building, Randolph and 5th Avenue,

CHICAGO, October 28th, 1916.

Mayor Thompson's peculiar activity, directed against the trade, to please the few sanctimonious friends he still possesses, have now brought him into conflict with the State authorities, October 11th, State's Attorney Hoyne having sent detectives to raid the Mayor's office for evidence which is intended to show that vice and gambling have been going on in Chicago with the knowledge of city officials. There has been bitterness for some time between the State's Attorney and City Hall officials. Mr. Hoyne charges that violation of the ordinance for closing saloons on Sunday and other unlawful practices have been flourishing with the consent of municipal officers. The detectives carried away all the correspondence files. Chief of Police Charles E. Healy is also "in for it," Mr. Hoyne having had him indicted for having permitted numerous violations of State laws. Mr. Hoyne intimates that this was done by Healy and other intimates of the Mayor to swell the Mayor's campaign fund. The Mayor, of course, blames some false friends for the trouble in which he now finds himself, asserting: "I have no doubt that not one but several persons have been trying to get crooked money by this shakedown process. In a city like Chicago men will not hesitate to trade on the name of the Mayor or other public officials who exert large power in trying to get money. This has been done, no doubt, by crooks who represent themselves to have influence at the city hall and who have gone to some of the saloonkeepers and told them that they could protect them in violating the law if they would come across for this thing or that thing."

For nearly a year the city council has been considering an ordinance to prohibit the sale of liquor in dance halls. It was placed on file by the council's committee on license. Alderman McCormick was the only member of the committee to oppose filing the measure. He said he voted against that action so it could not be charged the committee was unanimous in consenting to pigeonhole the measure. Practically every reform organization in the city and several women's clubs favored it.

The enforcement of the Sunday closing laws was blamed by Attorney Hubert Howard for the failure of William Loman, pioneer saloonkeeper at 149 South Clark street and 149 South Fifth avenue, Chicago, who filed a bankruptcy petition, listing liabilities of \$55,365.71 and assets of \$21,670.05. Mr. Lomax is a nephew of George Lomax of the Consolidated Bottling Works.

The number of complaints in different classes of crime was reduced in Chicago from one six months period to the other as follows: Larceny, 4,745 to 4,262; burglary, 5,417 to 3,886; robbery, 1,373 to 933; other crimes, 1,468 to 1,368. Police officials say that the better showing this year is a result of improved industrial conditions, with less unemployment in 1916 than in 1915, which proves that poverty and not liquor is the cause of crime.

A vote to oust the saloons from Chicago will be postponed one year. Announcement of this decision was made by the Rev. Philip Yarrow, superintendent of the Dry Chicago Federation, at the union meetings of the ministers in the First Methodist Episcopal Church. "The ministers and the leading men of the churches," he said, "are not sufficiently interested at this time to warrant our putting the question of a 'wet' or 'dry' Chicago up to the voters at the next spring election. We feel the presidential campaign absorbs so much interest it will be difficult to concentrate on the saloon question. Billy Sunday will be here next fall, and his meetings will help create sentiment. We believe the spring of 1918 will afford the best opportunity for success." The real fact of the business is that the prohibitionists were unable again to muster sufficient valid signatures to get an election, and were afraid to indulge in the same work perpetrated by them in the two former attempts, which might lead to some of them being sent to jail for fraudulent practices.

The Manufacturers and Dealers Association of America continues in its campaign of enlightenment and education. In one of its publications it said last month: "This association has taken a bold, fearless stand in regard to Class Legislation of any nature, and we will fight for our principles. We claim there are too many class laws now that cannot be enforced, and more ready to be introduced in the legislatures of every State. The slogan of theorists is 'Pass a law.' To-day the country is overburdened with non-enforceable laws, therefore, this association is using every endeavor to prevent any more class legislation from becoming laws. It is to the interest of every business man to join with us in opposing class laws. Our method of procedure is done in a way that gets results. We do not work with brass bands or limelights—our work is not spasmodic, nor do we work once a month, or just before elections. Our work is never done—we work 365 days in the year. If any man who thinks that this association guarantees to get him business, and is a member from that stand only, he is not desirable. He does not appreciate the fact that this association demands the right of every American citizen to exercise his own discretion in regard to what he shall eat, drink and wear so long as he does not interfere with the rights of others, and in soliciting and accepting anyone as a member, we expect him to help this association maintain the rights guaranteed by the Constitution of the United States."

Louis Weidner, the well-known dealer in malt and hops, died here September 30th, aged 64 years. He is survived by his widow, nee Marie Busse, whom he married twenty-five years ago, and one daughter, Mrs. Carl Schultz, of Philadelphia.

THE PROMOTERS OF RADICAL LIQUOR LEGISLATION, or at least the sincere ones, not dependent upon political constituency, assume that most men would become alcoholics if given free access to drink. Yet most men do have such free access, and very few of them become alcoholic."—(Andrew P. O'Connor, Rossville, Md.)

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, October 21st, 1916.

With election day only 17 days away the trade is none too confident of victory. The different interests are merely marking time now. Fear is felt that Number 2, misquoted by the "drys" as an anti-saloon measure but in reality a prohibition measure, will carry. The principal difference between the prohibition measures known as Number 1 and Number 2 is that the second one goes into effect in January, 1918, and the first one goes into effect two years later. Bradstreet sum up the situation thus: "The Prohibitionists are fairly confident and the liquor interests are scared."

Splendid work was done by the Allied Interests in San Francisco when they woke up to the fact that so many of the "wet" voters were not registered. They put up a whirlwind registration campaign and in three weeks added some 30,000 wet votes to the registration lists. Registration closed October 7th with 181,276 actual voters on the list.

It is not often that something comes unsolicited to help the trade in its campaign, but such a gift from the Gods has entered into the California campaign the last month. It is a monster moving picture put on by D. W. Griffith, the man who produced *The Clansman*, or *The Birth of a Nation*, and he says that all his profits from that great picture have gone into producing "Intolerance," the greatest picture that has ever been filmed. The theme of the picture is "Intolerance" and shows the cruelty of the intolerants of all ages since the world began; shows how they have inflicted their will on the people with special references to the intolerants of our day—the prohibitionists. The picture is a remarkable evening's entertainment where tears and laughter are properly blended, but what is the most remarkable thing about the picture is that it shows liquor as it is actually used not as its use is usually depicted where the scenario writer gets his ideas from the prohibition tracts. One wonderful scene shows Him who came to save all men at the marriage feast changing water into wine to add to pleasure of the occasion. "Intolerance" is not a pictorial preachment; it is a colossal spectacle with a beautiful love-story, but it shows so clearly the intolerant idea of the prohibitionists that it is making "wet" votes wherever it is shown. It is shown to packed houses twice a day in San Francisco—it is a dollar show—and looks as if it would be shown here until after the election. It will also be shown in the other large cities of California.

San Francisco is having a National Pure Food show at the Civic Auditorium, and the brewers with their usual public spiritedness have excellent exhibits, but most of them are trying to help keep California "wet" at their booths instead of boosting their wares. The Buffalo Brewing Co., of Sacramento, have an excellent exhibit, the dominant note of which is a huge bottle made of bottles of Buffalo beer in charge of a pretty girl dressed in white, who gives out attractive folders setting forth the merits of Buffalo beer. C. F. Wagner has an unusual idea for his booth advertising his Alpenweiss beer. He had a pretty girl dressed in a Tyrol costume, who tells the throngs that Alpenweiss is made of mountain water and gives out paper bottles of Alpenweiss beer. The Rainier Brewery is represented, of course, with an attractive booth from which they give out anti-prohibition literature.

H. L. Liebmann, vice-president of Obermeyer & Liebmann, Brooklyn, N. Y., who has been touring California

for the last two months, was a San Francisco visitor this month.

One of the pleasing features of the campaign which is so rapidly drawing to a close is the active interest taken by the women; they are working hard to keep the State "wet." They have banded together under different-named organizations throughout the State and splendid reports have been received at headquarters regarding their activities. In Oakland they have a fine active organization; "the Women of the Allied Interests they call themselves." Mrs. George West, the wife of a prominent brewer, is one of the leading spirits of the organization. The work in San Francisco has been conducted under different lines, it being in charge of Mrs. Anderson Reid, who, as Mrs. Mugen, was confidential secretary for Mayor Van Wyck of New York, and who received her political training in Tammany Hall.

The campaign in Oregon and Washington is punctuated with raids and arrests of prominent citizens for alleged violations of the prohibition law.

The hop outlook is very much more cheerful from the growers' point of view. Two months ago it seemed hopeless, but the market is firm at 13c. to-day, with every indication of going higher. California hops are unusually good this year, in fact it is the best crop, according to experts, that California has ever produced, and this coupled with the shortage in the Oregon and Washington crop is affecting the market favorably from the growers' point of view.

Among those who have vigorously contributed their literary share to the anti-Prohibition campaign is C. C. Donovan, dealer in choicest hops, Santa Rosa, whose terse articles have aroused great enthusiasm in that city and its vicinity.

DANGER TO CHRISTIANITY. "There is real danger of associating Christianity and total abstinence so closely as to throw into revolt against Christianity that large volume of reason and of custom in our countrymen which repudiates the habits and policy of total abstinence."—(Canon Hensley Henson.)

PROHIBITION INTOLERANCE. "Intolerance has ever been a scourge upon mankind. It has caused the greatest poverty, the cruelest suffering, and the bloodiest wars in the history of the universe. It plunged all medieval Europe into the cesspool of stagnation, and clipped the gorgeous wings of Progress. Intolerance is the backbone of Prohibition; it is the cornerstone upon which the whole structure rests. It is spreading poverty and suffering—yes, hatred!—in America to-day just as it did in Europe centuries ago. But there is an eternally vigilant army that watches over the destiny of Progress and Liberty; its banner is the banner of Warren, who died for American freedom on Bunker Hill, and in its ranks are the millions of free-born, liberty-loving American citizens."—"The Other Side.")

NO ELEVENTH COMMANDMENT NEEDED. "The old divine commandment says: 'Thou shalt not steal,' but in the struggle for existence hundreds of thousands proclaim the ancient Spartan educational principle: 'Thou may steal, but you must not let yourself be caught.' We are frightened when we see how the sanctity of matrimony is trampled under foot. We see the commandment: 'Thou shalt honor thy father and thy mother,' shamefully disregarded. Yet, many preachers imagine they could, with a man-made law, reform the country and the nation, initiate a great new era and even redeem mankind by such tricks! Let the church stand by the venerable ten commandments, and the people be temperate in all things. We need no eleventh commandment."—(Rev. Bruno Howe, Rector Ev. Luth. Johannes Church, Danville, Ill.)

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., October 13th, 1916.

There was but little comfort for the brewing industry in the United Kingdom in the reply of the Prime Minister to the grievances laid before him by the deputation of the trade which complained of the arbitrary methods employed by the Control Board in extending the areas where the consumption of beer and spirits is being regulated and restricted upon the pretense that such action be necessary for the defense of the realm. The deputation had pointed out to Mr. Asquith that even agricultural districts, where little or no munition and other necessities for the army and navy are being manufactured, have been included in the restricted territory. Mr. Asquith's reply was non-committal. It explained nothing and it promised nothing. While acknowledging the loyalty, devotion and patriotism of the members of the trade, the Prime Minister declared that the extension of the restricted areas was "inevitable," as all efforts made by the government to defend the country must be concentrated on the war and that "every other interest must be subordinated to that one overmastering purpose."

But the trade will not permit itself to be silenced by this equivocal reply of the Prime Minister. Its representatives in Parliament, now again in session, will avail themselves of the opportunity of discussing the whole matter when the resolution offered by Colonel Gretton and Mr. Bartley Dennis will come before the House of Commons. That resolution reads:

Resolved that, in the opinion of this House, the Central Control Board (Liquor Traffic) should no longer be independent of the control of Parliament, and that its proceedings and expenditure should be made subject to the control of a Minister responsible to Parliament.

The ideas prevailing among the members of the Central Control Board may be judged from the remarks recently made by Lord D'Abernon, chairman of the Board, at a conference with the local and military authorities in Glasgow when he said that for the first six months of this year there was a reduction of nearly a million gallons in the clearance of proof spirits for home consumption in Scotland, as compared with the corresponding period of 1915. In beer there was a decrease of about 27,000 barrels. The weekly average of convictions for drunkenness in Glasgow had fallen from 533 to 299, but the amount of drunkenness was still twice as great per 10,000 of the population as that in large areas in the south where there was similar employment. The Board had, he also said, to choose between the maintenance of the present restrictions with firmer administration, modified restriction on the present lines, State control, and prohibition, and in his judgment there could only be prohibition if success was otherwise unattainable.

The old charge that women had been excessively drinking since the war started, has once more been disproved. The matter came up when some pious ladies in Birmingham complained of excessive drinking by women in that city. The Control Board appointed a committee of three lady members and Dr. G. Newman to investigate, and what did they report? That there was no evidence that any great number of Birmingham women were drinking to excess. However, the committee suggested that the sale of intoxicants to "children under 21 years of age" should be prohibited. This proposition

was subsequently made to the licensed trade in Birmingham at a meeting of the local licensing justices, with the natural result that the representatives of the trade declared it to be preposterous that young men and women up to 21 years should be treated like little children.

The way the trade is discriminated against by government agents glaringly appears from an order recently made by the Local Government Board exempting certain trades from military duty, for instance coopers, drivers and bottlemakers. But the men working in these trades for the brewing industry are not to be exempted! No explanation of the why and wherefore of this unjust and arbitrary discrimination has so far been forthcoming.

The market situation in the malting world is unique. A large number of maltings will, owing to labor scarcity, remain closed, and in consequence the quantity of malt produced this season must necessarily fall below even war requirements. Maltsters are fully aware of the position, and are conserving whatever stocks of old malts they may possess to supplement the restricted supplies of new furnished material which will rule everywhere throughout the coming season. Prices must, therefore, reach higher figures than ever hitherto recorded in the history of the industry. On the other hand, with the curtailed demand for barley prices, which at the moment are considerably higher than last year, must gradually recede as the malting season advances. Present prices for both barley and malt are merely transitory, and form no criterion as to the ultimate market values of either material, which may be expected to fluctuate widely in the near future.

The crop reporters of the Board of Agriculture state that, expressing an average crop of 100, the condition of the hop crop on September 1st indicated a probable yield of 94; barley 99, and oats 95. Hops deteriorated somewhat in Kent, mainly owing to the attacks of red mould, which have been severe, and may lead to some yards being picked prematurely, or left unpicked; the yield will probably be from 5 to 10 per cent. below the mean. Elsewhere the mould is not so bad, and the prospects of a month ago for an average crop are about maintained. In Worcester and Hereford the hops were healthy and vigorous on the whole, and the yield was expected to be quite average.

HISTORY OF BREWING IN CANADA. Under the title of "Some Interesting Facts About Beer," The National Breweries, Limited, Montreal, have issued a pamphlet on the history of brewing in Canada. In the year 1811 Thomas A. Dawes completed at Lachine a brewery for the exclusive manufacture of ale and porter. While this was not the first brewery built on this continent, the plant today is one of the oldest in existence. Quoting from Francis Parkman's "The Old Regime in Canada," period 1665-1672, he says: "Talon saw with concern the huge consumption of wine and brandy among the settlers, costing them, as he wrote to Colbert, a hundred thousand livres a year; and to keep this money in the colony, he declared his intention of building a brewery. The minister (Colbert) approved the plan, not only on economic grounds, but because 'the vice of drunkenness' would thereafter cause no more scandal by reason of the cold nature of beer, the vapors whereof rarely depriving men of the use of judgment. The brewery was accordingly built, to the great satisfaction of the poorer colonists." Since the founding of the Dawes Breweries in Lachine in 1811 their motto has always been "purity and quality."

Brewing News from the European Continent.

Herbert Bayard Swope, a newspaper man, who has just returned to the United States from Germany, says: "The great mental change in Germany in the last two years from a certainty of victory to a fear of defeat has had its reflex on the spirit of the population. It is a rare thing to hear a laugh in Germany, and I visited many theatres without hearing any applause. Night life has disappeared. The supper restaurants are morgue-like in their lack of cheer, and none serves more than two or three parties at a time. The beer restaurants do better. It is an insult to Gambrinus to call the liquor that they serve in Germany "beer." It is really a pale, weak, emaciated, watery substance that has much the same resemblance to actual beer that water has when drunk from a recently emptied beer glass. This is due to the heavy reduction in grain allowances made to the breweries, but with the chemical readiness the Germans are showing they at once invented some form of 'Ersatz,' which translated means a substitute. In Germany to-day they have an 'Ersatz' for almost everything—except men. They have substitutes for coffee, sugar, beer, milk, butter, eggs used for cooking and condiments, and they believe they are well on their way to have a perfect substitute for rubber. One of the curious things to be met with in Berlin and some of the other large cities are 'speak-easies' where you can get meat on meatless days. It is almost as bad getting into them as trying to get into a 'blind tiger' to get a drink in Philadelphia on Sunday."

There are rumors that the output of the German breweries is to be again restricted. "This might do for North Germany," says the "Münchener Post," "but in Bavaria another restriction could completely turn topsy-turvy our economic life and we must energetically repulse all projects tending to still more limit the consumption of beer."

Petitions signed by 80,000 persons have been sent to Chancellor Bethmann-Hollweg asking him to introduce beer-cards, to limit the consumption of beer, as has been done in regard to the consumption of bread, butter, eggs and many other necessities of life. The petitioners say that 42,000 cwts. of barley are used up by the breweries in Germany every day, enough to feed 10,000,000 persons one day—and that beer is not as necessary for keeping the masses alive as bread.

Large quantities of potato starch are now being utilized by many German brewers in the production of beer.

Orders for maximum prices of bread-grain, oats and barley, which were recently issued by officials of the German Empire, do not vary greatly from the prices of the previous year, but show one notable change, viz., there will be a reduction for deliveries in the later months of the year, while previously there has been a premium for these late deliveries. A new feature of the present order is the power given to the Imperial Grain Office to pay a threshing premium of 20 marks per ton for all grain threshed and delivered by December 15, 1916, and if use is made of this power, the independent communal grain authorities are empowered also to buy grain at the increased price. The legal maximum price of barley to August 31st is 300 Marks, and for deliveries to December 15th 280 Marks. For later deliveries lower prices are fixed, but these will be enforced for contracts made early. In the last two years the maximum price for barley was 300 Marks, but it was temporarily raised to 360 Marks, subsequently falling to 330 and 300 Marks.

Of the German hop crop our Nuremberg correspondent, Bernhard Bing, writes, September 5th: "The yield of the

crop will fall short of last year's, as many planters, especially in Bavaria and Bohemia, have ploughed out the hop-roots on account of the less profitable prices. It is too early at this writing to make a reliable estimate as to the quantity we will harvest, but it probably will be 170,000 cwts.; Austria, about 180,000 cwts. The reduction of the yield is caused by the fact that 30-40% of the hop-yards were not planted. Nevertheless the expected yield will be sufficient to cover the wants of the two countries for the next year. The price question depends principally upon the fact, whether we can count with export possibilities for the season 1916-1917. Owing to present conditions the demand for hops of the new crop is rather restricted, as buyers are still holding some hops. The first arrivals of the new crop were sold this week in Saaz at 140@150 Kroners, and on the Nuremberg market the first lots of new Hallertau hops at 90@110 Marks per 50 Kilos."

From the Hopfenbau-Verband in Saaz we have this, dated September 2nd: "The hop crop will be greatly reduced; its exact amount can be determined only after picking. The quality is satisfactory. Business is very quiet. Quotations: 110@140 Kroners per 50 Kilos. None of the new crops on this market as yet."

Other advices state that the wire in the Saaz hop yards this year is of so poor a quality that it breaks and hundreds of thousands of vines are thus destroyed.

The entire hop crop in Germany this year is estimated by the "Hopfenbau-Korrespondenz" at from 120,000 to 130,000 cwts., while in Austria-Hungary a crop of about 233,000 cwts. is expected.

The hop growers of Germany and Austria have lost millions of dollars since the war started. The brewers are now consuming not more than one-half pound of hops to produce one hectoliter of beer.

Last year's production of beer in Bavaria is estimated at 14,191,893 hectoliters, as compared with 19,076,861 hectoliters produced in 1913.

Drastic measures to reduce the consumption of beer have been taken in Austria. The restaurants and beerhouses are now only permitted to sell beer between four and ten on Sundays, and then only one big glass, half a liter, to each customer. For the "off-trade" a liter may be sold. The penalties for a breach of these regulations are a fine of 5,000 crowns and imprisonment for six months. The restaurant proprietors are in despair. Some depend almost entirely on their luncheon trade, and can sell no beer at all. Doubtless a large number will be forced to shut up, and others are proposing to close one or two days a week. Meantime the beer drinkers are visiting half-a-dozen places to get a glass of beer at each, instead of drinking the same quantity in one restaurant. To offset this the Government will probably be forced to introduce beer-cards. The Austrian breweries have received 2,000,000 cwts. of Austrian and Hungarian barley, from government depots and more promised, while the Hungarian breweries received 1,000,000 cwts. This year's total output of the Austrian-Hungarian breweries has been estimated to amount to about 55 per cent. of the normal production. However, this is doubtful, other correspondents asserting that the entire output was not much more than 25 per cent. of the output in 1913.

According to a Rome message, fugitives arrived from Dalmatia state that the entire grape harvest of Dalmatia, Istria and Hungary has been taken over by the State, and all this year's wines are to be reserved for the use of the Austrian army.

The production of beer is still increasing in France. Its value in August was reported to be taxed at 1,022,000

francs, as compared with 830,000 francs in August, 1915, and with 1,009,000 francs in July, 1916. The normal production in August would be taxed about 1,524,000 francs. During the first 8 months of 1916 the beer-tax amounted to 6,815,000 francs, or 1,675,000 francs more than during the corresponding period of 1915. The quality of the French beer is said to be excellent.

Cider, beer and water have taken the place of wine in many Parisian households, according to figures from American Consuls. They show that during August the amount of wine brought into Paris was 20,000,000 quarts less than in August, 1915. Approximately 6,000,000 more quarts of cider and beer were brought to the city.

The barley and hop crops of France are reported to be good in all Departments, while in 1915 these crops were below medium in nine Departments. The imports of barley and malt in 1916, so far, have been valued at 18,559,000 francs, as against 15,000,000 francs in 1914. The first 5,000 tons of Algerian barley have arrived at Marseilles and they are now being distributed among the breweries by French government officials at about 29.50 francs f. o. b. Marseilles.

At Amiens and several other cities the municipal authorities are taxing beer 25 centimes and upward per liter.

The Commission appointed by the French Chamber of Deputies to devise ways and means how to reimburse the brewers in the invaded parts of France has reported that after the war all material value damaged, or lost, through the invasion, will be replaced by the government.

During the fiscal year 1915-1916, 4,513,129 kilos of glucose has been used in the production of beer in France.

A paragraph recently went the round of the Press to the effect that the prefecture of Bucharest had, on the occasion of Rumania joining the Allies, prohibited the sale of alcohol, and therefore Rumania had followed the example of Russia. There has been no confirmation of the announcement, which if true, relates probably only to the sale of spirits. Even so it obviously applies only to Bucharest and not to Rumania as a country.

Dr. Edmund C. Boddy, former commanding surgeon of the Tchele Koola Hospital at Nish, Serbia, writes: "I've come back to England, knowing that Serbia and Rumania, which see their moving pictures on Sunday, if they want to; where women smoke cigarettes delightfully and with no ill moral effects, and where drinking is done openly, are good proof against the assertion of a world that is prudish at times and which in part, believes that these things are a sign of mental degeneracy. I didn't see half the drunkenness there that I have seen in this country, with its side-door customs."

The position on the Russian hop market continues firm, and the price, according to the Volhynia Association of Hop Growers, has reached 40 rubles per pood in Volhynia and 60 rubles in other districts. With regard to the goods carried over from previous years there is still some of the 1914 gathering, which sells at 40 rubles per pood. But stocks on the whole are really very small. Great hopes are not reposed in the new harvest, for in the largest area of hop production—Volhynia—it is expected that the harvest will be but half of the normal. Sundries, such as wire and twine, were very difficult to obtain. In the eastern parts of Volhynia the growers did better; but even here, in consequence of some technical difficulties, the harvest cannot be as great as might have been expected under normal conditions. As to other districts, the information is not particularly favorable.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

NEW BREWERY

MARYLAND—BaltimoreAugust Fenker.

FIRM CHANGES.

MICHIGAN—DetroitChampion Brewery Company succeeds Kaiser & Schmidt.

NEW YORK—NewburghChas. K. Leicht, Highland Brewery (Kate Leicht) succeeds Chas. K. Leicht.

BREWERIES CLOSED.

ILLINOIS—DecaturDecatur Brewing Co.

" —McHenryWorts & Boley.

UTAH—Salt Lake.....H. Wagener Brewing Co.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1916 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, alphabetically arranged, with postal addresses, corrected to January 15, 1916, also in all other American countries where breweries exist.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries and firm changes recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
Total	17,457,315	19,479,894	2,172,408	149,829
Net increase for the first three months of the fiscal year 1916-1917				2,022,579

THE PROHIB'S NOSE. "What kind of a nose has the Prohibitionist got?" "A very long one that it is always poking into other people's business."—("Pop" Martin.)

NO RATIONAL REASON FOR IT. "If no intellectual, physical or moral deficiency can be traced to the moderate use of fermented liquors, then why try and prohibit their use and why try and make a crime of something that is not wrong?"—(Paul Masson.)

THE AMERICAN BOTTLERS' PROTECTIVE ASSOCIATION, at its 28th annual convention, held in St. Louis, October 11th to 13th, has elected these officers: President, J. M. Silver, Superior, Neb.; first vice-president, Frank W. Wegener, Detroit; second vice-president, Jacob Hilleman, Philadelphia; third vice-president, Otto L. Meyer, Milwaukee; treasurer, J. J. Duffy, Jersey City, N. J.; secretary, William T. Phillips, New York.

A COURSE IN PRACTICAL CHEMISTRY OF FOOD INDUSTRIES is now being conducted by the School of Practical Arts of Teachers College at the Columbia University, in the City of New York, brewing being one of the subjects taught. Details may be obtained at the office of the Registrar in Columbia University or at Desk E in the office of the Secretary of Teachers College. The first lecture was delivered October 24th. Special fee, \$10. University fee not charged to students who take only this course.

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Anheuser-Busch Brewing Association, St. Louis, are at work on the concrete foundation for their new "bevo" bottling plant at 3001-53 South Broadway, St. Louis, which is to cost about \$130,000.

—American Brewing Co., Detroit, Mich., have recently ordered of The Pfaudler Co., Rochester, N. Y.; 12 additional rings with which their Pfaudler Glass Enameled Steel Tanks previously installed are to be enlarged.

—Arnholt & Schaefer Brewing Co., Philadelphia, erect an addition to their bottling works, 65x100 feet; plans having been drawn by Wm. F. Koelle & Co., architects and contractors.

—P. Ballantine & Sons, Newark, N. J., recently placed their fourth order for Glass Enameled Steel Tanks with the Pfaudler Co., of Rochester, N. Y., this last item calling for 3 Horizontal Bottling Tanks.

—Bergner & Engel Brewing Co., Philadelphia, are increasing the capacity of their bottling cellars with 4 Pfaudler Glass Enameled Steel Upright Bottling Tanks which are now being built at Rochester, New York.

—Bowler Bros., Lim., Worcester, Mass., erect a one-story addition, which will be used for their shipping department office.

—Burkhardt Brewing Co., Boston, have completed the installation of the third Arrow Inverted or Type "C" Washer. All of the units are now equipped with this type of washer. Each machine is equipped with automatic transfer from Goldman brush conveyor to feed conveyor of washer. Bottles, after being fed into the soaker, travel automatically through the washer, filler and crowner and are delivered from crowner directly in front of Pasteurizer baskets by means of a belt conveyor, all of which was furnished and installed by the Arrow Bottlers Machinery Co. of Chicago. Few, if any, bottling departments in the country can equal this plant if cleanliness, efficiency and economy of operation are considered.

—M. Burkhardt Brewing Co., Akron, Ohio, erect a storage depot and rathskeller in Barberton, Ohio. The company also have ordered of the Pfaudler Co., Rochester, N. Y., 17 Horizontal Chip Tanks and 2 Upright Closed Fermenters of the cylindrical type; these are soon to be installed and are expected to contribute considerably to the efficiency of the plant.

—Chattanooga Brewing Co., Chattanooga, Tenn., recently placed their eighth order with the Pfaudler Co., Rochester, N. Y., this item calling for 1 Upright Closed Glass Enameled Steel Tank which is soon to be installed.

—Christ Brewing Co., Louisville, Ky., have completed their renovations and improvements, operating them with largely increased capacity.

—Columbia Brewing Co., Shenandoah, Pa., erect a new garage and stable, 100x100 feet, the plans having been designed by Wm. F. Koelle & Co., architects and contractors, Philadelphia.

—Connecticut Breweries Co., Bridgeport, Conn., have placed an order with the Pfaudler Co., of Rochester, N. Y., for 3 Horizontal Chip Tanks which are glass enameled steel.

—Dick & Bros. Quincy Brewery Co., Quincy, Ill.,

are erecting a new structure at Ninth and Main Streets, the old one having been torn down.

—Duluth Brewing & Malting Co., Duluth, Minn., are enlarging their distributing agency at Chippewa Falls, Wis. They have also erected a combination ice and cold storage depot at Hancock, Mich.

—East Grand Forks Brewing Co., East Grand Forks, Minn., are rebuilding the part of their plant which was recently destroyed by fire.

—Henry Elias Brewing Co., New York, recently made improvements and added to their equipment at an expense of about \$6,000.

—Elk Brewing Co., Kittanning, Pa., have doubled the capacity of their ice plant, put in a grains dryer and built a new bottling house. They also drilled two wells and now have their own water supply.

—Fergus Brewing Co., Fergus Falls, Minn., have added another story to their bottling house, which was equipped with additional machinery.

—German-American Brewing Co., Buffalo, N. Y., in addition to 7 new Glass Enameled Steel Bottling Tanks, have ordered of the Pfaudler Co., Rochester, N. Y., 4 additional sections, by which the capacities of tanks purchased some time ago are to be increased.

—Home Brewing Co., Canton, Ohio, erect a \$10,000 brick addition, 2 stories high, 30x96 feet. The company also recently installed twenty Glass Enameled Steel Horizontal Chip Tanks, one upright open settling tank and one yeast tank, all built by The Pfaudler Co.

—Horlacher Brewing Co., Allentown, Pa., have ordered from the Frick Co., Waynesboro, Pa., one 200 horizontal double acting duplex refrigerating machine with high side and direct expansion piping for ice storage.

—Houston Ice & Brewing Co., Houston, Tex., have installed two "Shipley" flooded atmospheric ammonia condensers, each 12 pipes high, 20 ft. long, made of 2-in. pipe, all furnished by the York Mfg. Co., York, Pa.

—Independent Brewing Co., Pittsburgh, have placed a recent order with The Pfaudler Co., Rochester, N. Y., for 8 additional sections and 8 additional heads with which the capacities of their tanks previously installed are to be enlarged and rearranged. This brewery has also arranged for the installation in its Loyalhanna plant at Latrobe, Pa., for 10 additional rings and 5 additional heads for the same purpose. This will considerably increase the capacity of the company's two plants without necessitating the installation of entirely new tanks.

—Iron City Brewery, of the Pittsburgh Brewing Co., Pittsburgh, is to have a \$35,000 addition to its bottling department.

—Iroquois Brewing Co., Buffalo, N. Y., recently ordered, through A. Magnus Sons Company, Chicago, two Arrow Inverted or Type "C" Washers, to be used in connection with its new 350-barrel, 8-compartment Barry-Wehmiller Soaker.

—Kamin & Schellinger Brewing Co., Mishawaka, Ltd., are enlarging and newly equipping their plant.

—Kittanning Brewing Co., Kittanning, Pa., recently installed an Arrow Inverted or Type "C" Washer in connection with its Goldman Soaker.

—Gerhard Lang Brewery, Buffalo, N. Y., are arranging to add the equipment of their bottling house, 5 Pfaudler Glass Enameled Horizontal Bottling Tanks. The Lang Brewery have been building extensively to be in position to handle a considerable share of next summer's business.

—William J. Lemp Brewing Co., St. Louis, recently placed an order with The Pfaudler Co., of Rochester, N. Y., for three Glass Enameled Jacketed Steel Kettles to be used in the manufacture of Near Beer. The Pfaudler Co. has for some time been building jacketed kettles for the preparation of various foods as well as for the Chemical and Pharmaceutical Trades, and is therefore well prepared to meet the demands for apparatus required in the production of Beer substitute. In addition to these, the Lemp Company have ordered two Upright Closed Tanks to be added to their Pfaudler equipment already installed.

—Marshfield Brewing Co., Marshfield, Wis., have completed their new bottling works. The building is a one-story structure with a cement floor, built of brick. New machinery is now being installed.

—Minneapolis Brewing Co., Minneapolis, Minn., erect a distributing depot at Pipestone, Minn.

—Monumental Brewing Co., Baltimore, Md., recently installed an Arrow Inverted or Type "C" Washer, to be used in connection with its Barry-Wehmiller Soaker.

—National Brewing Co., Chicago, are arranging to meet the increased demand for its bottled product with three Pfaudler Glass Enameled Steel Upright Bottling Tanks, which are soon to be installed. The company have also ordered, through A. Magnus Sons Company, Chicago, an Arrow Brush Conveyor and an Arrow Inverted or Type "C" Washer, automatically connected, to be installed in connection with a Magnus Soaker and Ruff Pasteurizer.

—North American Brewing Co., Chicago, are about to considerably enlarge and improve the plant of the former Tabor Brewing Co., now being operated by the North American Brewing Co.

—Peoria Malting Co., Peoria Ill., are about to largely increase and improve their plant, at an outlay of about \$200,000.

—Phoenix Brewery, Buffalo, N. Y., recently ordered an Arrow Standard or Type "A" Washer, to be used in connection with its Barry-Wehmiller Soaker.

—Potosi Brewing Co., Potosi, Wis., erect a three-story structure in East Dubuque, Iowa, to be used for storage and office purposes.

—Reading Brewing Co., Reading, Pa., erect a two-story brick and concrete bottling house, to cost about \$10,000.

—Rock Island Brewing Co., Rock Island, Ill., are rapidly completing their new bottling house, a two-story fireproof structure, costing approximately \$50,000.

—Roessle Brewery, Boston, Mass., recently installed an Arrow Standard or Type "A" Washer, in connection with its Goldman Soaker.

—Ruff Brewing Co., Quincy, Ill., have ordered from The Pfaudler Co., at Rochester, N. Y., one 2-section Upright Closed Separated Tank.

—Jacob Ruppert, Inc., New York, are erecting an addition to their ice making plant on 132nd Street, near Lincoln Avenue, Bronx Borough; cost, about \$1,500.

—Wm. Simon Brewery, Inc., Buffalo, N. Y., are building a two-story addition to their bottling works; cost, about \$6,000.

—Washington Brewing Co., Columbus, Ohio, recently installed automatic stokers for the boilers of their power plant.

—Watertown Consumers Brewing Co., Watertown, N. Y., are about to install 10 Pfaudler Glass Enameled Steel Horizontal Chip Tanks, which are now being built at Rochester, N. Y.

—West Bend Brewing Co., West Bend, Wis., erect a new frame ice house, on a concrete foundation; dimensions, 60x90 feet.

—D. G. Yuengling & Son, Pottsville, Pa., have placed an order with The Pfaudler Co., of Rochester, N. Y., for four Glass Enameled Steel Bottling Tanks.

—Ziegele Brewing Co., Buffalo, N. Y., are erecting a new brew house, the cost of which will be about \$10,000, the equipment not included.

—The Wm. Hartig Malting Co., Watertown, Wis., has resumed operations for a continuous run of two years under direction of Superintendent C. E. Emmerling.

—George J. Greis's old established brewery, at Petaluma, Cal., recipient of many prizes at international and State expositions, has been purchased by William Miller and Bert Souza.

—The Pabst Brewing Co., Milwaukee, have recovered \$9,000 paid under error to the city treasury for personal taxes, the company having been assessed twice and paid their taxes twice.

—Harry Sillman, a collector for the Stroh Brewery Co., Detroit, Mich., was held up by five bandits, at 8.30 A. M., Tuesday, September 26th, on Congress street, Detroit, \$500 being taken from his pockets.

—Roof climbing robbers broke into the second floor office of the Schlitz Brewing Co., 957 State Line, Kansas City, Mo., some time October 8th. Office employes found a battered safe. The robbers got \$600.

—The Leisy, Gipps and Union Brewing Companies, of Peoria, Ill., had fine displays of their products in exhibition recently held at the Merchants building. All had handsomely decorated booths with several attendants in charge.

—An attempted holdup occurred at the office of the Walter Bros. Brewing Co., Menasha, Wis., during the night of October 11th. The intruder, who demanded that the safe be opened for him, was driven off by night watchman William Holmes.

—The Pennsylvania Central Brewing Co., Scranton, Pa., have obtained an injunction against the Anthracite Beer Co., Scranton, to prevent them from painting their kegs the same color as those of the E. Robinson's Sons plant of the Pennsylvania Central Brewing Co.

—The Huebner-Toledo Breweries Co., Toledo, Ohio, have procured an injunction to restrain Harry and David Denenson and J. Michael Lipke from disposing of bottles belonging to the company. It is charged these men have been shipping the bottles to other cities.

—Drawback has been allowed by the U. S. Treasury Department on polished fancy rice, polished screenings, polished brewers' rice, and rice flour or meal manufactured by the Empire Rice Milling Co. (Ltd.), of New Orleans, La., for the benefit of A. Held, also of New Orleans, with the use of imported cleaned rice.

—The Independent Breweries Co., St. Louis, have bought the property at the northwest corner of Broadway and Dorcas street, and 25 feet on the east side of Seventh street, north of Dorcas street. The company acquired this property for terminal purposes. Track connections will be made with the Manufacturers' Railway.

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW CORPORATIONS. The John Kam Malting Co., Buffalo, N. Y., have amended their charter, increasing their capital from \$200,000 to \$285,000.

Rex Brewing Co., Spangler, Pa.; capital, \$95,000. Incorporators: Michael J. Hines, Michael J. Hines, Jr., Dr. Reuben Eiseman, Arcangelo Abbaticchio, Owen Murphy, G. J. Createan.

Officers have been elected by brewery companies as follows:

Arnold & Co., Inc., Ogdensburg, N. Y.: President, J. H. Collins; secretary and treasurer, C. M. Brownlow; vice-president and brewmaster, Wm. Johnson.

Bartholomae & Roesing Brewing & Malting Co., Chicago: Brewmaster, William Heiland, succeeding William Schwartz, retired.

Bartholomay Brewing Co., Ltd., Rochester, N. Y.: President and treasurer, S. B. Foster; vice-president and secretary, John Bradley; additional directors, C. S. Rauber, F. C. Goodwin, and Carl Nixon. The brewmaster is A. Mueller.

Chattanooga Brewing Co., Chattanooga, Tenn.: President, Charles Reif; secretary and treasurer, J. H. Broshaus, Jr.; brewmaster, Carl Neidhardt.

Citizens' Brewing Corporation, Albany, N. Y.: President, Silas H. Livingston; vice-president, treasurer and general manager, Robert Weigel; secretary, Charles P. Drumm; superintendent, P. H. Anglin.

Elk Brewing Co., Kittanning, Pa.: President and general manager, H. H. Weylman; vice-president, J. B. Coogon; secretary and treasurer, H. E. Moesta; brewmaster, John Borger; additional directors, Charles J. Moesta, Valentine Neubert, and Joseph Shankle.

Enterprise Brewery, Inc., Brooklyn, N. Y.: Brewmaster, George Berg, formerly brewmaster of the Frank Brewery, Brooklyn.

Forest Park Brewing Co., St. Louis: President and general manager, Edward Wagner; secretary-treasurer and brewmaster, Edward Wagner, Jr.; additional director, August Roopmann.

Franz Brothers Brewing Co., Freeport, Ill.: Brewmaster, Adam Wolfrum, formerly with the Iron Range Brewing Association, Tower, Minn.

German-American Brewing Co., Buffalo, N. Y.: President, John F. Nagel; vice-president and secretary, Ernest Muelhauser; treasurer, Carl J. Weideman; superintendent and brewmaster, Charles W. Lappe.

Haberle-Crystal Spring Brewing Co., Syracuse, N. Y.: President, Charles Schwarz, succeeding the late Frank B. Haberle; vice-president, Frank C. Biehler.

Hedrick Brewing Co., Albany, N. Y.: President and general manager, Robert Weigel.

Otto Huber Brewery, Brooklyn, N. Y.: President, general manager and treasurer, Joseph Huber; secretary, F. Max Huber; brewmaster, John Huber.

J. Chr. G. Hupfel Brewing Co., New York: President, J. Chr. G. Hupfel; vice-president, Anton C. G. Hupfel; treasurer and general manager, Adolph G. Hupfel; secretary, Chris. G. Hupfel. The brewmaster is Andrew Denner.

Keystone Brewing Co., Dunmore, Pa.: Treasurer, manager and majority stockholder, R. C. Wills; other members of the board of directors, E. G. Wills, Jos. J. Wills, F. P. Butler (also secretary) and John J. Cannon. The company recently acquired the entire block on Blakely street, from Pine to Green streets. In announcing the deal, Secretary Butler says: "For a number of years, in fact since the incorporation of the Brewing Company, Mr. Wills, who is practically the sole owner of our concern, leased the land and buildings, in which we have conducted our business, to this company, but, owing to the fact that he has decided to give a small share in the stock of the company to old and trusted employes, and also to increase the assets of our company, made the change within described. We feel confident that we are one of the few brewing companies in the country, and in fact we are sure we are the only brewing company in this county which has no liens or encumbrances against it of any kind or nature whatever. Our method in the future, as it has been in the past, will be to discount our bills, and to have no liens owing against us, except ordinary running accounts from month to month."

George J. Meyer Malting Co., Buffalo, N. Y.: President and treasurer, George J. Meyer; first vice-president and superintendent, George H. Meyer; second vice-president, Leo P. Meyer; secretary, Eugene J. Meyer; additional directors, M. J. Meyer and M. M. Frauenheim.

Leonhard Michel Brewing Co., Brooklyn, N. Y.: President, superintendent and brewmaster, Leonhard Michel; vice-president and general manager, Charles Doll.

Milwaukee Brewery Co., Milwaukee: President, treasurer and general manager, Gustav Becherer; vice-president, G. G. Gehrz; secretary, Herman Fehr; brewmaster, Günther Schmidt.

National Brewing Co., Steelton, Pa.: President, John Matta; vice-president, Dr. Bayart T. Dickinson; secretary-treasurer, Leon Engel; additional director, Jos. Feuchtwanger. The brewmaster is T. F. Healey.

Pennsylvania Central Brewing Co., Scranton, Pa.: President, A. J. Casey; vice-presidents, William Kelly and Harry W. Jacobs; secretary and treasurer, W. G. Harding; additional directors, P. J. Casey, J. George Hufnagel, E. J. Rutledge, Philip Robinson, H. W. Reichard and E. J. Rutledge.

Piqua Malt Co., Piqua, Ohio: President and treasurer, Louis Hehman; vice-president, J. G. Schmidlapp; secretary, J. F. Hubbard; superintendent, A. J. Eliel; additional directors, Henry Flesh and W. W. Schmidlapp.

Quandt Brewing Co., Troy, N. Y.: President, George Bolton; vice-president, Joseph Bolton, Jr.; treasurer, William Bolton; secretary and general manager, Thomas McCochrane. The brewmaster is William Hammer.

F. A. Rieker Brewing Co., Lancaster, Pa.: President, Harry A. Rieker; treasurer, Frank J. Rieker; secretary, Charles A. Rieker; superintendent and brewmaster, Theobald Schlegel; additional director, Anna Rieker-Vogel.

K. G. Schmidt Brewing Co., Chicago: Brewmaster, Charles Landsberg, succeeding William Heiland, transferred to the Bartholomae & Roesing plant of the Milwaukee & Chicago Breweries, Ltd.

South Side Brewing Co., Chicago: President and general

manager, Frank J. Hinkamp; vice-president, Frank P. Decker; secretary and treasurer, Frank C. McNicholas; additional directors, George Scholler, B. McNicholas, C. Salvator, P. Peletanskis, Charles Gartner, and F. A. Weltenbrink. The brewmaster is Charles Scholl.

St. Louis Brewing Association, St. Louis: President, Henry Nicolaus; first vice-president, Frank J. Foster; second vice-president, Robert Bethmann; secretary and treasurer, C. Norman Jones; additional directors, W. A. Haren and H. E. Wuertenbaecher.

Union Brewing Co., Sharon, Pa.: President, T. S. Patch; vice-president, John Wilson; secretary, W. H. Cohn; treasurer, Harry Orchard; general manager, Patrick Wilson; additional director, Felix Weil.

Washington Brewery Co., Ltd., Washington, D. C.: President, Henry F. Woodard; vice-president, Charles Owen Haines; treasurer and general manager, Harry Williams; secretary, Sigmund Erlich. The brewmaster is John Kirschensteiner.

Weisbrod & Hess Brewing Co., Inc., Philadelphia: President, George Weisbrod, Jr.; vice-president and treasurer, John H. Ragatz, Jr.; secretary and general manager, William F. Fiedler; brewmaster, Louis Winter, Sr.

York Brewing Co., York, Pa.: Secretary, Frederick Hetzel; general manager, Charles V. Hetzel; brewmaster, William P. Moeller.

Ph. Zang Brewing Co., Denver, Colo.: President, A. J. Zang; vice-president, Daniel Fuelscher; secretary and treasurer, George H. Kaub; superintendent and brewmaster, Joseph Besser.

BRITISH-AMERICAN BREWERIES. The report of the San Francisco Breweries, Ltd., for the year ended April 30th last states that the sales were 184,113 barrels, an increase of 6,305 barrels. The first four months of the current year show an increase of 7,000 barrels. The profit is £11,060 before providing for interest on prior lien bonds, debentures, and loans, rent losses on old leases entered into soon after the earthquake in 1906, and subscription to Panama Exposition. After charging these items, the loss is £35,277, which, added to the debit balance of £40,383 brought forward, gives a total debit balance of £75,660 to be carried forward. In accordance with the resolutions passed on Sept. 22 last, deferred interest warrants aggregating £59,794 have been issued in respect of two years' interest up to April 30th, 1916.

The Denver United Breweries, Ltd., report for the year ended June 30th that the enforcement of the Prohibition Law in Colorado has deprived the company from carrying on its business. It has also involved the closing of all saloons with the result that the company's investments in saloon equipments and loans have been largely sacrificed. The company has put upon the market a temperance beverage, and the profit has considerably helped towards meeting standard charges. The profit for the year is £2,610 after writing off £2,904 for depreciation. After charging debenture interest, and adding £2,249 brought in, the deficiency is £5,238, to which must be added £62,319, losses arising from the closing of saloons and the termination of all licenses. The losses amount to £67,557, and the directors have appropriated the reserve of £50,000 towards meeting the same. After deducting this amount there remains a debit balance of £17,557 to be carried forward.

THOSE PESKY REFORMERS. If most of the Reformers would wait long enough to correct their own faults they wouldn't have any time to correct the faults of others.—(Cincinnati "Enquirer.")

Changes in Rice Growing and Rice Milling.

The rice plant requires much moisture, and it is necessary to resort to irrigation in supplying it. Formally the entire production of rice in the United States was grown in the low-lying coastal lands adjacent to rivers, from which they were flooded. The nature of the land and the character of the irrigation works made rice growing in the localities both difficult and expensive. With the development of irrigation in the United States, however, it has been found expedient to use the level and somewhat elevated sections of Louisiana, Texas and Arkansas for this culture. These sections, being easily drained, are well adapted to rice growing, and the plowing, harrowing, sowing and reaping can be done in the same manner as for other grain crops. As a result, it is probable that the production of rice has undergone greater changes than that of any other crop grown in the United States.

As late as 1890, or 25 years ago, nearly all the American rice was grown near the Atlantic and Gulf coasts. The culture in these localities, however, has been practically discontinued, and nearly the entire production of the country is now grown in the inland sections of Louisiana and Texas, and in Arkansas, in the order named.

The change in the habitat of rice in the United States has necessarily brought about a change in the location of the rice mills. Whereas most of the cleaning and polishing establishments were formerly in the Carolinas and Georgia, the industry in these States has almost disappeared and now nearly all the mills are located in Louisiana, Texas and Arkansas, with a few small ones in the Pacific coast cities.

Formerly the rough rice was generally milled on contract for a stipulated price or for a portion of the rice itself. With the erection of the larger and more up-to-date mills in the new rice-growing districts, however, has come the general practice of buying the rough rice outright, milling it, and selling the various products obtained. The industry has accordingly changed almost entirely from a custom-milling to a merchant-milling basis. As a result of the erection of these larger mills there has been a gradual reduction in the number of establishments engaged in cleaning rice. This tendency was especially pronounced from 1909 to 1914.—(U. S. Commerce Reports.)

—It is reported that Edw. Heuer, formerly connected with the Erie Brewing Co., Erie, Pa., M. Liebel, former mayor of Erie, Frank Overkirk, of St. Mary's, and others have organized a company who purpose to build a new brewery at Erie, Pa., a site having been secured near the eastern limits of the city, along the Pennsylvania railway.

MORE RELIGION—LESS LAW. Bishop Candler, of the Southern Methodist communion, recently announced: "For one I am tired of the revolutionists who call themselves 'reformers.' I am weary of men who would pull down our system of government to correct evils that lie beyond the utmost power of the wisest legislators and the most skillfully framed legislation. . . . What we need is not more probing, but more piety; not revolutions but religion." That is the nubbin of the whole matter, and every reasonable man who has any respect for the progress and growth of his country will think it over rationally and put the proper estimate upon the politicians who are trying to foist themselves into office and power on the promise that they are going to regenerate mankind by statute. It can't be done, as Bishop Candler tells us very frankly.—("Chattanooga [Tenn.] Times.")

United States Brewers' Association.

Fifty-Sixth Annual Convention, to be held in Cleveland, Ohio, November 21st to 24th, 1916.

The Board of Trustees of the United States Brewers' Association have agreed that the Association's 56th annual convention shall be held in Cleveland, Ohio, November 21st to November 24th.

The delegates and members will hold their sessions at the Hollenden Hotel, and secretary Hugh F. Fox announces the following program:

Tuesday, November 21st.—10.00 A. M.—Meeting of the Executive Committee. 3.00 P. M.—Meeting of the Board of Trustees.

Wednesday, November 22nd.—10.00 A. M.—Opening Session of the Convention. Welcome from the Mayor of Cleveland, the President of the Cleveland Chamber of Commerce, and the President of the Cleveland Chamber of Industry. Address of President Gustave Pabst of the United States Brewers' Association. Addresses by invited speakers. Appointment of Committee on Resolutions. Reports of the Board of Trustees and Standing Committees. Appointment of Committee on Condolence. 2.30 P. M.—Executive Session for Brewers. 3.00 P. M.—Automobile Tour for ladies. 8.00 P. M.—Entertainment at the Hollenden, for members and guests.

Thursday, November 23rd.—10.00 A. M.—Closing session of the Convention. Election of new Trustees and Standing Committees. Reports of Condolence and Resolution Committees. (If necessary a Second Executive Session will be held.)

Meetings.—All meetings will be held in the Hollenden Hotel.

Registration.—The Registration Bureau will open on Tuesday morning, November 21st. (All brewers are requested to furnish credentials.)

Hotels.—The following hotels are recommended: Hollenden Hotel, European plan, \$2.00 up; Hotel Statler, European plan, \$2.00 up; Hotel Olmsted, European plan, \$1.50 up; Colonial Hotel, European plan, \$1.50 up, American plan, \$3.50 up; Euclid Hotel, European plan, \$1.50 up; Gillsey Hotel, European plan, \$1.00 up; Kennard House, European plan, \$1.00 to \$2.50; American House, European plan, \$1.00 up. American plan, \$2.00 up. Application for rooms should be made as soon as possible to the hotel delegates or members may select.

Considering the Saloon.

By HUGH F. FOX, Secretary of the United States Brewers' Association.

The saloons in our large cities must do a large trade to pay their overhead expenses, which probably average fully four thousand dollars a year. Their customers, who are very numerous, seem fairly well satisfied with the existing conditions, and it is doubtful if they would welcome any radical change such as the exclusion of spirits. Obviously a saloon which sold only certain beverages would be at a disadvantage in competition with the place where the customer can get anything he calls for. Whether the "trade" will ever lift itself by its own bootstraps and introduce any startling changes by its own voluntary action is doubtful. The leaders in all branches of the liquor business realize that, except in the manufacturing centers, there is a strong sentiment against the standing bar saloon as it is generally conducted at present.

Probably 90 per cent. of the saloons are decently conducted to-day, and it would be an easy matter to close the others if the authorities were in earnest about it, but—this would not solve the problem.

Profiting by experience in some of the European countries, would it not be possible to make a number of demonstrations in those States that are now dry, which have already gone through the costly tearing-down process, and are in a position to start all over again?

Is it futile to dream of a place where the beer pump

and the soda fountain shall be so close together that one man can work them both?

The best field for experimentation is undoubtedly to be found in the prohibition states themselves. The people of the cities in prohibition territory are thoroughly dissatisfied with the present conditions. Though they may be opposed to the saloon, they are eager to put a stop to the present illicit traffic and are ready for a reasonable remedy. Most of them would welcome legislation which would permit the sale of beer and light wines in restaurants (including bona fide clubs and reputable hotels). Care should be taken to avoid overstimulation of the business by so limiting licenses that they will be determined solely by the reasonable convenience of the public. Under such a system the State would naturally be committed to the principle of local self-government by giving each community the right to determine the matter for itself. In re-establishing this plan, however, it would be wise to provide that no change should be made by any local community unless 60 per cent. of the vote was cast in favor of it. Under such a plan the individual would still have the right to have any beverage shipped to him from outside the State for his personal use, in accordance with the limitations implied by the law of the State. The successful operation of this plan in several States would be so widely commented upon that the movement would soon spread, and it would pave the way for radical reforms of a general nature in many other States. Such a plan would lend itself easily to other experiments along the line of the Public House Trust Companies of England, or even to municipal restaurants.—("The Forum.")

Master Brewers' Association of the United States.

**28th Convention, held in Buffalo, N. Y., October 1st, 2nd, 3rd
and 4th, 1916.**

The 28th Convention of the Master Brewers' Association of the United States was held in the German-American Hall, Buffalo, N. Y., from October 1st to October 4th, 1916. There was a very large attendance, many of the members and delegates being accompanied by their ladies. The proceedings were of intense interest and importance to the entire brewing industry as will be seen from the subjoined report.

On Sunday, October 1st, the delegates and members registered at headquarters, receiving their badges and tickets for the various entertainments which were arranged with skill and great liberality by the members and committees of the Buffalo District. An informal reception took place on Sunday evening.

On Monday, October 2nd, the Board of Trustees held their preliminary meeting and the members had a luncheon at noon.

THE BUSINESS SESSIONS

The proceedings of the Convention proper were opened by President William F. Carthaus, who called the meeting to order.

The Mayor of Buffalo, Hon. Louis P. Fuhrmann was then introduced by one of the Buffalo members, Mr. Fuhrmann bidding the organized brewmasters of America welcome to the City of Buffalo, extending to its visitors the good wishes of the citizens whose chosen head was the speaker. President Carthaus thanked the Mayor in a few hearty remarks.

The Representative of the United States Brewers' Association.

The next speaker was Hugh F. Fox, secretary of the United States Brewers' Association, who, on behalf of that body, addressed the convention, saying in part:

That the consumption of milder beverages after the war in European countries will be encouraged by diverting trade from spirits. Mr. Fox discussed the trade in beer and spirituous liquors from every standpoint and showed the effects of prohibition in the various localities where such laws exist and the result of such prohibitory legislation.

"After the war is over and the first reconstruction period begins, the relation of alcohol to society will be an international question," said Mr. Fox. "The whole trend of thought and action is to encourage the consumption of milder beverages to divert the trade from spirits."

Mr. Fox showed that the idea is one of discrimination rather than that of prohibition. He took for example the Scandinavian countries where they have concluded that prohibition of any kind would be unwise. Their aim is to divert the trade to beverages of low alcoholic strength by discriminatory taxes and various regulatory measures. To show the importance of prohibition, Mr. Fox cited the law in France passed a few years ago which allows every household to make five gallons of spirits every year. Over a million took advantage of the provision of the law and the result was that many went into the illicit business of selling to their neighbors. Absolute prohibition, he said, leads to home distillation, as France has demonstrated. France has characterized as hygienic beverages beer, cider and perry, a drink made of pears.

In several European countries the license fee is light and the tax is nominal. In Scandinavian countries the tax is on the strength of alcohol, the idea being that spirits have become a luxury. In the Scandinavian countries the spirits are sold in their original packages in government depots where there are no facilities or comforts for consumption. Beer is sold in the people's comfort places or family resorts. He said that this plan works out satisfactorily. In Denmark and Norway the governments class beer having not more than 2 1-4 per cent. of alcohol as a temperance drink. Consequently it is not taxed. The result is that trade in beer with 3 to 4 per cent. alcohol has remained stationary for ten years, but the business in the so-called temperance beer has increased. Prohibitionists in this country are opposing the sale of any beverage even if it contains one-half of one per cent. alcohol.

Mr. Fox spoke on the national prohibition amendment movement, saying the control would be placed in the hands of legislatures of rural states and in all probability industrial states would not even be given the chance to legislate on it, so that we might get prohibition by the act of legislation representing only a minority of the people of the United States. Thus the population of twelve great industrial states, comprising nearly two-thirds of the people, might have the amendment imposed upon them by a minority of the people. The prohibitionists could encompass this by focusing the fight in other states than New York and such big commonwealths. The amendment is regarded as a violation of the principle of State rights.

The national amendment, Mr. Fox said, if adopted, would mean the loss of \$20,000,000 in revenue in New York State and the loss of \$250,000,000 in the entire country. It would raise a question of public finance of stupendous importance.

Speaking of the operation of the British munition control commission, Mr. Fox said that it has arbitrary and absolute control in the munitions area of all liquor business. The commission has taken over all public places and has extinguished half of them, converting others into people's refreshment places under disinterested management and giving compensation to all people who have lost their jobs or property. After the war, he said, there is a possibility that the whole public house business may be nationalized. This program has been endorsed by the temperance party, composed by prominent folk of wide and constructive views, who regard prohibition as futile.

President Carthaus tendered to Mr. Fox the thanks of the convention with the assurance that the brewmasters were ever ready to co-operate with the United States Brewers' Association in all efforts made for the best interests of the American brewing industry.

Report of the Secretary.

The Annual Report of Secretary Nowak, which after having been submitted, was referred to the proper committee, was as follows:

Gentlemen:

It is exactly ten months ago that I assumed my present duties, after your President, Mr. Wm. F. Carthaus, conferred the singular honor upon me by appointing me Secretary of your Association. Although I entered upon my new duties with a certain degree of diffidence, I felt assured of the cooperation of your officers and accordingly perfectly confident that the results accomplished by the time of the Buffalo convention would be such that you would feel that the confidence of your President in my ability had not been misplaced.

Although the time has been comparatively short, at least a month having been wasted in the adjustment of the new machinery of our Association, and the encouraging business conditions with the unusually hot weather this season resulting in far greater sales than had been anticipated, having kept our members very busy, it nevertheless affords me great pleasure to be able to report to you to-day that considerable headway has been made, and that some of the fears expressed at the last Convention were unwarranted.

Permit me to submit to you a brief resumé of what we have accomplished. First of all, in spite of the fact that prohibition has closed up a great many breweries and that the outlook at the beginning of the year was not very encouraging, and a great many members were forced to take withdrawal cards, we have nevertheless taken 35 new members into the Association which is 10 more than was the case in the preceding year. We have done this in spite of the fact that practically no money was spent on an extensive membership campaign, and if this could be done we ought to experience no difficulty in securing at least one hundred new members next year.

Next in order is the condition of the Treasury, or the financial standing of the Association. Figures in general have a strong appeal to our reasoning powers, especially so when they concern themselves with dollars and cents. In view of the fact that at the San Francisco Convention the fear was expressed by one of the members that under the present arrangement (that is, the employment of a Secretary) the treasury of the Association would look badly depleted at the end of one year, it is gratifying to find in view of all the so-called extra expenses we to-day have \$10,368.86 in our treasury as against \$9,852.49 at the time of the San Francisco Convention. Were it not for the fact that the present report of the treasurer dates back to October, 1915, three months of which were still spent under the old régime, we could to-day report \$12,537.21 in the treasury instead of \$10,368.86, or \$2,684.72 more than last year. You will note that we still have charged against us this year \$4,000 for Convention purposes instead of \$2,000 as shall hereafter be the case, and the other expenses incurred in October, November and December of 1915, amount to \$168.35, or a total of \$2,168.35, which shall henceforth fall away.

Inasmuch as the detailed account of all expenditures will not be read at this Convention, as has previously been customary, but will be turned over directly to the Finance Committee for its verification and O. K., I will mention here only the disbursements of the moneys allowed the various committees. The Technical Committee was allowed \$2,500 for its operating expenses of which only \$1,779.40 were spent. The Barley and Hop Committee has used only \$114.06 of its allowance which amounted to \$500. The \$1,500 granted by last Convention as in previous years for extraordinary expenses of the President remains intact. In other words, of the total allowances of \$4,500 only \$1,893.46 has been used.

Among the other matters which were turned over to me the early part of the year was the working out of the details in the matter of the revision of the By-laws in order to enable the Association to grant sub-charters to the Districts, a matter which appears mutually desirable. The results of this work were reported by me in the June issue of the "Communications" and need not be repeated here.

As far as the Second Class Postage for the "Communications" is concerned, the publication has been so changed as to comply with the postal regulations with respect to that type of mail matter. The granting of the lower rate now hinges entirely upon the question of subscriptions. Inasmuch as this matter involves certain questions of policy, which in the opinion of the President must be submitted and acted upon by the Board of Trustees, the matter is now pending awaiting the decision of the present Convention.

In accordance with the President's request in the instructions to the Secretary at the beginning of this year, a new system of bookkeeping along the lines suggested has been introduced. Furthermore, all of the Association correspondence has been carefully filed and supplied with a card index for easy reference.

We have had some correspondence with various large American Universities with a view of interesting them in our industry along the lines suggested by President Carthaus in January. While nothing

definite has been accomplished, the results are, in a way, very promising. To further help our cause along, that is, to bring our cause before the scientist and educator, and the general public, I have made a special trip to New York to address the Annual Convention of the American Chemical Society on the subject of "Why the Brewing Industry Demands Recognition by the Universities," which address has been published in the October issue of the "Communications" and should have reached you before coming here. In order to insure proper co-operation I first communicated my intention to Secretary Fox of the U. S. Brewers' Association, and take this opportunity to thank him for the active interest which he has taken in our work.

Furthermore, it gives me great pleasure to be able to report to you that Mr. George J. Meyer, of Buffalo, with whom I had the pleasure of talking over the University problem earlier in the year, has volunteered the donation of \$250 for the purpose of a scholarship to be given to a student at some recognized University who wishes to devote some time to some research problem connected with our industry. So far the money has not been disposed of, but we are nevertheless most grateful to Mr. George J. Meyer for his willingness to assist in the cause.

Finally, let me confess that I have devoted some of my spare time to a matter which, while it does not directly fall within the scope of our Association, it is in my opinion most worthy of our serious consideration. What I have reference to is the establishment of a Manufacturers' and Dealers' Association in Missouri along the lines of the Chicago, New York, Milwaukee, etc., Associations. I became interested in the good work this Association was doing in the early part of the year, and being of the opinion that our Association should lend itself to every good cause whose end is to promote the welfare of the entire industry, I was directly instrumental in the organization, which after considerable struggle was effected in St. Louis the latter part of June.

For the benefit of those not familiar with the work of this Association, let me say that as the name implies it is an organization of manufacturers and dealers, but does not accept as members any one dealing in alcoholic liquors. This Association is fundamentally opposed to class or restrictive Legislation, and believes in Home Rule—America First—Temperance and not Prohibition. Although much of value has been done more could be accomplished if each and everyone interested in the upbuilding of personal liberty would cooperate with it.

Finally, it is indeed a sad duty for me to report the demise of thirteen of our faithful colleagues. In order that our departed colleagues may be the recipients of the esteem due them, our President has taken the honorable duty upon himself of instructing the Condolence Committee. The names of the departed members are:

Aug. von Arator,	Wendelin Miller,
John J. Beltz,	F. H. Piccaver,
John Biesinger,	Eugene Roeder,
Rudolph Bohnstengel,	Jacob B. Schorr,
Franz Fenderich,	Louis Schumacher,
Adam Mader,	Louis Zimmermann,
Henry Meyer,	

Respectfully submitted,

C. A. NOWAK, Recording Secretary.

Recommendations of the Board of Trustees.

President Carthaus then said: "After careful deliberation and due consideration of the various matters brought to its attention the Board of Trustees wishes to recommend to you:

To request the President, to be elected at this convention, or somebody to be designated by the President, to visit as soon as possible, at the expense of the Association, every one of its Districts.

To grant to Secretary Nowak, who in our behalf went to New York to address the meeting of the American Chemical Society, and whose duty it is to attend the Convention, an amount sufficient to cover traveling expenses for both trips. (Amount granted, \$100.)

To endorse the proposed changes in the By-laws of the Association as published in the June issue (page 145) of the "Communications." These changes in the By-laws are necessary in order to enable us to grant sub-charters to the Districts and in this way effect a closer organization of the membership.

To convey a vote of thanks to Mr. George J. Meyer, of Buffalo, for the voluntary donation of \$250 for the purpose of a scholarship to be given to a student at some recognized University who wishes to devote some time to some research problem connected with our industry.

To maintain a permanent office for the Secretary, office rent and office expenses to be paid by the Association. In the event of the election of a new President resident in a different city, if said President wishes the Secretary to move to the same city in which he is located, all expenses incurred by the Secretary in making this change to be paid by the Association.

To elect Mr. Emil Schlichting, President of the National Brewers' Academy in New York City, an honorary member of the Association.

To elect Colleague J. Fritz Theurer, a charter member of the Milwaukee District and of the Association, an honorary member of the Association.

To elect Colleague Carl Schmidt, charter member of the Chicago District and of the Association, an honorary member of the Association.

To elect Colleague Ernst Kreusler, charter member of the New York District and of the Association, an honorary member of the Association.

To allow \$1,500, as has been the case in previous years, for the extraordinary expenses of the President.

To make appropriations to the various committees the same as in previous years, namely, Technical Committee, \$2,500 and Barley and Hop Committee, \$500.

The different recommendations were voted upon separately and unanimously approved by the convention.

Lecture by President Carthaus.

The proceedings of the first day were closed after President Carthaus had delivered the following lecture:

Due to the prohibition legislation in various states the demand upon the brewer to produce both a low alcoholic beer and a non-alcoholic beverage has increased. The United States Government considers a beverage containing less than 0.5 per cent. of alcohol by volume as non-alcoholic. Whether the states will take the same view remains to be seen. To my knowledge this question has not been decided by state courts and we should fortify ourselves against their taking a different view. The State of Arizona for instance permits no beverage containing alcohol to enter. This has caused the railroad companies to demand an affidavit of shippers stating that their consignment contains no alcohol.

Before making a statement, whether a beverage contains or does not contain alcohol, the chemist has to make a series of tests. In a beer-like beverage the usual test might indicate alcohol, even if the beverage does not contain alcohol. This was found in the experiments of Mr. A. Fonyo in charge of the laboratory of Wm. J. Lemp Brewing Co. and Mr. W. F. Monfort a well-known chemist of St. Louis.

The alcohol tests were made on wort taken from the kettle, furthermore on hopped wort and on hopped city water.

First the determination of the Specific Gravity was made of the distillates of the different solutions. The regular method of this determination is that 100 cc. of liquid are distilled and 100 cc. distillate collected. The Specific Gravity is taken by a pycnometer.

If the Specific Gravity is exactly one, the distillate contains nothing but distilled water. If it is less than one, it contains some other lighter substances, which reduce the Specific Gravity of the distillate. Such a substance is alcohol. From the reduced Specific Gravity is calculated the alcohol content.

Testing for small amounts of alcohol the Specific Gravity was determined of a concentrated distillate. 1000 cc. liquid was distilled and the Specific Gravity of 100 cc. distillate was determined. This method was carried out as advised by Bacon in United States Chemistry Bureau Circular No. 74. The results of the determinations are seen in the following tables:

1. Unhopped wort taken from kettle.

	Spec. Grav.	Indicated Alcohol
From 100 cc. wort 100 cc. distilled..	1.0000	None
From 1000 cc. wort 100 cc. distilled..	1.0000	None

2. Wort boiled with 1% hop for 20 minutes.

	Spec. Grav.	Indicated Alcohol
From 100 cc. wort 100 cc. distilled..	0.99996	0.02%
From 1000 cc. wort 100 cc. distilled..	0.99992	0.04%

3. City water boiled with hops.

	Spec. Grav.	Indicated Alcohol
100 cc. water + 1 gr. hops.....	0.99995	0.025%
100 cc. water + 2 grs. lupulin.....	0.99994	0.03%
	Spec. Grav.	Indicated Alcohol
100 cc. water + 1 gr. hops.....	0.99994	0.03%
100 cc. water + 2 grs. lupulin.....	0.99990	0.05%

Unhopped wort was taken from the kettle and distilled. The Specific Gravity of the distillate was the same as the Specific Gravity of distilled water.

When the same wort was boiled with hops, it gave a lower Specific Gravity than water. The Specific Gravity of the distillate of the wort was one before it was boiled with hops, therefore a charge must be due to the addition of hops. The Specific Gravity indicates 0.02 per cent. alcohol. If this were alcohol, then by concentrating the distillate to the tenth volume of the wort, we would expect ten times the amount of alcohol in the distillate, but the result of the next analysis in which this was done shows the Specific Gravity to differ very little from the first distillate and corresponds only to 0.04 per cent. of alcohol instead of 0.2.

There are volatile substances in hops which are distilled over and cause the lower Specific Gravity. These substances are soluble in water to a limited degree and that is the reason for the Specific Gravity not being proportionately lower after the concentration.

The third experiment shows that when city water is boiled with hops and the distillate collected, the Specific Gravity is less than one. This is certainly not due to alcohol.

The fourth experiment shows that the lower the temperature to which the hop distillate is cooled, the more of the hop oils will be absorbed by water.

There are different qualitative tests for the detection of alcohol. The most widely used is the iodoform reaction. Iodine with alcohol forms in an alkaline solution at about 60 C. iodoform. If larger amount of alcohol is present, the yellow crystals of iodoform precipitate. Small amount of alcohol develops only the characteristic iodoform odor, which can be detected by smell. In our case the test depended entirely upon the smell. The iodoform odor is not noticeable at first; it appears only after a few minutes when the hop aroma disappears. The iodoform odor was either covered by the hop aroma or it developed later simultaneously with the disappearance of hop aroma. Probably a saponification of the aromatic oils or esters of hops has taken place in the alkaline solution and yielded a presumptive alcohol, which gave the iodoform reaction, but this alcohol was not present in the beverage, it developed only in the distillate while making the iodoform reaction.

The other test for alcohol with para nitro benzoylchloride or with benzoylchloride will not prove whether

the alcohol was present in a free state in the beverage or as esters, because these reactions are made in alkaline solutions, which may saponify the esters producing alcohol, like in the iodoform reaction.

That same sort of saponification took place in the above mentioned reactions is favored by the fact that the test for alcohol with Potassium Bichromate was negative. This test is made in a presence of a strong acid, such as sulphuric acid, and if alcohol is in the solution it reduces the yellow color of Potassium Bichromate to blueish green. But in acid solution the esters were not saponified and the reduction of the Potassium Bichromate was not noticeable.

But while the negative reaction with the Bichromate proves the absence of alcohol, a positive reaction will not necessarily be caused by alcohol, because many other substances reduce the Potassium Bichromate.

It is evident that the volatile ingredients of hops reduce the Specific Gravity of a distillate to a certain degree and that the identification of the small amount of substances reducing the Specific Gravity is doubtful.

I want to caution our members, that when they have produced a hopped beverage without any fermentation that is when they have done everything in their power to avoid the production of alcohol, the report of a chemical analysis showing small amounts of alcohol present may properly be questioned.

The evening of October 2nd was spent at the Elm Music Hall where sociability and good fellowship reigned supreme.

On Tuesday, October 3rd, the second day of the proceedings, the Board of Trustees and the committees appointed by the convention, met at 8.30 A. M., and by 10 o'clock, the hour of reassembling of the delegates, they were ready to report.

The Officers.

The nominating committee recommended the re-election of the officers, excepting the first vice-president. The report was adopted unanimously and, therefore, the officers for the ensuing year will be:

President, Wm. F. Carthaus, St. Louis.
First Vice-President, Cornelius Sippel, Chicago.
Second Vice-President, Gustav Braun, Buffalo.
Treasurer, Louis Suess, Chicago.
Financial Secretary, Marcus Maegerlein, c. o. Citizens' Brewery, 2762 Archer Ave., Chicago.
Recording and Corresponding Secretary, Carl A. Nowak, 2027 Railway Exchange, St. Louis.

Report of the Committee on Condolence.

The Committee on Condolence submitted the following report which, with its resolution attached, was adopted by a rising vote:

To the 28th Convention of the Master Brewers' Association of the United States:

Death has again heavily laid its hand upon our fellow-members this year.

We grieve over the demise of the following colleagues:

August von Arator,
John J. Beltz,
John Biesinger,
Rudolph Bohnstengel,
Franz Fenderich,
Adam Mader,
Henry Meyer,
Wendelin Miller,
F. H. Piccaver,
Eugene Roeder,

Jacob B. Schorr,
Louis Schumacher,
Louis Zimmermann.

Therefore, in consideration of those happenings so sad to us all, be it resolved to give a proper expression of our sorrow on account of the bereavement that has fallen on us by the passing away of those gentlemen, good and conscientious comrades and excellent men in the full meaning of the word.

Be it further resolved, that the Secretary be instructed to mail a copy of this resolution to the families of our Colleagues who have passed away so early—and to express at the same time our sincere sympathy on account of their sad bereavement.

THE COMMITTEE.

(Signed) L. Ritschel,
Gustav Etter,
Fred. Hofmann.

It was also announced that George J. Meyer, president and treasurer of the Geo. J. Meyer Malting Co., Buffalo, had presented the Association with two donations of \$250 each for scholarships to be awarded to two students who are to specialize in the study of brewing and malting at some recognized college. Mr. Meyer was tendered a vote of thanks.

Next Year's Convention.

The Delegates from New Orleans had brought letters from the Mayor of that city, Hon. Martin Behrman, and from the New Orleans Association of Commerce, inviting the brewmasters to hold their convention next year in New Orleans.

The invitation was unanimously accepted, and this wound up the principal business of the convention, which, adjourned *sine die*, after having passed resolutions thanking the Buffalo District, the Municipality, Press, and others for their kindness and liberality in entertaining the delegates and their ladies, and otherwise promoting the welfare and interests of the Association.

Entertainments and Sociability.

On the evening of October 3rd, District Buffalo entertained the members and delegates to the convention and their ladies at a gorgeously arranged banquet which was followed by a grand ball.

At the banquet Gustave Braun, president of the Buffalo district presided and George Bredemeier of the George J. Meyer Malting company was toastmaster. The speakers' list included President William F. Carthaus; Louis Suess, Chicago, treasurer; C. A. Nowak, St. Louis, financial treasurer, and others. Toasts were proposed to the United States, the fatherland and the National Brewers' Association. The assemblage joined in singing the national anthems of Germany and the United States and German folk songs, accompanied by Henry Stricht's orchestra. After this came a vaudeville entertainment, featured by Mrs. Marion Newkirk Scherer of Buffalo, violinist and impersonator.

On Wednesday, October 4th, the members, delegates and their ladies went to Niagara Falls, where, after viewing the unique scenery and illumination, they were deliciously entertained and feasted by the Niagara Falls Brewing Co.

The Committees, appointed by the Buffalo District, who had made and successfully carried out the arrangements of the convention, were composed as follows:

Executive Committee—Fritz Silber, chairman; J. R. Schwartz, Theodore Praun, Ernst Koppisch, Carl Lehmann, Adolf Zimmermann, Gustav Braun, George F. Sitterle, John Kam, William E. Kreiner, Jr., Charles W. Lappe.

Finance Committee—J. Raymond Schwartz, chairman; Theodore Praun, Gustav Praun, Charles W. Lappe, George F. Sitterle, Ernst Koppisch, Fritz Silber, William F. Otto, Edward A. Kern.

Press Committee—Adolf Zimmermann, chairman; Fritz Silber, Carl Lehmann, George Bredemeier, Gustav Braun, William F. Otto.

Music Committee—Gustav Braun, chairman; George H. Meyer, Ferdinand Lehmann, George Brédemeier, R. J. Schwartz.

Technical Committee—Carl Lehmann, chairman; Frank Feltes, George F. Sitterle.

Trade Exhibits.

In the convention hall there was an exhibition of brewing and malting machinery, by manufacturers and dealers, all of whom distributed among the delegates and their ladies a number of handsome and useful souvenirs. Among the exhibitors were:

Economic Machinery Co., Worcester, Mass., was represented at the Convention through attendance of their secretary and treasurer, Mr. Arthur J. Wallace, and several other gentlemen connected with said Company.

J. B. Ford Co., Wyandotte, Mich., presented pins and chains, reproductions of the famous "Wyandotte" chief, to all visitors, through their Mr. J. J. Harris and Jos. Kruby.

A. Gusmer, Inc., New York, exhibited samples of their "Mammut" package coatings.

Mr. Chas. F. Hehle represented the B. Hehle Malt Milling System Co., Cincinnati, who exhibited one of their new "Little Wonder" malt mills, presenting a neat leather bill-fold to all convention visitors.

Mr. Jacob Mack, vice-president of the American Tap-Bush Co., Detroit, exhibited and demonstrated the "Peerless" method of tapping beer direct from the package.

Geo. J. Meyer Malting Co., Buffalo, N. Y., presented "fountain-pen" pocket flash-light to visitors.

Gustav Schock & Son, New York, through Mr. Robert Schock, pointed out the salient features of the Schock Keg Washing Machine which is entirely automatic in operation, at the Gerhard Lang Brewery, to a great many visitors at that plant who displayed considerable interest.

The 20th Century Machinery Co., Milwaukee, operated in connection with the Zahn system a bottle soaker and washer which it is claimed produces a perfectly sterile bottle.

Zahn Mfg. Co., Buffalo, N. Y., introduced many convention visitors to the installations of their systems of beer sterilization, at the German-American brewery and the International Brewing Co., in that city.

Ernst Zobel Co., Brooklyn, N. Y., manufacturers of "Zobelac," presented pencils and extra leads to visitors.

Hans E. Zobel, president and treasurer of the American Antiformin Co., New York, N. Y., presented a very useful souvenir in the form of leather pocket-books with memorandum pads and pencil to visitors at the Convention.

MEN ARE BUT BOYS, ETC. "When we were boys there was always some old grouch who claimed that the things we liked to eat were not good for us and should be barred. And when we grew up we found that there were a lot of old grouches who claimed that the things we liked to drink were not good for us and should be prohibited."—(Luke McLuke in "Cincinnati Enquirer.")

"THE PRINCIPLE OF PERSONAL LIBERTY is not confined to the question of prohibiting. It is not even confined to the moral, mental and political affairs of man. It extends to the physical matter of his health and long life. And, beyond that, it extends to animal and vegetable life. One of the favorite misrepresentations of the Prohibitionist is that 'personal liberty' is but a cloak for alcoholic drink, just as he applies 'temperance' only to drink, permitting and indulging in the grossest intemperance in other things."—("The American Leader.")

Among the Brewmasters.

DAYTON. The Dayton District of the Master Brewers' Association of the United States has enrolled colleague Conrad Rabman, brewmaster of the Sebald Brewing Co., Middletown, Ohio, who held a withdrawal card and was in good standing. George W. Wattles, malt master of the Piqua Malt Co., Piqua, Ohio, was admitted as a new member, as was colleague A. Eliel, superintendent of the Piqua Malt Co.

LA CROSSE. The La Crosse District has a promise from Professor Moore, Chief Agronomist of the University of Wisconsin, to deliver a lecture on the subject of "Barley" at the District's meeting, December 2nd. Colleague Edwin Geisler was dropped from the roll for non-payment of dues.

MILWAUKEE. The members of the Milwaukee District recently enjoyed a stag party at Colleague Bock's romantic place on Nagowicha Lake.

NEW YORK. The monthly meeting of the District New York was held on Saturday, October 14th. Owing to the absence of both the President and Vice-President, ex-President John A. Kayan presided. As delegate to the Buffalo convention, the chairman reported in glowing terms of the excellent program arranged and the hospitality shown by the Buffalo colleagues. The report was accepted and a resolution adopted conveying thanks and appreciation to the Buffalo District. To assist the German Red Cross in its October festival, \$25 was appropriated; also \$25 for the Irish Relief-Fund Bazaar.

JOHN KOENIG, JR., Secretary.

SAN FRANCISCO. The San Francisco District has adopted a new rule according to which in the future no amounts greater than \$50 may be taken from the District Treasury without all the members being informed previous to the meeting at which the appropriation is to be made.

The Professional Reformer.

This is an excerpt from a story by L. B. Yates, entitled "The Reformation of Mayor Miles," in the "Saturday Evening Post":

"My idea was that wherevah yo' met a professional refo'mah yo' met a man who was lopsided. Accordin' to my notion his definition of success was to marry a meal ticket an' sit down close to the pot licker an' preach. To me he was full of cheap platitudes as an elephant's trunk is full of tricks; but of his own initiative he nevah did enough to start a wheelbarrow in motion. I classes him with th' kind of man who would tie a baby-blue ribbon on a garbage can an' take credit fo' doin' away with th' odor of its contents, an' his ideas of eternal fitness would be put to stained glass windoes in a pigpen.

"It's fashionable nowadays," continued the Major after a brief pause, "to classify an' catalogue an' index humanity, an' to dominate human nature by th' card system until yo' can wind it up like a clock an' it will run just so long an' accomplish certain functions in just such a way.

"If I pick up a newspapah I find that everything I touch, eat, drink or smell is full of microbes; that Death lurks in th' toddy, an' the Grim Reaper is hidin' behind every woodpile in th' country."

THE UNREASONABLE AND CRABBED AGITATOR. "The only person as unreasonable as a confirmed drinker is a crabbed Prohibitionist; the only person as contradictory as a man of science is another man of science."—(Bulletin" Pennsylvania State Brewers' Association.)

Personal Mention.

AUGUST A. BUSCH, president of the Anheuser-Busch Brewing Association, St. Louis, and his wife announce the marriage of their second daughter, Clara Busch, to Percy Orthwein, of St. Louis, the wedding to take place today, November 1st.

KENNETH T. DAWES, manager for Dawes's Lachine Brewery of the National Breweries, Limited, Montreal, Can., has achieved a most enviable reputation in the world of business. Mr. Dawes is the possessor of a formidable string of thoroughbred horses and his colors have been borne to many a notable victory over the Canadian tracks. One of his stable's best achievements was the winning of the King's Plate at Blue Bonnets, Montreal, with Kilo, in 1911. On that occasion the chestnut gelding, a 4-year-old, packed 121 pounds over the mile and a quarter course in 2.13½.

ALBERT F. DIEHL, vice-president of the Christian Diehl Brewing Co., Inc., Defiance, Ohio, is now a benedict, having married Emma G. Schmaltz, also of Defiance. Their honeymoon was spent traveling and they now reside at 309 Third Street, Dayton, Ohio.

KATHERINE EBLING, widow of the late Philip Ebling, founder of the Ebling Brewing Co., New York, celebrated her eighty-third birthday, October 10th, being the recipient of congratulations and gifts, appropriate to the happy occasion, from the members of her family and their numerous friends. Mrs. Ebling is at present in the best of health.

GEORGE EHRET, who was expected to return to New York from Germany last month, has notified his relatives that he has reconsidered his intention of leaving and he will now remain in Germany indefinitely.

There is joy in the Ehret family, Edward G. Burghard, one of Mr. Ehret's grandson's being engaged to marry Miss Vivian Kranich, both of New York. Mr. Burghard is a law student at Columbia University, expecting soon to graduate, and then the wedding will take place. Mr. Burghard is the son of Edward M. Burghard, son-in-law and legal adviser of George Ehret, whose birthday anniversary was duly celebrated by the family October 17th.

JULIA GROH, widow of the late Michael Groh, of M. Groh's Sons, Inc., New York, on October 1st, celebrated the eightieth anniversary of her birth, surrounded by her large family of children, grandchildren and great grandchildren, and other relatives and numerous friends. Mrs. Groh, who was born in the city of New York, is still hale and hearty and enjoys her full physical and intellectual faculties.

WALTER H. HANLEY, president, and GERALD T. HANLEY, vice-president of the James Hanley Brewing Co., Providence, R. I., were among the successful and price-crowned exhibitors at the Broomfield Fair horse show last month, showing several splendid hunters, runabout animals, and saddle horses; also the \$20,000 nine-horse hitch of the James Hanley Brewing Co.

WILLIAM HOFFMANN, president and treasurer of the Jacob Hoffmann Brewing Co., New York, and his amiable wife, celebrated the thirty-fifth anniversary of their wedding, October 11th.

GROVE JOHNSON, well known to English and American brewers as a practical and scientific brewer, who has been in Australia for a number of years, has accepted the position of analytical chemist to Tooth & Co., Limited, Kent Brewery, Sydney, Australia. His duties there will occupy half his time, and he retains his analytical practice, and will continue to contribute technical articles to the brewing trade journals. Mr. Johnson was the discoverer of the tropical

fungus, which produces fermentation at 105° to 112° F., and resists destruction at as high a temperature as 183° F. He named his discovery "Saccharomyces Thermantitonus."

ALBIN J. KAMM, vice-president of the Kamm & Schellinger Brewing Co., Mishawaka, Ind., and Miss Lavinia M. Irr, of Cleveland, Ohio, were recently married in St. Agnes Catholic Church, Cleveland.

AUGUST F. NESCHKE, brewmaster of the Frank Jones Brewing Co., Ltd., Portsmouth, N. H., was recently injured in an automobile accident when riding with a friend who unfortunately drove his machine into a pole, the wheels having caught in the street-car tracks. Both gentlemen are rapidly recovering.

NEW YORK BREWERS HONORED BY DEMOCRATIC PARTY. Among the citizens who were selected by the New York State Committee of the Democratic Party to act as Presidential Electors, are the following well known brewers and members of brewers' families: Theodore C. Eppig, of Brooklyn; Gerhard Lang, Buffalo. And among the Democrats who attended the notification of Samuel Seabury, candidate for Governor, was John B. Hasslocher, superintendent of the George Ehret brewery. Samuel Untermeyer, counsel for many years for the New York brewing industry, has been named for Elector at Large, on the Democratic ticket.

HENRY REININGER, brewmaster of the Consumers' Brewing Co., New Orleans, La., accompanied by his wife, was in New York for several days, visiting relatives and friends. They then went to Buffalo, N. Y., to attend the convention of the Master Brewers' Association of the United States.

RUDOLPH J. SCHAEFER, president of the F. & M. Schaefer Brewing Co., New York, and his wife, née Frederica Vilette Beck, celebrated the twenty-sixth anniversary of their wedding on Sunday, October 15th.

LOUIS B. SCHRAM, president of the India Wharf Brewing Co., Brooklyn, N. Y., and chairman of the Committee on Labor of the United States Brewers' Association, has been appointed a member of the Committee on Factory Laws and Regulations of the Merchants' Association of New York.

PIUS SINZ, formerly brewmaster of the Christian Moerlein Brewing Co., Cincinnati, Ohio, has settled in Dallas, Tex., where he is now conducting the Crystal Ice Factory of that city.

"IS IT REASONABLE TO SUPPOSE that any business man, no matter what line he is in, would deliberately use his influence to encourage another business that would be the cause of misery and suffering to humanity? Every business man knows that everything in this world is abused by some. You know, we know, that food, liquor and passion desires are abused, and of the three liquor is the last, but liquor agitations are the only ones that pay the agitator. He would be scoffed at if he attempted to prohibit food or passion."—"The Booster.")

TYPICAL KANSAS CONDITIONS. "Such conditions as now exist at the Atchison Orphans' Home . . . do not belong in a State like Kansas. . . . The Kansas roads are bad roads. . . . The disgraceful and humiliating incident of the Kansas Natural Gas Company receivership has attracted the attention of the country to another immediate need of the State. . . . The Kansas schools have been falling behind the schools of other progressive States." The reason assigned for the last-named condition is that "Kansas has been electing a class of Cheap John legislators who had far greater respect for a campaign record than for the good name of the State."

Obituary.

CHARLES C. CLAUSEN, founder of and for many years connected with the late Clausen & Price Brewing Co., New York, and also prominently identified with the malting business up to a few years ago, died suddenly October 20th at Sharon Springs, N. Y., in the 73rd year of his age. He had retired from active business several years ago.

FRANK B. HABERLE, president of the Haberle-Crystal Spring Brewing Co., died in Syracuse, N. Y., September 8th, having been ailing for some time. He was born in Syracuse, September 2d, 1855, and, after having received his practical and scientific education as a brewer in Germany, assisted his father in the brewery founded by the senior Haberle fifty-nine years ago. In 1892 the Haberle plant became part of the Haberle-Crystal Spring Brewing Company, over which the deceased presided twenty-four years. Two sisters, Mrs. Olive Biehler and Mrs. Woese, survive him.

JOHN A. KING, one of the principal stockholders in the McAvoy Brewing Co., Chicago, died there September 11th. He was born in DeWitt, N. Y., in 1834, and came to Chicago in 1861, rising to a power in the finances and politics of that city. His widow and one daughter, Mrs. Nellie K. Hayes, of Pasadena, Cal., survive him.

JOSEPH KUMLI, brewmaster of the New South Brewery & Ice Co., Middlesborough, Ky., died in that city, after a short illness, September 28th, in the fifty-eighth year of his age.

AUGUST N. LITTIG, one of the founders of the Littig Bros. Brewery, Davenport, Iowa, died in that city September 11th, aged eighty-nine years. He was a pioneer brewer in Iowa, having been in the business more than sixty years ago and retiring in 1877.

ERNEST A. SALMSTEIN, secretary of Ernecke & Salmstein Co., Chicago, manufacturers of paints and varnishes, died in that city September 6th, aged forty-four years. He was born in Ansbach, Bavaria, and came to the United States in 1891. In 1893 he and Mr. A. H. Ernecke organized their firm, which has since prospered and grown to large proportions. The deceased is survived by his widow and one son.

JOSEPH STRAUBMÜLLER, founder of the Philadelphia brewery of Jos. Straubmüller & Son, died in Philadelphia, October 11th, apparently of grieving over the sudden death of his wife, who had preceded him in death but a few weeks previous. Mr. Straubmüller was born in Gross-Eislingen, Württemberg, sixty-seven years ago and was apprenticed to the brewing trade in his native city. When he was twenty years old he came to the United States, settling in Philadelphia in 1870, and erecting his brewery in 1876. He was active and esteemed in the business and social circles of Philadelphia, and several years ago the Local Organization of the Master Brewers' Association of the United States elected him an honorary member of their district.

ROBERT J. TRACY, formerly manager of the James Everard Breweries, New York, died in the Lucerne Hotel, New York, October 7th, after an attack of heart trouble. The deceased was a native of New York City, where he lived all his life. About four years ago he retired from active business and since then had been making his home in the Lucerne Hotel. His survivors are one sister and three brothers.

ALPHONSE S. WETTERER, vice-president and secretary of the Wetterer Brewing Co., Cincinnati, died suddenly October 4th, a victim of assassination, the details of which have been exploited by the daily sensational press.

ADOLPHE J. ZANG, president of the Ph. Zang Brewing Co., Denver, Colo., died at his home in that city September 28th. He was the son of the founder of the Zang brewery and became his father's partner in 1889.

Deaths in Foreign Countries.

Albert Austin, manager of the Guernsey Brewery Co., Guernsey, Cambridge, England, aged 40.

Augustin Debast, proprietor of brewery at Saint-Omer, France, aged 74.

Second Lieutenant Harold Stanley Haworth, partner in Haworth Bros. & Wormald, maltsters, Wakefield, England. Killed in action.

John Hewett Higson, Marchfield, Merrilocks Road, Blundellsands, England, aged 63. He was the eldest son of the late Mr. Daniel Higson, founder of Daniel Higson, Ltd., Liverpool. Up to the time of his death Mr. Higson was managing director of the firm.

Martin Kennedy, director of Staples & Co., Ltd., brewers, Wellington, New Zealand, aged 77.

Paul Calixte Lepage, former proprietor of brewery at Joinville, Department Haute-Marne, France, aged 71.

M. Marilier, business manager of the Malterie Brassot, Dijon, France.

Lieutenant Edward Philip Matthews died of wounds received in action, aged 20. He was the fourth son of Geo. Gerrard Matthews, of Wyke Brewery, Gillingham, Dorset, England.

Lieutenant John W. Power, killed in action, aged 22. He was the eldest son of J. Danvers Power, M.V.O. (Thos. Wethered & Sons, Ltd., Marlow, England), a vice-president of the Brewers' Society.

John Taylor Ramsden, formerly of Halifax, at Middleton Tower, King's Lynn, England, aged 80. For many years Mr. Ramsden was the head of Thos. Ramsden & Sons, Halifax.

Captain Ernest S. Rogerson, of Ballard & Co., Ltd., Lewes, England, son of their managing director, Arthur W. Rogerson; killed in action.

Emma Georgina Tulloch, aged 83, widow of the founder of Coghlan & Tulloch, Ballarat Brewing Co., Pty. Ltd., Ballarat, Victoria, Australia, and mother of C. Tulloch, head brewer for the company.

Ice Making and Refrigerating Machinery.

The York Manufacturing Co., York, Pa., have just issued their new Fitting Catalog, fourth edition. It is a mighty fine publication, well worth the careful reading by every one who owns, or has to do with, ice-making and refrigerating machinery.

Comprising 158 pages, copiously illustrated, this catalog, superseding all previous issues, describes the types for which the York Manufacturing Co. have patterns. But they are also prepared to figure on special requirements. Any deviations from the catalog dimensions will incur an extra cost.

In regard to their Sales organization, a Service Department, the company say, that it is the only one of its scope and magnitude in this industry. The business of this organization is that of catering to the wants of owners of refrigerating and ice-making plants—not as a side line, but as their sole and only business. This organization has a combined investment in this business of over \$1,000,000. This is in addition to the \$5,000,000 invested by the York Manufacturing Co. These Construction companies are really Service companies. They employ their own experts, and in addition to carrying a line of York products to the value of \$500,000, they also carry a complete line of supplies for the ice-making and refrigerating plant, including ammonia, salt, calcium, oil, packing, pipe, insulating materials, etc., and are prepared at all times to furnish repair parts, or make repairs to the average plant, on short notice. Service is the running mate of quality. You can have both quality and service by patronizing the York Organization. Write for the catalog.

Cultivating the Latin-American Trade: Are We Living Up to Our Opportunity?

By ALFRED T. MARKS, Washington, D. C.

Have the brewers and brewers' machinery makers in the United States given the markets of Latin-America the consideration they should have in view of the immensely promising status of the trade there is in these lines? Do we all realize that there is at this moment in Latin-America a population of over sixty-five millions of people, practically all of whom may be considered under the general head of "prospects" for exporting brewers? Are we "sizing up" to the opportunity the field presents us in such a way that we will be able not only to win the business now, but to keep it once the warring European nations get into their working clothes again?

It should be borne in mind, in dealing with Latin-America, that we are appealing to a people which, to a very considerable extent, has been taught by long years of usage to depend upon outside nations for sustenance—practically for its very life. Several of the republics—such as Argentina and Brazil—are feebly reaching out in a manufacturing way in the attempt to provide for themselves what up to this time they have looked to other countries for. But even these efforts are, in many ways, a sort of experiment, as the Latin-American character—we might say the Spanish blood—does not take readily to doing today what can be postponed until tomorrow or next week. It therefore becomes necessary for the enterprises inaugurated in Latin-American countries, which depend upon the cooperation of the working classes of those countries for their prosperity and ultimate success, to educate the workers—in a sense to plant initiative and what we Americans call "push" where none has heretofore existed—to not only cultivate the "know-how-and-do-it" traits, but to commercially isolate these various industries until they have learned to stand alone. This, it will readily be appreciated, is a process not alone difficult, but one that will require much time to work out.

The above applies particularly to the efforts by several South American countries to manufacture beer and liquors of various kinds. And the initial steps in establishing these industries also served to establish firmly the hold a number of European countries—notably Germany and England—contained on the markets. How? When Argentina established its first brewery what did it do? Sent to Germany for an experienced brewmaster and a corps of assistants. The brewer took hold with true German enterprise and installed a complete outfit of German-made machinery to the last cog-wheel. German-produced malt and hops were used. Germans were employed to place the products on the market. From time to time a few natives of Argentina were added to the working forces in minor capacities, where many of them still remain. But, to all intents and purposes, Argentina's breweries today, while capitalized with Argentina's money and making for their Argentine owners whatever profit there is, are in reality German-conducted concerns. This applies in other countries as well, and merely serves to illustrate the manner in which Germany and England obtained their foothold in these lines in practically all of South and Central America.

This was the status of affairs in Latin America when the European war broke out. But the point of very present interest to American brewers is that conditions today are such as to practically open the markets of all the Latin-American countries to our brewers and brewers' machinery manufacturers. The old European sources of supply can

no longer be reached; Latin America's thirst is not diminishing; the United States is the only source of relief. And to the United States belongs, not by right on conquest (for we have made no determined effort to cultivate the business), but as the result of Latin-America's necessity, the trade the European countries have had to surrender.

A brief glance at the United States exports of beer and related lines for the fiscal year ended on June 30th, 1916, and those for the corresponding period ended June 30th, 1915, will give a fair idea of the possibilities and the present rapid growth of this business:

	Year ended June 30, 1916.	Year ended June 30, 1915
Malt liquors (bottled).....	\$428,000	\$261,400
Malt liquors (other coverings).....	62,000	18,900
Malt	1,520,300	166,400
Hops	62,500	9,452
Malt Sprouts.....	22,400	11,016
Ciders, ginger ales and similar beverages..	119,400	101,586
Wines	201,000	155,270
Rye Whiskey.....	98,450	66,500
Rum	59,000	26,570
Alcohol (including pure, neutral or cologne spirits)	31,000	12,851
All other distilled liquors.....	24,700	17,890
Demijohns, flasks, bar glassware, etc.....	261,870	119,950
Bar fixtures (not including glassware).....	73,466	12,580
Brewery machinery and supplies.....	101,468	19,012
Totals	\$3,065,554	\$999,377

Of course, any survey of foreign markets under present abnormal conditions must lead to conclusions which will obtain only during the existence of such conditions, unless we succeed in putting our trade on a permanent basis. Because we are selling there over three million dollars' worth of beers, brewery products and other liquors a year is no proof that we have the Latin-American trade cornered for all time. What it should mean to us is that we must now put in our best efforts to keep as high a percentage of the trade as we can once these conditions disappear. The trade we keep when Germany and the other European countries get down to business again will be the net gain.

There seems to be widespread belief in the United States, not only among brewers but in many other industries, that this country has secured a permanent foothold in a great number of lines of trade on account of the war, and due entirely to it, and that it will be able to hold this trade after the war irrespective of other conditions. This is a mistake. The history of past wars shows that, whether victorious or defeated, nations come out of these wars no less efficient in the matter of handling foreign trade than when they entered them. This is not a paradox, as it might seem to be, for foreign trade sometimes does not depend upon prosperity, but is due to adversity. Nevertheless, it strikes home to the competing nation just as hard in the one case as in the other. France, crushed in 1870, within the next ten years built up a foreign trade many times greater than that prior to the Franco-Prussian war. The southern States of the United States, subsequent to 1865, built up a trade far in excess of that prior to the civil war. These are the defeated. The conquerors, Germany, in 1870, began its progress in world trade, and from almost nothing reached a position second only to England. So it was with the northern States of the United States. Their industrial progress really began at the end of the civil war.

Our brewery products' exporters and fixture and machinery manufacturers should not, therefore, deceive themselves into the belief that Europe or any part of it will emerge from this great world-war so crippled as not to be able, in the matter of foreign trade, to compete with those countries fortunate enough to remain outside of the war.

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

Hops, No. 22,587.—An American consular officer in Spain reports that the representative of an association of brewers in that country wishes to communicate with American exporters of hops. Offers giving full details as to prices, terms of delivery, etc., should be sent immediately.

France Has Market for Foreign Bottles. By Consul General A. Gaulin, Marseille.—The local production of bottles in Marseilles at present is below the requirements, and it appears, therefore, that it would be possible to sell American bottles in this district, if delivery prices are suitable. The existing freight rates, in addition to the customs duty (5.25 francs for bottles of at least one-half liter capacity, or \$1.01 at standard rate of 19.3 cents per franc, per 100 kilos, or 220 pounds gross weight) would, however, probably prevent the profitable sale of ordinary bottles. It should be noted, also, that the standard bottles have a capacity of 1 liter (1.06 quarts). The lowest wholesale prices for the ordinary wine and beer bottles are now 28 francs (\$5.40 at the standard rate of exchange). The tendency is toward an increase in these prices.

There is a greater possibility of selling high-grade bottles for oil samples and perfumery. Quotations should be c. i. f. Marseille, or at least f. o. b. New York or other American port, with freight estimates. Correspondence in French is also desired, and measurements should be indicated in metric units.

A list of Marseilles firms dealing in glass bottles and glassware may be obtained from the Bureau of Foreign and Domestic Commerce, its district or cooperative offices. Refer to file No. 80358.

Egypt's Brewing Industry. By Consul Arthur Garrels, Alexandria.—No beer was produced in Egypt prior to 1899. In that year two breweries began operations, one each in Cairo and Alexandria. These two establishments continued brewing until 1908 when a third one entered the field in Alexandria. No definite statistics in regard to the beer production in Egypt are available. It is learned, however, from reliable sources, that from 1899 until 1907 the annual output of beer in Egypt aggregated approximately 660,000 gallons and from 1907 to 1914 about 1,320,000 gallons. During 1915, owing to the presence of allied troops in Egypt and curtailment of imports from Germany and Austria, the production probably reached 1,980,000 gallons, and it is estimated that during 1916 the output will touch 3,430,000 gallons. It is further stated that when normal conditions again exist the annual production of beer in Egypt will be about 2,115,000 gallons. Hops were not imported into Egypt previous to 1899, there being no breweries. Before the war they were purchased from Austria-Hungary and Turkey, those from the latter country being much cheaper than those from the former. It was from this country that the first hops imported into Egypt originated. The quantity imported varies from year to year. In 1899 (the year in which the brewing industry was established in Egypt) 3,437 tons were brought in, but since that date the largest quantity received in any one twelve-month was 24 tons. This was in 1908. In 1909 the imports amounted to but 7 tons; in 1910 to 9 tons; in 1911 to 12 tons, declining in 1912 to 8 tons. In 1913 there were 14 tons imported; in 1914 8 tons; and in 1915 23 tons.

Shortage of Beer at Saint Pierre. By Consul John J. C. Watson, St. Pierre, Miquelon.—A scarcity of beer exists in this district at present, offering American brewers an opportunity to increase their sales here. While the market is small, it is worth looking over. The average annual consumption of beer for the district is approximately 1,000 gallons. Last year only about half of that amount was imported. Most of it came from France formerly, but since the war began the importation of French beer has practically ceased. American exporters should note that the inhabitants of this colony prefer light beer, although a small amount of dark beer is imported from England.

The Why of the Trade Paper: As Well as the How of It.

Where there's a will there's a way and where there are 3,375 trade papers with 36,000,000 regular readers, there must be a why.

When the history of American journalism is written it will naturally record the early beginnings when postmasters were the editors (nowadays the editors are the postmasters); it will recount Peter Zenger's trial when Andrew Hamilton won for America the freedom of the press; it will devote another chapter to the influence of the penny paper; another to the decline of the party-subsidized press; another (let us hope and pray) to the passing of yellow journalism.

Along with these obvious high-water marks in American journalism will be another—not yet so obvious because of our proximity to it—the remarkable growth of the trade press. If the historian is not a slave to understatement, he will use the word phenomenal, for to every student of journalism the development of the trade press in the past decade is phenomenal. Not only has its growth been measured in material form—a tenfold increase in circulation in ten years—but it has shot forward immeasurably in influence and power, and instead of being regarded as parasitic incubus upon the industry, the trade paper to-day is looked upon as invaluable to both the front and back office. This is because it has become purposeful; it has not been content with merely furnishing the information of the trade week by week or month by month—although this itself is of high ethical value—it has reached out in an effort to crystallize the aspirations and ideals of its respective trade, and in so doing has assumed a natural leadership. Be it said to the credit of American industry, this leadership was quickly recognized.

The information which the technical journals are gathering and presenting to their readers, while ranging all the way from personal chit-chat to the most advanced methods of operation, has, first of all, the prime requisite of being accurate and authentic. Readers being human, this of course increased their respect for the trade journals. Editorial staffs to-day are composed of men who not only understand the art of faithful presentation, but who also have the technical knowledge which makes worth while what they have to say. The day has passed when the failures and misfits of the newspaper and magazine can softly drop into a position on "some trade paper." The old paraphrase is no longer a happy one—"them as can, do; them as can't, edit a trade paper." For the writers and editors of the technical press to-day are most often chosen from the ranks of successful business men, and successful business men have on more than one occasion drawn their best executives from the trade paper field.

This information then, at once authentic, accurate, and timely has done much to bring the class publication into favor. Those who read the trade paper *intelligently* get something more than direct information about their business. Indirectly they apply methods and adapt plans to their own individual enterprises. Furthermore, the successful business man, who must always have imagination, reads between the lines of his trade paper and by intuition is able to forecast the development in his special line. Added to imagination must be the courage to reach out and take advantage of the vision. This is why a magazine writer found a short time since that a number of successful business men whom he interviewed set aside a half hour of the day's schedule to read the trade magazines. In some instances executives had their assistants go through the periodicals and mark the articles they considered important to the head office.

Not content with giving this direct and indirect information, many trade papers are installing service bureaus. In this way every department of the paper is placed at the disposal of the individual reader. There is scarcely a business man to-day who has not at one time or another called upon his trade paper for information. To-day it may be a request for the address of a business concern; to-morrow, a technical question that requires three days or three weeks of research. This paper is installing cost systems for its patrons; this one maintains a bureau at Washington to look up the governmental angle on particular problems of its industry. Sales methods, office management, intricate and improved processes of manufacture, these have come to be legitimate fields in which a reader may expect advice from his trade paper.

Of course, it follows as the night the day, when a paper gets such a hold upon its readers through its service and its high purposes, that business men will want their announcements carried in its columns. They are quick to sense the prestige that being on such pages will bring men in his trade. It comes pretty close to professional spirit. . . . Unwittingly the trade paper has helped to break down the isolation of the individual and to bring about a social consciousness. Democratic America has been charged with dreadful waste in its industries because of the individualistic tendencies of its members. Trade papers have done their share—and more—to impress upon modern business that it cannot live for itself alone, that the modern sociologist is right when he states that there is no such monster as an "individual consciousness" independent of and separate from the "social consciousness."

And how much might be said of the codes of ethics that have been formulated and are formulating in various trades because of the inspiration of the trade press. These working principles brought into concrete being will finally develop the true professional spirit and make business indeed a profession. Vague notions of right conduct are crystallized by the trade press into principles of action, and possibilities, hazy even to the mind of the man with idealistic vision, are now coming into the foreground sharply and incisively defined to the sight of all.

This, then, is the big *why* of the trade paper.—("The Nation's Business.")

UNWORTHY OF LOGIC. "Evils of drink exist, and to neglect their cure would be criminal; but to rush on to the conclusion that every vineyard ought, therefore, to be devastated, is unworthy of the logic of a self-governing nation."—(Prof. Hugo Münsterberg, of Harvard, leading psychologist.)

Internal Revenue Decisions.

Temperance Beer—The Commissioner of Internal Revenue, W. H. Osborn, has sent to collectors, internal-revenue agents, and others concerned, the following communication, dated, Washington, D. C., September 18th, 1916:

It has come to the attention of this office that unstamped beverages made from malt or substitutes therefor, for sale on draft, in barrels and other bulk containers, and containing more than one-half of 1 per cent. of alcohol by volume, are being found on the market in violation of section 3339, Revised Statutes.

All brewers producing alleged non-taxable beverages must be warned that such beverages can not be classed as non-taxable under T. D. 1360 of May 19, 1908, as modified by T. D. 2354 of August 2, the limit of one-half of 1 per cent. by volume from the time the beverage is finished and ready for sale until it is actually consumed. The burden is on the brewer not only to know that the beverage which he sends out unstamped is within the limit, but also to know that the condition of the liquid is such that no increase in the alcoholic content can take place after the beverage leave his premises sufficient to remove it from the non-taxable class by raising the same above one-half of 1 per cent. In all cases where beverages containing alcohol in excess of the limit are found on the market, the brewer who produced the same will be held liable to the tax thereon (Sec. 3339, Revised Statutes), the packages with their contents will be subject to seizure and forfeiture (Sec. 3352, Revised Statutes), and the brewer will be liable to prosecution (Sec. 3340, Revised Statutes).

Persons not authorized brewers who manufacture and place on the market a beverage which is found to contain alcohol in excess of the limit specified render themselves liable to special tax as brewers and to the barrel tax on the beverage itself, as well as to prosecution, and the packages with their contents are subject to seizure and forfeiture.

Persons selling or offering for sale from unstamped packages beverages whose alcoholic content is found to exceed the limit will be held liable to special tax as dealers, and the packages with their contents will be subject to seizure and forfeiture.

Revenue agents having reason to suspect that any beverage claimed to be non-taxable is in fact taxable by reason of the alcoholic content will forward samples to this office for analysis, sealing and labeling same in the usual manner. At the time the sample is drawn from the bulk container for the purpose of forwarding to the laboratory, a 5-grain tablet of bichloride of mercury (poison) should be immediately added to the bottle containing the sample, in order to arrest fermentation and keep the alcoholic content as when he sample was drawn. When the tablet is dissolved the sample should be mixed by shaking. The label must be conspicuously marked "poison," and any officer who poisons and omits to so state on the label is liable to be recommended for dismissal. The small sealed pasteurized bottle which usually goes to the consumer need not be poisoned when taken as a sample.

Printed copies hereof will be furnished to collectors for distribution to parties interested in their respective districts.

THEY DON'T KNOW HUMAN NATURE. "All fanatics of prohibition who are imbued with the delusory idea to prohibit natural instincts of self-preservation and propagation by social laws written on paper, or even restraining them, possess not the remotest knowledge of the workings in nature."—(John Meyer, Mt. Clemens, Mich.)

Statement of the Ownership, Management, etc.

Required by the Act of Congress of August 24, 1912, of THE BREWERS' JOURNAL, published monthly at New York, N. Y., for October 1st, 1916.

State of New York, County of New York, s.s.

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Edward Bold, who, having been duly sworn according to law, deposes and says that he is the Business Manager of "THE BREWERS' JOURNAL," and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:

Publisher, THE BREWERS' JOURNAL, INC., 1 Hudson Street, New York, N. Y.

Editor, THEO. F. CUNO, 1 Hudson Street, New York, N. Y.

Managing Editor, EDWARD BOLD, 1 Hudson Street, New York, N. Y.

Business Manager, EDWARD BOLD, 1 Hudson Street, New York, N. Y.

2. That the owners are: THE BREWERS' JOURNAL, INC.

Stockholders, holding 1 per cent. or more of the total amount of stock: Fred J. Alley, 80 Arch Street, Boston, Mass.; Edward Bold, 1 Hudson Street, New York, N. Y.; Fred Brückbauer, 911 8th Avenue, Brooklyn, N. Y.; August A. Busch, Trustee, 9th and Pestalozzi Streets, St. Louis, Mo.; Mrs. Elizabeth B. F. Cherouny, 21 Vandewater Street, New York, N. Y.; George Ehret, 235 92nd Street, New York, N. Y.; Estate of August Finck, 324 West 39th Street, New York, N. Y.; Estate of Wm. L. Flanagan, 262 10th Avenue, New York, N. Y.; David Gerber, 96 Broadway, New York, N. Y.; Isaac Goldmann, 80 Lafayette Street, New York, N. Y.; Adolf G. Hupfel, 161st Street and St. Ann's Avenue, New York, N. Y.; Wm. H. Kurtz, 524 10th Street, Brooklyn, N. Y.; Estate of Henry Lindenmeyr, Bleecker and Mott Streets, New York, N. Y.; Lion Brewery of N. Y. City, 108th Street and Columbus Avenue, New York, N. Y.; Henry Osborne O'Hagan, 34 Old Broad Street, London, England; Fred Oppermann, Jr., Brewing Co., 332 East 45th Street, New York, N. Y.; Jacob Rupert, 1639 Third Avenue, New York, N. Y.; A. E. J. Tovey, 46 Cannon Street, London, England; David W. Tovey, 240 Riverside Drive, New York, N. Y.; Samuel Untermyer, 120 Broadway, New York, N. Y.; Edward W. Voigt, 213 Grand River Avenue, Detroit, Mich.; C. M. Warner, 124 Front Street, New York, N. Y.; Josephine Weil, 317 East 156th Street, New York, N. Y.; E. G. W. Woerz, 291 West 10th Street, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who

do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

EDWARD BOLD (*Business Manager*).

Sworn to and subscribed before me this 29th day of September, 1916.

HIERONYMUS BREUNICH, *Notary Public, Bronx Co.*
Certificate filed in New York Co.

My commission expires March 31st, 1917.

Triumphant Progress of the Motor Truck.

Several years ago, when brewers began to consider whether they should replace their horses and beerwagons by motor trucks, the president of one of the largest brewing companies in this country said to a representative of THE BREWERS' JOURNAL: "May be these new-fangled machines will be good enough to pull in 'empties,' but I do not see how they will ever be as effective and as economical as a good team of strong brewery horses and a stout brewery wagon." The company over which that gentleman still presides has today a fleet of motor trucks which, when placed in a row, would occupy a large number of city blocks.

The horse has had its day in the American brewing industry. There are now but few brewers who do not prefer motor traction to horse traction. It is more efficient and less expensive. That fact had been demonstrated long ago.

The only question the brewer considers today in regard to traction is: "Which of the many motor trucks extant am I to buy?"

It is also a fact that the horse is a constant menace to the welfare of a brewery, where cleanliness and freedom from infection through microorganisms are paramount. In every horse stable these organisms prevail to a shocking extent and from there they are carried through the atmosphere into the vats and packages of the brewery with the result that large amounts of beer may be spoiled and become a total loss. Rats, mice and flies, which are also inseparable from the stabling of horses, also distribute bacteria and wild yeasts, the most vicious enemies of the brewer and his valuable product.

The motor truck is *not* a propagator of germs.

FIND THE WEAK SPOT. "If you find more than a few unwilling listeners, the trouble lies in some specific direction. It may be lack of physical poise or tactless working in the approach; it may be improper handling of the outer guard; it may be wrong choice of time or place for the interview. Whatever the fault, you can find and correct it, if you are really resolved to do so and go about it persistently."—(Lorraine McKay.)

MORE SALOONS NEEDED AT NEW ORLEANS. Daniel D. Moore, editor and manager of the New Orleans "Times-Picayune," breezed into the McAlpin, New York, the other day. Before he had time to register he had to listen to a knock on his home town. He was greeted by a traveling man, "That's a tough burg of yours," said he. "What's the trouble?" asked Mr. Moore. "Why, a fellow can't get a drink there. My tongue was hanging out," said the traveling man. Mr. Moore perked up his ears. "That's strange," said he, "New Orleans is a wide open town." "That's the trouble," said the traveler, "the saloons are so crowded one cannot get near the mahogany."

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,199,061. Bottle-labeling machine. Edward Ermold, New York.
 1,199,456. Brush for bottle-cleaning machines. Otto Eick, St. Louis.
 1,199,516. Feeding mechanism for labeling-machines. Frank O. Woodland, Worcester, Mass., assigned to Economic Machinery Co., Worcester, Mass.
 1,199,642. Apparatus for the sterilization of fluids. William Richard Walkey, Westminster, London, England.
 1,199,873. Bottle-seal. Frank J. Bussmann, New York, assignor to The Interstate Bottle Stopper Co., Inc., Brooklyn, N. Y.
 1,199,908. Spinning-machine for bottles. Joseph Davis Lacroix, Baltimore, Md., assignor to The Wilson Distilling Co., Jersey City, N. J.
 1,199,908. Bottle-washing machine. Theodore J. Linderme, Detroit, Mich.
 1,200,011. Yeast extract and process of manufacturing the same. Arvid Nilson, Chicago, Ill.
 1,200,341. Gage for beer-tanks. Wilhelm Griesser, St. Louis, Mo.
 1,200,406. Wiper mechanism for labeling-machines. Frank O. Woodland, Worcester, Mass., assigned to Economic Machinery Co., Worcester, Mass.
 1,200,482. Closure-applying machine. Lauritz C. Garman, Baltimore, Md., assignor to The Crown Cork and Seal Co., Baltimore.
 1,200,513. Cooler. Charles Meldau, New York.
 1,200,764. Beer-dispensing apparatus. Frank Schneible, New York, assignor to C. A. Schneible, Inc., New York.
 1,200,908. Clearer device for glue-distributing rolls in labeling-machines. Frank O. Woodland, Worcester, Mass., assigned to Economic Machinery Co., Worcester, Mass.
 1,200,918. Feeding attachment for crown-cork-making machines. Alexander Bogdánffy, New York.
 1,200,924. Bottle-carrier. Joseph W. Dawson, St. Louis, assignor to Barry-Wehmiller Machinery Co., St. Louis.
 1,200,940. Apparatus for the treatment of water and other liquids by ultra-violet rays. Victor Henri, Paris, and André Heilbronner, and Marx von Recklinghausen, Suresnes, France, assignors to the R. U. V. Co., Inc., New York.
 1,200,999. Bottle-washing machine. Frank C. Strasburger, Chicago, Ill., assignor to The Bottlers' Machinery Mfg. Co., Chicago.
 1,201,062. Process of manufacturing Yeast. Lucian Lavedan, New Orleans, La.
 1,201,247. Cork-blocking machine. Alexander Bogdánffy, New York.
 1,201,268. Mash-tun or the like. Charles B. Davis, New York.
 1,201,385. Apparatus for producing diastatic product. Jokichi Takamine, New York.
 1,201,533. Internal-combustion engine. Frederick Wackenhuth, Newark, N. J.
 1,202,109. Filter-press. Carl Sellenscheidt, Berlin, Germany, assignor to Filter & Brautechnische Maschinenfabrik, Berlin.
 1,202,439. Bottling-machine. Charles B. Scott, Hanover, N. H.
 1,202,466. Labeling-machine. Frank O. Woodland, Worcester, Mass., assigned to Economic Machinery Co., Worcester, Mass.
 1,202,479. Bottle-crate. Willis A. Burlingame, Richland, Wash.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

FIRES. In Josef Niedermair's brewery at Menominee, Wis., fire caused a loss of about \$20,000, early Sunday morning, September 24th; insurance about \$10,000. The brew house was a total wreck.

Flames have almost razed the plant of the East Grand Forks Brewing Co., East Grand Forks, Minn., September 3d; damage, about \$50,000.

There was a fire in the Genesee plant of the Bartholomay Brewing Co., Inc., Rochester, N. Y., October 5th, but it did very little damage, the brewery's employees extinguishing the blaze immediately.

In the Frank Fehr Brewery of the Central Consumers' Co., Inc., at Logan and Lampton streets, Louisville, Ky., fire broke out October 5th; damage slight.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration, may oppose it upon payment of the fee required by law.



Ser. No. 93,723. Old Dutch Brew Co., San Francisco, Cal. Filed Mar. 20, 1916.

Particular description of goods.—Beer.

Claims use since Feb. 1, 1916.

ANSTAT

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ANZAC

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KING'S CROWN CORONA

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Ser. No. 97,261. Leo Wallerstein, New York, N. Y. Filed Aug. 10, 1916.

Particular description of goods.—A Beverage Made Principally from Unmalted Cereals, Hops, and Water and Containing Less Than One-Half of One Per Cent. of Alcohol.

Claims use since July 25, 1916.

Ser. No. 97,585. The Monumental Brewing Co., Baltimore, Md. Filed Aug. 23, 1916.

Particular description of goods.—Malt Non-Intoxicating Beverage.

Claims use since Dec. 21, 1915.

Ser. No. 97,656. Burkhardt Brewing Co., Boston, Mass. Filed Aug. 28, 1916.

Particular description of goods.—Beer.

Claims use since July, 1916.

Ser. No. 90,453. Columbia Brewing Co., Tacoma, Wash. Filed Nov. 6, 1915.

Particular description of goods.—Non-Alcoholic Carbonated Beverages.

Claims use since Oct. 7, 1915.

Ser. No. 95,385. Massachusetts Breweries Co., Alexandria, Va., and Boston, Mass. Filed May 23, 1916.

Particular description of goods.—Malt Tonic.

Claims use since Jan. 1, 1916.

Ser. No. 97,937. Alonzo G. Van Nostrand, Boston, Mass. Filed Sept. 11, 1916.

Particular description of goods.—Non-Intoxicating Malt Beverages.

Claims use since Aug. 31, 1916.

The following Trade Marks have been definitely Registered:

112,495. Beer. Evansville Brewing Association, Evansville, Ind. Filed December 28, 1914. Serial No. 83,547. Published June 27, 1916. Registration granted, September 12th, 1916.

112,567. Beer. The Standard Brewery, Chicago, Ill. Filed January 15, 1916. Serial No. 92,169. Published March 21, 1916. Registration granted, September 12th, 1916.

112,668. Non-Alcoholic Brewed Malt Beverage. John Hauenstein Brewery Co., New Ulm, Minn. Filed March 6, 1916. Serial No. 93,334. Published July 11, 1916. Registration granted, September 19th, 1916.

113,009. Beer. The Christian Moerlein Brewing Co., Cincinnati, Ohio. Filed January 19, 1916. Serial No. 92,250. Published February 22, 1916. Registration granted, October 10, 1916.

113,275. Malt Tonic. Massachusetts Breweries Co., Alexandria, Va., and Boston, Mass. Filed May 23, 1916. Serial No. 95,386. Published August 8, 1916. Registration granted, October 10th, 1916.

American Society of Brewing Technology.

Chicago Section, October 19th, 1916.



The first meeting of the Society of Brewing Technology, Chicago Section, for the 1916-1917 season, was held at the New Kaiserhof Hotel, October 19th. The meeting was preceded by an informal dinner and was very well attended.

The official paper of the evening was one on "Artesian Well Waters," read by Prof. Bartow, of the University of Illinois. The paper was of considerable interest and included a historical resumé on artesian well waters, especially in the Chicago district. The data submitted represent an immense amount of work and are in themselves of considerable value. An interesting discussion took place later, which was entered into by Otto Luhr, F. P. Siebel, Gillies and Wm. Breuer.

NEITHER ARE WE, UNK. "You have declared for Prohibition, haven't you?" "Yes," replied Uncle Bill Bottletop, "I also sing 'I Want to Be an Angel,' but I ain't in any great hurry about it."—(Washington [D. C.] "Star.")

YA, DAS BANE SO! "Under the Swedish license law no one can buy a drink without buying something to eat at the same time. Must be a great country for indigestion."—(Chicago "Journal.")

NATIONAL ASSOCIATION OF COMMERCE AND LABOR. The annual meeting of the National Association of Commerce and Labor will be held in the Hollenden Hotel, Cleveland, Ohio, on Wednesday, November 22nd, 1916, at 2.00 P. M. Affiliated organizations should arrange that properly accredited delegates representing them will be present at this meeting, on which occasion officers and executive and finance committees will be elected for the ensuing year.

"SENSUOUS PLEASURES, like eating and drinking, are sometimes described as animal and therefore unworthy. It must be confessed, however, that men are in this life animals all through—whatever else they may be—and that they have a right to enjoy without reproach those pleasures of animal existence which maintain health, strength and life itself—familiar ascetic and pessimistic dogmas to the contrary notwithstanding. These pleasures, taken naturally and in moderation, are all pure, honorable and wholesome."—(Prof. Charles W. Eliot.)

New Advertisers in THE BREWERS' JOURNAL.

The names of wide-awake firms and manufacturers, who know a thing or two about the effects of advertising in a widely-circulating trade paper, are spread over the pages set aside for that purpose in THE BREWERS' JOURNAL. To-day we add to those with whom our subscribers have already become familiar, the following:

CENTRAL PRODUCTS Co., 1352 Wells St., Chicago, Ill.
Brewing Salts.

IMPROVED APPLIANCE Co., 451 Kent Ave., Brooklyn, N. Y.
"Improved" Vat Dryer.

KRUECKE BROS. MANUFACTURING Co., 515-517 Park St., Milwaukee, Wis.
Brewers' Copper and Brass Goods.

LADÉWIG & STOCK Co., Waukesha, Wis.
Designers and Manufacturers of Bottlers' Machinery and Equipment.

A. MENDLESON'S SONS, 120 Broadway, New York, N. Y.
Caustic Soda and Lye, for Brewers' purposes.

SILVER CROWN DISK Co., 1463 Broadway, New York, N. Y.
Tin Foil Lined Cork Disks.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, October 30th, 1916.

Barley. The U. S. Government crop estimates, published October 1st, 1916, give this year's percentage of 92.6 for barley as compared with the barley crops of 1915; acreage, 7,757,000 acres; condition: October 1st, 1916, 74.6; October 1st, 1915, 94.2; October 1st, 10 years average, 80.4; September 1st, 1916, 80; yield per acre: 1916, 23.7 bushels; final, 1915, 32 bushels; 1910-1914 average, 24.6 bu.; total production: October forecast, 183,536,000 bushels; September forecast, 194,195,000 bushels; final, 1915, 237,009,000 bushels; 1910-1914 average, 186,000,000 bushels; price per bu., October 1st, 1916, 76.5c; October 1st, 1915, 46.8c.

The local Barley market is up in sympathy with other grains and jumping sky-high. Offerings are limited and the demand is brisk. Quotations nominal.

In BUFFALO, October 28th, Malting Barley was quoted at \$1.13 for Low Grade, \$1.18 for Fair, up to \$1.25 for Fancy.

Our CHICAGO correspondent writes, October 28th: "The barley market for the past month has ruled generally firm and higher, with a sharp advantage in prices during the last week. The strength in all grains has influenced barley values and the fact that offerings are running poorer in quality is also a factor. Choice cars are becoming scarcer and the percentage of light weight is increasing. We quote low-grade thin, which can be cleaned into thin malting, 92c.@\$1.04c.; Standard grade, \$1.05@\$1.11; Good to Choice, \$1.12@\$1.18; Fancy, \$1.20—possibly more for really fancy."

Malt. In sympathy with the rapidly rising Barley market, Malt sales are more or less limited. Prices are: Standard, \$1.33, cash New York; Bottle Beer Malt, \$1.41, cash New York; California Barley Malt, \$1.32.

BUFFALO quotations, October 28th: Standard Malt, \$1.27; Choice, \$1.30@\$1.32.

Our CHICAGO advices, dated October 28th, quote: Standard Malt, \$1.27; Bottle Beer Malt, \$1.33; Fancy, \$1.38@\$1.40, all f. o. b. Chicago. "The market is excited. Maltsters will not sell large quantities, and only for a few months."

Corn Goods. Quoted: Old Crop Grits, \$2.55; New, \$2.40; Old Crop Meal, \$2.54; New, \$2.39; Corn Syrup, \$3.11; Corn Sugar, \$3.13. In CHICAGO, Grits was offered, October 28th, at from \$2.14@\$2.20; Meal, one cent less.

Rice. Brewers' Rice advanced in October owing to the heavy demand, the embargo from the Gulf on Domestic shipments and increase in Trans-Pacific freight rates. Imported Rice is quoted at \$3.50 per 100 lbs. Chicago, or \$3.75 New York, and Domestic at \$3.25 Chicago, or New York.

Hops. October was fairly active. Several hundred bales of Pacific Coast hops were purchased at nominally unchanged prices, the bulk of the trading being done in California. Exporters have not participated much if any in these purchases, on account of the embargo now in effect on shipments to Europe. Many of the dealers were compelled to pay higher prices than they expected, needing the hops for sales made to brewers early in the season at rather low prices, and the market advanced. After our last report, the N. Y. State market became even firmer, with as high as 55c per lb. paid to growers for several hundred bales of choice quality. It is now estimated that 95 per cent. of the entire N. Y. State crop has been sold. The reason of the high price for these hops is, that many brewers are buying —?— them in place of Bohemian and Bavarian hops, which cannot be imported under present existing conditions. In England the market is firm for prime to choice quality, which is very scarce, most of the crop there, on account of inclement weather during harvest, being of undesirable quality. Similar conditions exist in Austria, and while some very good hops have been harvested, three-quarters of the crop was more or less affected by unfavorable weather. Prices in Germany and Austria are low. We quote: 1916 Pacific Coast hops, 15@19c; 1916 N. Y. State hops, 50@56c; 1915 Pacific Coast hops, 12@15c; 1914 States and Pacifics, 8@12c.

—The Yokohama Glass Manufacturing Co., a new company, has been established under the joint cooperation of the Japan Brewing Co. in Tokyo and the Meiji Kirin Brewery in Yokohama for the manufacture of bottles. The company has purchased a site covering 30,000 tsubo and propose to start with a capital of 3,000,000 yen, or \$1,500,000.

Trade Correspondence and Literature.

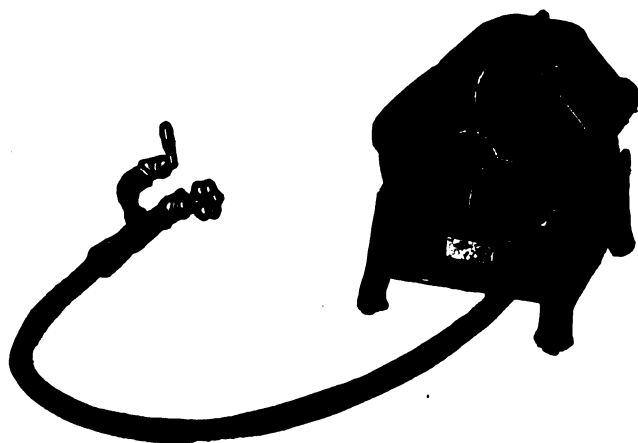
Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Vat Drying by Gas with High-Pressure Air.

By GILBERT C. SHADWELL, Improved Appliance Company, Brooklyn, N. Y.

During the present season the Brewmaster is cleaning and revarnishing his Vats and after scrubbing them out has to apply heat to them to dry them thoroughly before revarnishing. Every Brewmaster is familiar with the troubles accompanying the use of charcoal and electricity. Charcoal with its accompanying dirt and poisonous gases is also dangerous, owing to the attendant risks of fire, and it is so slow that a long period is usually required to accomplish the necessary drying. The use of gas with high-pressure air, which is always available in every brewery, has made such obsolete methods unnecessary and has brought about a new era of accomplishing this work accompanied by safety, cleanliness and hygiene in addition to very great speed.

The Vat Dryer which is illustrated in this article will dry the largest vat in eight hours at the cost of only a few cents for gas, and it accomplishes this work with less trouble, greater speed and at less cost than any other method. This appliance is not new and it has been used by some of the largest breweries for several years, but there are many others who have not been aware of the existence



of such a method and who will appreciate this process. The heater consists of a cast iron body heavily reinforced inside of which the gas is burned. The body rides on a rolling carriage. These two parts are separate and will pass through the smallest manhole. The Dryer is equipped with a new style of Burner so designed that the flame will not blow away from the head under a wide margin of adjustment. The gas and air for combustion are supplied through a flexible metallic hose which can also be used to move the Dryer to the center of the Vat. It is especially made for this purpose and will withstand the hard usage and heat to which it is subjected.

Perfect combustion is assured, as the supply of gas and air are both under absolute control from outside the Vat.

The flame cannot be smothered, as combustion takes place entirely within the body and all the air necessary for combustion is supplied through the Burner.

The Dryer may be run red hot for rapid drying without scorching the floor, as the carriage is equipped with a baffle to obviate this difficulty. The compressed air which is available in every brewery will operate these dryers perfectly.

Brewmasters will readily appreciate the many annoyances which are eliminated by the use of so simple an appliance, which means quick and clean work, and which is always ready for use.

"Corrective," for Improving Brewing Waters.

The Central Products Company, 1352-1360 Wells street, Chicago, have a new trade announcement in another column to which we call the attention of the reader. The announcement refers to "Corrective," a preparation for improving brewing waters.

Brewers' Copper and Brass Goods.

The Kruecke Bros. Manufacturing Co., 515-517 Park street, Milwaukee, manufacture brewers' copper and brass goods—brew kettles, government pipe lines, mash tubs, beer coolers, and brass goods for all departments of the brewery and bottling house. The company's trade announcement, to be found on another page, gives to the reader additional details.

Devices that Make for Motor Truck Efficiency.

The above is the title of an interesting little pamphlet just issued by the B. F. Goodrich Co., Akron, Ohio. It briefly describes some of the appliances or devices which have gathered around the original self-propelled cart, and which better enable it to load, carry and deliver.

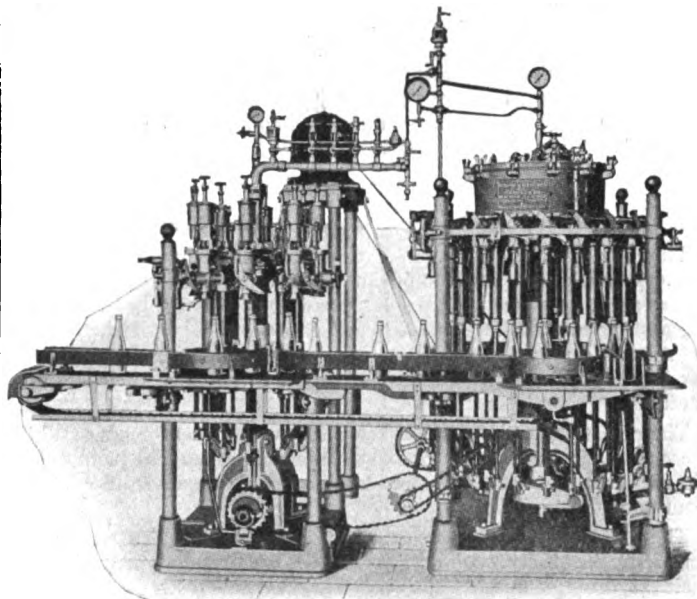
It is hoped that this listing of modern devices used on trucks or in connection with them to expedite the handling of loads will be of service to truck owners or prospective owners, who, by observing what other concerns in the same lines of business have done, may determine whether or not they can use similar devices in their own business.

The Company will be glad to supply our readers with any number of these pamphlets.

Efficient and Economical Bottling.

The Bishop-Babcock Becker Co., Cleveland, Ohio, with offices in New York, Chicago, St. Louis, Milwaukee, Cincinnati, Pittsburgh, St. Paul, Minn.; San Francisco, Denver, Col.; Atlanta, Ga.; Dallas, Tex., have just published their latest booklet describing and illustrating their Eureka Economic System of Low Pressure Bottling, for which it is claimed that it guarantees speed, safety, quality and sanitation—for bigger bottling profit.

Among other things the booklet, which may be had by writing



for it, says: "With the rapid and enormous increase in the manufacture and sale of carbonated beverages and table water, the bottling business has become one of high-grade rapid production and sanitary engineering combined. This development calls for the installation, by the larger bottling establishments, of most modern, economical and large capacity syringing and filling equipment. The "Eureka" Economy System was designed to take care of this need of bottling soft drinks and waters at a low pressure and low temperature, resulting in the highest grade product at the lowest cost for labor, gas and syrup, and with less waste and breakage."

New Firm of Engineers and Contractors.

Wm. F. Koelle announces that the firm of Koelle, Speth & Co. has been dissolved and that he will continue the business under the firm name of Wm. F. Koelle & Co., Engineers and Contractors, N. W. cor. 26th and Oxford streets, Philadelphia, Pa.

Many Installations, Made by the Frick Company.

The Frick Company, Waynesboro, Pa., have recently made one hundred and twelve installations of their Corliss and other refrigerating machines and apparatus in the plants of industrial establishments, public institutions and factories of manufacturing firms. These installations are exclusive of reports made previously and new orders are still coming in such numbers that the laboring force had to be largely increased. Installations made in breweries are reported elsewhere in these columns.

New Crucible Plant.

The Joseph Dixon Crucible Co., Jersey City, N. J., have purchased the plant of the Pacific Borax Co., situated on Westside avenue, Jersey City. The plant, which has been vacant for several years, contains about eighteen acres with buildings, and is on the line of the Central Railroad of New Jersey.

The Crucible Co., which now occupies an area of about one million square feet in Jersey City, has found it necessary to enlarge its facilities. Alterations will be made in the buildings at the new plant, a number of kilns will be built, and steps taken in every way to put the Dixon Crucible Co. in shape to meet all of the requirements of crucible users in the United States, as well as to meet its growing export requirements.

Deliveries from the new plant will be started about the first of the coming year.

"Dragon Impervo"—Some Gum, This!

The General Adhesive Manufacturing Co., Inc., 467 Greenwich street, New York, writes us: "We wish to say that our sales of Dragon Impervo, Ice Proof Labeling Gum, have increased during the past year so much that we have had to install additional machinery to take care of the business that has come our way. The advantage of Ice Proof Labeling Gum is being recognized more and more every day by discriminating brewers and bottlers," all readers of THE BREWERS' JOURNAL. "In Dragon Impervo Ice Proof Gum we believe we have reached the highest degree of perfection. On the hundreds of barrels of this material we have shipped during the past season we have not had one complaint. As a matter of fact, we have received many testimonials from some of the largest brewers throughout the country. There is every reason why Ice-Proof Gum should be used."

Hydro-Pneumatic Washing and Sterilizing System.

The Ladewig & Stock Co., designers and manufacturers of bottlers' machinery and equipment, Waukesha, Wis. (see their announcement on advertising pages 78 and 79 of this issue), are building pasteurizers, soakers, washers and conveyors of all capacities and of special design to meet bottling house conditions, particularly for beer and ale, requiring pasteurization to enhance their keeping qualities.

Their pasteurizers are constructed in two different types. While the prevailing method is to extend them into the basement, or a pit, they can, however, be placed on the floor, provided the required head room is available.

The Ladewig & Stock Co. state that their trade-mark stands for simplicity, durability, economy, perfect design, first-class material, and their Hydro-Pneumatic Washing and Sterilizing System, with a capacity ranging from 1,500 to 6,000 bottles per hour, is entirely automatic, and will soon pay for itself in saving labor and eliminating bottling breakage. There are no bristle brushes, as compressed air has replaced them. It is the firm's contention that no impure air can interfere with the work done by their machines and that thus all danger of infection is safely prevented, the entire system producing a perfectly sterile bottle.

Requests for additional information and prices will receive prompt attention and the company's engineering department is at the service of prospective customers without cost to them. Plans and specifications are cheerfully furnished for the construction and installation of complete bottling plants.

Solvay as a Brine Medium.

The Semet-Solvay Co., Syracuse, N. Y., announce that by using Solvay as a brine medium the quality and uniformity of the brine are decidedly improved at a noticeable reduction in the cost of maintenance, brine trouble being thereby abated and profits increased.

Much practical information may be obtained from the Company's latest booklets, "Dry Cold Air," and "Refrigerating Brine of Uniform High Strength." They are mailed free upon request.

York Company's Monthly Report.

Since their last report, the York Manufacturing Co., York, Pa., have again made a large number of installations of their refrigerating and ice-making machinery, high pressure sides, freezing systems, ammonia condensers, pipings, coils, etc., in various industrial establishments, factories, public and private institutions, apartments, skating rinks, markets, etc., etc., throughout the United States and abroad. Installations made in breweries are reported elsewhere in these columns.

Polack Truck Tyre Corporation.

The Polack Truck Tyre Corporation, with Hugo Hoffstaedter, president of the present Polack Tyre and Rubber Co., at its head, is now being organized under the laws of the State of New York. It will acquire the assets and business of the Polack Tyre & Rubber Co., manufacturing at their Bridgeport, Conn., plant solid rubber tires for motor trucks, operating 26 active branches in the United States and Canada, and having earned upwards of 50 per cent. on its cash capital invested during the last two years.

The proposed new corporation, whose shares are on the market at \$12.50 per share, estimates that when the new plant is completed, the increased operating facilities should produce net earnings approximating a dividend of 30 per cent. on the present price of offering. Further details may be obtained from E. B. Eames & Co., 80 Broadway, New York.

S. L. Goldman Now With the Arrow Organization.

Mr. S. L. Goldman, formerly vice-president and superintendent of E. Goldman & Co., Chicago, who, during the past year, represented the Arrow Bottlers' Machinery Co., Chicago, in the East, has now permanently joined the Arrow Organization, as sales-manager, with headquarters in Chicago and a branch office at 47 West 42d street, New York. Mr. Goldman is also interested in and representing a syndicate of gentlemen well known in the brewing industry who are bringing into the market a new pocket soaker under the name of "Keystone" Soaker, made under patents recently granted to Mr. Goldman. This "Keystone" Open Pocket Soaker, with force cleaning and automatic brush conveyor, forms, in connection with the Arrow Inverted or Type "C" Bottle Washer and the new Arrow Rotary, tubeless, counter-pressure Bottle Filler, an absolutely automatic unit up to the Pasteurizer.

Silver Crown Disks for Bottle Caps.

The Silver Crown Disk Co., Inc., New York, manufacture Silver Crown Disks for bottle caps, of which they say that they are sealing bottle crowns absolutely hermetically, that they are also completely acid proof, carbonic proof and leak proof.

They add: "We do not manufacture crowns, but only the disks for crowns. We have a special process for producing our disks and they are covered, next to the bottle contents, by a metal foil (a special pure block tin) that is flexible and is attached by a flexible composition to the cork, so that it will not break and permit leakage of gas or liquid; preventing also deterioration or disintegration of the cork or cork composition. This covers the entire under surface of our disk. No taste, no odor, communicable to contents.

"The satisfactory employment of cork composition disks, or low-grade cork disks, protected by the impervious foil cover; these do not leak or disintegrate and are fully as satisfactory as the most expensive high-grade cork disks.

"The cork disk with the cover is also treated with a sticking solution to adhere the disks to the crowns, and this replaces the sticking paper generally used in crowns.

"IN THE TRADE—from 5 per cent. to 10 per cent. of the stoppers and crowns used are considered as 'leakers,' and makers of the effervescent beverages regularly allow for escape to that extent of the carbonic gas or contents. In using the Silver Crown Disks, this is saved, as the silver closes the bottle hermetically underneath the cork, and the cork merely furnishes the resiliency for sealing."

Caustic Soda and Lye for Brewery Cleansing.

A. Mendleson's Sons, 120 Broadway, New York, furnish breweries with cleaning Caustic Soda and Lye, packed in all-size containers, and ship them immediately.

Ice Harvesting Equipment.

In Bulletin No. 24, just published by the Gifford-Wood Co., Hudson, N. Y., those engaged in the natural ice business, and those using in their business natural ice, will find valuable suggestions in regard to the advantages and obvious savings possible with the proper ice-harvesting equipment. Some of the latest machines and tools are interestingly illustrated and described.

The Gifford-Wood service can be obtained everywhere in the United States by addressing the company's nearest office and immediate attention will be given to inquiries and orders.

A copy of the Bulletin, or any other Gifford-Wood publication, may be had by addressing any one of the Gifford-Wood Co.'s offices in New York, Philadelphia, Chicago, Scranton, Pa.; Boston, Rochester, N. Y.; and Hudson, N. Y.

Pierce-Arrow Motor Trucks for Breweries.

P. Ballantine & Sons, Newark, N. J., and the Harvard Brewing Co., Lowell, Mass., are operating more Pierce-Arrow motor trucks than any other brewery in the United States.

It is stated that these companies are rapidly dispensing with their horses, as horse traction costs more than the average outlay of \$13.62 a day for one Pierce-Arrow motor truck.

Many of these trucks are operated 18 hours at a stretch and they can easily run 76 miles in 10 hours, the delivery service yielding daily averages of from 23 to 58 miles, occasional long runs aggregating up to 92 miles, and the cost per mile being only 17 cents, as computed from the maintenance, tires, gasoline, lubrication and repairs for 18 trucks which covered a total of 122,228 miles.

Further details will be cheerfully given to prospective purchasers of Pierce-Arrow motor trucks by Messrs. Ballantine and the owners of the Harvard Brewing Co.

Prompt Service from McKenna Bros. Brass Company.

The ever aggressive firm of McKenna Bros. Brass Co., Pittsburgh, Pa., has not been caught napping during this metal scarcity, but through the keen foresight of their purchasing department covered their requirements very early to such an extent that their home bottler and faucet customers have not been forced to wait for any extended period before receiving their orders. In fact the McKenna Bros. Co.'s business has exceeded all records of previous years, and a visit to their shops, foundry and salesrooms puts to shame the far-famed quotation: "as busy as a bee," but revised to fit this occasion reads: "as busy as McKennas."

Five entire floors out of the six in the McKenna Building, situated at First avenue and Ross street, constitutes the "hive" for this thriving business. A trip through this large plant brings forth the fact that there are no "drones" in their force. Two streams are ever passing through the doors of this "hive"; incoming bearing orders for Home Bottlers, Faucets, Capping Machines, etc., also Brass Railings and Grilles, in fact brass goods of many kinds. For the outgoing—Mail, Express and Messengers bearing the filled orders.

Particular attention is paid to all orders, whether large or small, and suggestions as to betterment in service or goods are always gladly received by the McKenna Bros. Brass Co.

CLASSIFIED ADVERTISEMENTS.**Brewery for Sale.**

Brewery for sale or for rent in Central Pennsylvania, selling 3,000 barrels at good prices. Address:
M. P. T. 21, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York

For Sale.

Copper Kettle 4' 6" diameter by 34" deep, two 1" steam inlets, 1" exhaust outlet, 3" outlet in center. Open top, tinned inside. Address:
August Roos' Son,
429 East 91st Street, New York, N. Y.

Wanted.

A good brewer or cellar man in a small brewery who is handy all over and willing to work. State salary. Address:
A. W., 26, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewery for Sale.

Small Steam Beer Brewery, located in heart of small town thirty miles from San Francisco. Also have large agency lager trade. Address:
P. O. Box 181,
Mayfield, Cal.

Wanted Brewery Manager

for a new concern in the West, must be qualified and have \$3,000 to \$4,000 to buy a part interest of present manager. For particulars, address:
B. B. C., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Beer Filters; Loew Blitz Blank, Loew Improved, Theurer with press, Goldman Double Cell with press, Karl Kiefer with press; large Cyclone Filtermass Washer; all in excellent condition. Address:
N. H. Heyman,
438 East 59th Street, New York, N. Y.

Position Wanted.

Brewmaster, competent and efficient, 37 years old, seeks position. Is a graduate of a prominent brewers' school, has had 21 years experience and for the past 16 years held a leading position in a New York brewery. Address:
P. G., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

A small brewery of 3,000 bbls. capacity, with ice machine, located at Hortonville, Wis., is for sale at a reasonable price. The territory is good. Would take in an experienced brewer with \$1,000 or more stock as manager. Address communications to
Peter Oik,
Hortonville, Wis.

Brewery for Sale.

A brewery in one of the best locations of Wisconsin is for sale. Its trade is flourishing and at present the investment yields a profit of 32 per cent. The proprietor desires to retire. Price: \$25,000. Terms: One-half cash, and the rest in easy payments. Address:
M. M. 36, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewery for Sale or Rent.

Brewery in the anthracite coal region; has railroad siding and its own water. A good proposition for a good business man to push ahead. Present owners cannot operate because of other interests. Will be sold or rented reasonable. For particulars, address:
G. F., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Cafe for Sale.

The best paying licensed place, including the property on Centre Street in the heart of the City of Pottsville, Pa., for sale on account of ill health. The property is in excellent condition and the equipment of the finest. Can show the purchaser receipts which will, in two years, more than pay the purchase price.

Carl H. Wagner,
Attorney-at-Law,
113 N. Centre Street, Pottsville, Pa.

Position Wanted.

Practical and theoretical brewer and maltster with nearly thirty years' experience, thoroughly familiar with every modern innovation in American as well as German brewing systems. I handle all the known brewing materials of the day successfully. I guarantee full and perfect extract, producing goods of superior quality. Address:
A. B., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Situation Wanted.

An experienced brewmaster with good practical and theoretical ability and good references, and inclined to use caution in obtaining the best product, seeks engagement as brewmaster in a lager beer or ale and porter brewery; he also is disposed, if it is desired, to invest some capital or accept stock as a part of his salary. Address:
S. M. 15, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale—Cheap.

15 Large Storage Tanks, double headed, 2" Cypress, 8 ft. diameter, 15 ft. high, Est. Capacity 150 bbls. each; 12 Fermenting Tanks, single headed, 2" Cypress, 8 ft. diameter, 6 ft. high, Est. Capacity 60 bbls. each; 15 Chip Casks, 2" Oak, 200 bbls. Capacity. These tanks are new, having never been used. For further information write to
J. B. Lagomarsino,
Sheffield, Ala.

Apr 17]

Brewmaster Wants to Make a Change.

Experienced brewmaster, for many years in the trade, and graduate of two brewers' academies, at present employed, for certain reasons must make a change within one or three months. Has thorough knowledge of American and German brewing methods. Prefers large brewery where several kinds of beer and ale are produced; position to be permanent. Address:
J. C. F., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Wanted.

Brewmaster for a small, up-to-date brewery, located in Southern territory. A young man preferred, who has had experience, and is competent, energetic, of good habits and executive ability, and who can make a first class bottle beer, as also Temperance Beverages or non-alcoholic Beverages.

State age, whether married or single, experience and capability, also salary expected to start with, also give past employment and reference. Address:
W. W., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Position Wanted.

I am 35 years of age, having a practical as well as a theoretical training in the brewing line, seeking a position as brewmaster or bottling house manager. Can give A1 references. Address:

C. H., 16, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

The Virginia Brewing Co., Roanoke, Virginia, offers its brewery and ice plant and its soda water bottling plant for sale. November 1st, prohibition goes into effect, permitting the manufacture and sale of beverages containing less than 1/4 of 1% alcohol. Ice plant has a capacity of 75 tons per day. Parties interested, please address promptly for further information,
The Virginia Brewing Co.,
Roanoke, Va.

Position Wanted.

Brewmaster, practical and theoretical, who has 30 years of practical experience in Germany as well as in this country, wishes position. Has excellent testimonials, graduated from the U. S. Brewers' Academy in New York (nota 1, very good) and from Lehmann's Brewing School in Worms, Germany. Can brew all kinds of lager beer, ale and porter of the finest taste, economically, and is familiar with the production of high-grade bottling and export and Temperance beer. Address:

Gambrinus 42, care of THE BREWERS' JOURNAL,
1 Hudson St., New York.

FOR SALE

- One (1) 100-bbl. Loew "Hydro-Pressure" Soaker.
- One (1) 100-bbl. Loew 2-compt. "Perfection" Soaker.
- One (1) 100-bbl. Loew 3-compt. "Perfection" Soaker.
- One (1) 100-bbl. 20th Century, 3-compt. Soaker.
- One (1) 75-bbl. 20th Century, 3-compt. Soaker.
- One (1) 75-bbl. 20th Century 2-compt. Soaker.
- One (1) 200-bbl. Goldman 3 1/2-compt. Soaker.
- Two (2) 100-bbl. Loew "Monitor" Pasteurizers.
- One (1) 200-bbl. Loew "Monitor" Pasteurizer.
- One (1) 150-bbl. Goldman "Rotary" Pasteurizer.

These Soakers and Pasteurizers have been replaced by larger machines of Loew Mfg. Co.

- One (1) Style F Eureka Superheater.
- One (1) Double Spray Eureka Pitch Kettle.
- One (1) 100-bbl. "Very Klean" Soaker & Washer.
- One (1) 50-bbl. "Goldman" Soaker, 3 Compartment.
- One (1) 50-bbl. "Goldman" Pasteurizer.

The above are in good condition and offered subject to previous sale.

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- 1 5 1/2 x 3 1/2 x 6 Duplex Knowles Brine Pump. Brass fitted.
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- 1 8x8x14 Duplex Knowles Brine Pump. Brass fitted.
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- 2 Foot Power Crown Corkers.
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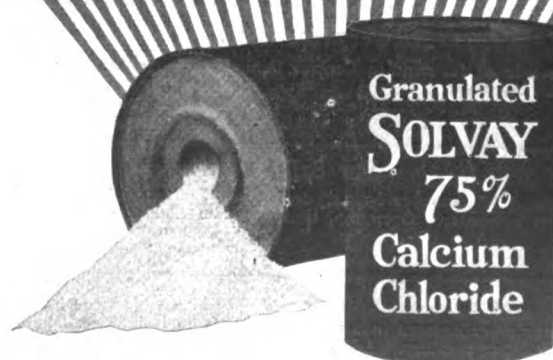
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AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

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Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....

Total 22,024,897 24,328,971 2,453,903 149,829

Net increase for the first four months of the fiscal year
1916-1917 2,304,074

Organization Paramount!

Every brewer, every liquor dealer, every owner of property, every man who believes in justice and fair play, common decency and the abolition of the fad idea from our politics, must band together politically for the common good. There must be a political head organization of wets to counteract the political organization of dries.

If the wets were to establish the same kind of an organization throughout the country, have a State central committee, a county committee for each of the counties, whether dry or wet, and place literature into the hands of a large percentage of the people, this anti-saloon crowd would soon run up against the rocks. In other words, the sole reason why the dries are successful is because they have no combined, unified organization of wets against them.—("The Beacon.")

THE RACE DESIRES IT. "A very large number of the human race desire, occasionally, to partake of liquids containing alcohol, and the vast majority of those who do so partake do not abuse it, and suffer no permanent damage from its ingestion."—(Dr. Hobart A. Hare, Prof. Therapeutics, Jefferson Medical College, Philadelphia, Pa.)

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Pre-Mashing and Protein Haze.

By F. EMSLANDER.

While pre-mashing or digesting increases the yield, at least in the case of imperfectly modified malts, it may, in some cases, impair the keeping properties of the beer. The author's experience with pre-mashing, extending over seven years, is that pale beers produced by this method do not clarify well in the fermentation room, and remain hazy for a long time in the maturing cellar. In ordinary circumstances this makes little difference, being remedied by filtering, and the beer is not intended for long keeping. The scarcity of malt has now necessitated lower gravity worts, and greater care has to be taken to maintain the fulness of flavor, in which respect the filter has an adverse effect, so that shavings have to be employed as the clarifying medium. At first, however, these proved incapable of clarifying the beer sufficiently to make it acceptable to customers, though, so far as dark beers were concerned, the addition of a little color malt got over the difficulty. In endeavoring to prevent the formation of the haze—which is liable to influence flavor—the procedure adopted was based on the knowledge that haze is always the result of imperfectly degraded protein. The protein-rest temperature was, therefore, raised to 122° F., and as this still proved unsatisfactory, to about 133° F., whereupon an improvement was observed, the yeast head being better, the "break" cleaner, and the clarification in the maturing cask all that could be desired so far as the dark beers were concerned. The pale beers, however, still required filtering to give them the necessary brightness. On the other hand, the break, clarification and stability were quite satisfactory in the pale beers made without pre-mashing. Since the higher protein-rest temperature was incapable of sufficiently degrading the protein for these pale beers, the whole of the very hard mashing and sparging liquor was boiled beforehand for half an hour, to remove lime and magnesia, a procedure which gave a noticeable improvement.

Commenting on the foregoing experience, Windisch observes that he has already pointed out the ill effects of very alkaline brewing liquor, especially with the malts of the present season; and that these results really confirm his claim that pre-mashing, in combination with protein-rest, is not a general source of unwelcome phenomena. The removal of the disturbing factor, viz., the alkalinity of the brewing liquor, enabled a closer approximation to the normal to be obtained; and still better results would have ensued if the mash had been soured, so as to give more favorable conditions for enzymatic action and protein degradation.

Another author states that he has always found pre-mashing and protein-rest give an increased extract, of 0.5-0.7% in the first case, and 1-1.8% in the other, according to the degree of modification of the malt. Pre-mashing has the greater effect of the two in darkening the color of the beer, through the prolonged lixiviation of the husks. Protein-rest accelerates wort drainage, the temperature favoring protein degradation, and this beneficial effect is most noticeable in short-grown malts. It also improves the

"break" of the wort in the copper. With regard to the influence on fermentation, this is chiefly exercised by the protein rest, and always beneficially; but for short-grown malts the rest must be sufficiently protracted if any good result is to be obtained, and the color of the beer is also improved. The yeast head has, likewise, a better appearance, the bladdery fermentation often experienced with short-grown malt being obviated by protein-rest mashing. Clarification and head retention are improved, though the latter may suffer when the malt has been over-modified. The protein-rest method is well adapted for present conditions in Germany, seeing that the wort gravity has to be lower than usual, and that, in view of head retention, a barley with 10-12% of protein is preferable to one of lower protein content. In these circumstances a very good "war beer" can be produced by a preliminary mashing for 10-14 hours, followed by a protein rest in accordance with the character of the malt. Finally, it is considered that pre-mashing and protein-rest have a favorable influence on reducing the dextrin content of the beer, and thus improve its keeping qualities by making the conditions unsuitable for the development of wild yeasts and sarcina.—("Wochenschrift für Brauerei.")

"NON-ALCOHOLIC BEER." "There has been so much talk recently on the subject of the production of so-called 'non-alcoholic' beer that, despite the fact that it is impossible to produce a substance of this kind, which can justly be designated beer, we think it necessary to utter a warning to the brewing trade concerning it. The product in question is, as a rule, of a low original gravity, and some brewers have tempted to take up its manufacture in their own premises. The danger to our mind, however, which the brewing trade runs in taking up its manufacture is that such an article never can be accepted by the beer-drinking public as beer. We feel convinced that any firm which engages in this enterprise is, unconsciously perhaps, doing harm to the industry. The attempt to foist on the public such an article would, in all probability, have the effect of alienating the public from beer itself."—("Australian Brewers' Journal.")

BEHAVIOR OF ENZYMES AT LOW TEMPERATURES. According to Hepburn in J. Franklin, Inst., enzymes are able, in general, to stand low temperatures, and especially such of them as effect the hydrolysis of fats, carbohydrates and proteids, as well as those taking part in chemical oxidation and reduction, fermentation enzymes and the enzymes of alcoholic fermentation. Even in aqueous solution they retain their enzymatic power under the influence of temperatures ranging from a little above 0° C. to the temperature of liquid air, though in the latter case only a very short time—usually less than an hour, though sometimes nearly a day. The longest period of resistance observed was 89 months at -9.4 to -12.2° C. The activity of certain enzymes—rennin, zymase, and lipatic, amylolytic and proteolytic enzymes—between ice-box temperature and -12° C. was investigated, at which temperatures the enzymes set up autolysis or acted on artificial media, though the velocity of the reaction was greatly retarded.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

October 15th—November 15th.

During this month, there were analyzed and reported upon, 1,018 samples; these were classified as follows:

	Per Cent.
Barleys	2— 0.2
Malts	212—20.6
Unmalted Cereals and Sugar.....	44— 4.3
Colorants	20— 1.9
Hops	13— 1.3
Grains	3— 0.3
Waters	13— 1.3
Worts	52— 5.0
Yeasts	227—21.1
Ales and Beers.....	346—33.7
Temperance Beverages	27— 2.6
Coals, Ashes	23— 2.2
Miscellaneous	36— 3.5

1018

Barleys.

The two samples of Barley were "Standard" and "Fancy" Dakota; both were considered satisfactory for their respective purposes, although of a rather lean and small berry.

Malts.

208 samples of Barley Malt, 3 samples of Caramel Malt and 1 sample of Black Malt were analyzed.

The Barley Malts included a large number made from California barley; these have invariably shown excellent qualities regarding growth, mellowness and available extract. The highest extract found was 72.9%, and the lowest 65.8% with an average of 70.1%, which must be considered very satisfactory.

The average moisture of 4.57% is lower than for the last month, the highest amount being 8.80%, and the lowest 2.75%; 30 samples showed over 5.0%.

The growth of the acrospire and the degree of mellowness was better than for the previous month; only 7 samples being criticised from the point of view of mellowness. The Caramel and Black Malts analyzed were satisfactory in every respect.

Malt Adjuncts.

29 samples of unmalted Cereals and 14 samples of Sugar products were analyzed, distributed as follows:

Corn Grits	10
Corn Meal	10
Refined Grits	1
Flaked Maize	1
Rice Grits	7
Sugars	5
Syrups	4
Body Sugars	5

7 samples of Corn Grits and Meal contained excessive amounts of oil; all the remaining samples were entirely satisfactory.

Colorants.

20 samples of various Sugar and Malt Colors were found to be satisfactory for their respective purposes.

Hops.

12 samples of Hops were examined, of these 1 was 1915 Pacifics of remarkably good quality; 11 samples were 1916 Pacifics, of these 3 samples were of inferior quality on account of very careless picking and the presence of a considerable number of mouldy cones.

1 sample of Spent Hops was analyzed as to its "extract content."

Grains.

Of the 3 samples analyzed, 2 were found of satisfactory composition, while one sample was found to contain too much water-soluble extract; indicating improper sparging operations.

Water.

All Water samples were subjected to a biological examination, and all were found in satisfactory condition from this point of view. 1 sample was chemically analyzed.

Worts.

4 Ale Worts and 48 Lager Beer Worts were analyzed chemically; 5 samples were also tested biologically in order to locate an incipient infection.

Yeasts.

64 samples of Ale Yeast were examined; of these 5 showed an excessive amount of lactic acid ferments. Among the 154 samples of Lager Beer Yeasts, 6 samples were from the Pure Yeast Department; these were all in excellent condition both physically and physiologically. Of the brewery Yeasts, 11 were infected by *Sarcina* and *Saccharobacillus Pastorianus*.

Ale and Beers.

These samples were all examined biologically as well as chemically. A total of 128 samples of Ales and Porter were submitted; 6 were pasteurized, the remaining 122 were biologically sound.

The average original gravity of the samples was 13.4 degrees Balling, and the alcohol content 4.33% by weight or 5.43% by volume.

The total number of Lager Beer samples was 218 of which 10 were pasteurized. The average original gravity of the samples analyzed was 12.7 degrees Balling, and the alcohol content was found to be 3.60% by weight or 4.52% by volume.

Temperance Beverage.

27 samples were classified as follows:

Ciders	6
Temperance Ales	3
Temperance Beers	18

With the exception of the six Cider samples, all these Beverages were pasteurized. The average original gravity was 6.4 degree Balling with an alcohol content of 0.46% by weight or 0.57% by volume.

Coals and Ashes.

23 samples of Coal were analyzed; 9 samples showed a too high percentage of ash, with a correspondingly low heat-value.

Miscellaneous.

This month's Miscellaneous samples comprised the following:

Filtermass	7
Cleaning Compounds	7
Soaking Solutions	6
Pitch	5
Salts	5
Liquids	2
Liquid Ammonia	1
Varnish	1
Paste	1
Dried Yeast	1

The Sugar in Sweetened Beers.

By F. SCHOENFELD and H. KRUMHAAR.

In purely malt beers maltose is the only remainder of all the sugars originally present, the others having been decomposed into alcohol and carbon dioxide in the early stages of fermentation; but when appreciable quantities of sugar have been used in brewing, some portions of this may be still present in the finished beer. The nature of the residual sugar depends on that of the original material and the degree of inversion it has undergone in the brewing process. Sacharose, for example, has to be transformed into monohexoses before it is attacked by yeast, and the higher the fermentation temperature and the larger the amount of yeast used, the more rapid the inversion. This does not, however, imply corresponding completeness of fermentation, and given favorable storage conditions, some of the inverted sugar may remain unattacked even during secondary fermentation, and so appear in the finished beer.

In the preparation of sweetened top-fermentation beers the usual practice is to add saccharose after fermentation; nevertheless, it is more or less rapidly transformed into invert sugar, though the process may go on so slowly that the beer reaches the consumer before it is completed, this being particularly the case with pasteurized bottled beers.

The authorities having to examine certain sweetened beers for the presence of saccharose, determined the monohexoses by the osazone method and the saccharose by the polarimeter—fresh, thoroughly washed yeast being used for the inversion. All the samples were found to contain a high proportion of monohexoses, ranging from 4.2 to 5.6%; but saccharose was present only in one, the amount being very small (0.4%). All the beers were pasteurized bottled beers, a type in which inversion proceeds on an extensive scale owing to the addition of gyle along with the sugar, and to the warm maturing temperature employed, as well as to the effect of the pasteurization temperature. Beers of this kind can easily be kept low in alcohol by starting with low gravity worts, fermenting at low temperature, and adding sugar and gyle to such an extent that the alcohol content is less than 1 per cent.

The method of analysis adopted may best be explained by an example. The beer is freed from gas by filtration, and is tested for gravity, two samples, each of 100 c.c., being then pipetted into small flasks. The one sample is purified by precipitation with tannic acid and lead acetate and filtered by aspiration, the filtrate being freed from the surplus lead by treatment with sodium sulphate solution, and made up to 200 c.c. after the separation of the precipitate. This purified solution is polarized. The other 100 c.c. are treated with 5% of fresh, well-washed yeast, plus 2% (vol.) of chloroform to prevent fermentation. At the end of three days at room temperature the inversion of any saccharose present will be complete. The inverted liquid is then purified in the same way as the other sample, made up to 200 c.c. and polarized, and the difference between the two readings gives the percentage of saccharose.

The monohexose content is determined from 100 c.c. of the purified and inverted sample. Assuming the beer to have had a gravity of 7%, falling to 6% on deducting protein and dextrin, it may be assumed to contain 3% of sugar. To ascertain how much of this is monohexose and how much maltose, the amount of phenylhydrazine hydrochloride consumed in the osazone test must be calculated to dextrose—thus making sure that a sufficient excess will be used. Consequently, under the conditions postulated, $2 \times 2.4 = 7.2$

grms. of phenylhydrazine hydrochloride will be taken, and 10.5 grms. of sodium acetate, together with a little water and 10 c.c. of 50% acetic acid. After warming on the water bath and recooling, this mixture is warmed with the 100 c.c. of beer on the water bath for two hours. To make sure that all the dextrosazone is down, the mixture is thoroughly cooled, whereupon the maltosazone separates out as well, after which it is again warmed, and is passed through a warm Gooch filter. The precipitate is purified by washing with boiling water until colorless washings are obtained, and after drying for three hours at 105° C., the precipitate is weighed. Since the weight of osazone obtained corresponds to an equal weight of monohexoses, the amount of dextrose and levulose present is found, with sufficient accuracy, after deducting the weight of saccharose ascertained by the polarimeter test. Since the total sugars can be ascertained by fermenting to the limit, this method enables the various sugars present to be determined individually. This method was indicated from theoretical considerations by Prior, but has not hitherto been adopted in a practical form. —(“Wochenschrift für Brauerei.”)

Kerosene Automobile Engines.

The use of kerosene in standard gasoline equipment does not produce what can be regarded as satisfactory results from the operating standpoint, because, even in addition to the requirement of gasoline for starting purposes, the kerosene is so little vaporized as to involve troubles of the following well known order: (a) Bad header distribution between carburetor and the several intakes resulting in unequal charges to the several cylinders; (b) excessive washing down of lubricating oil from the cylinder walls, due to its solubility in kerosene—proved by the accumulation of kerosene in the crank-case oil; (c) smoke and smell in the exhaust or internal carbon, due to decomposition of heavy, unvaporized kerosene drops and wall films, or late vaporizing oil unmixed with air, by the explosion heat of the unmixed part; (d) misfires and backfires, due to variations in the mixture as a result of varying degrees of vaporization of the oil that passes the carburetor as the engine temperature varies—especially noticeable with change of throttle, engine speed, or load.

The trouble encountered can be generalized as due to excessively wet mixtures of a variable degree of vaporization. No particular knowledge of the properties of vapors or of vapor-air mixtures is required to realize that the sort of corrective needed is heat, but it makes all the difference in the world just how the heat is applied. The scientific knowledge of the properties of hydrocarbon liquids and vapors and their vapor-laden mixtures, and the laws of heat transmission through metal walls to get warm mixtures, is no more than sufficient than to indicate just where, how, and to what degree the heat application is to be made.—(C. E. Lucke in “Bulletin of the Society of Automobile Engineers.”)

LIMEWASH FOR OUTSIDE WORK. The United States Government use the following formula for their public buildings, lighthouses, etc.: Quicklime, 2 pecks; common salt, 1 peck; rice flour, 3 lbs.; Spanish whiting, ½-lb.; glue (white), 1 lb.; water, sufficient. Slake the lime, strain, and add the salt (dissolved in warm water); boil the rice flour in water, soak the glue in water, and add both with the whiting and 5 gallons of hot water. Stir all well together, and allow to stand for five days, when it will be ready for use. Apply hot.

The Cleansing of a Brewery.

From a paper read at a meeting of the London Section of the
Institute of Brewing,

by S. WILDING COLE.

As everyone knows, a brewer may go round his brewery for a year and not notice some small thing of importance; a friend will walk round once and point it out to him. To directors of breweries I will say: If in trouble, do not discharge your brewer because he is unable to find it out, but call in outside advice. And to the brewer: If in trouble, do not be above asking your directors for outside advice, as from the above cause you may have missed one vital matter which, if altered, would put things right.

The means of cleansing a brewery or brewery plant may vary in different cases. I propose to start with the malt-room and end with the trade casks, and suggest methods for keeping the whole clean.

Malt-rooms are always a bugbear, as, however careful a brewer may be, he cannot keep the dust down. These rooms should always have a good, sound, dustproof floor, and should be kept sealed as far as the windows and doors are concerned, so that no dust may be conveyed to other parts of the brewery. The walls should be regularly treated with whitewash. If the malt is shot from sacks into a hopper, the hopper should be fitted with a domed cover and a pipe should lead from the top of the hopper either into the chimney shaft or to a fan and dust quencher, so that all dust caused by shooting malt can be carried away at once.

Passing to the malt screens, these screens should be absolutely dust-tight, and the latest makes are so, the dust during screening being carried away by a pipe and fan to the quencher. The mill-room and screen-room should be entirely enclosed, so that no dust can escape into the brewery. Both screens and mills should be taken apart periodically, as dust collects in different corners and a mill has been known to have been taken apart and found to be full of maggots. Also oil often leaks from the bearings and with the dust clogs the working parts. There is no doubt that malt dust is a cause of trouble in many breweries. The same applies to screws and elevators for conveying the malt either to the hopper for grinding or to the grist hopper. Care should be taken to see that all covers are absolutely dust-tight.

Grist hoppers should be cleaned out and brushed down once a week, as often the water will splash up from the mashing machine and with the dust clog round the outlet, when it will prevent the proper flow of grist, and also go sour and bad.

Mashing machines should be cleaned out thoroughly after every brew, directly after mashing if possible, if not, directly the mash-tun has been finished with. All tuns should be emptied of the grains as soon as possible after the coppers are made up, as if left standing, acidity is set up, with evil effects to the tun. Wooden tuns should be regularly sprayed with either a solution of formaldehyde or bisulphite of lime.

Iron mash-tuns should be mopped round once a fortnight if necessary with a solution of tannic acid. Copper mash-tuns should be thoroughly scoured, but not with any coarse material, as this soon wears the copper. A weak solution of sulphuric acid is often used where the whole tun is copper and gunmetal.

The spend pipes, or regulators, leading from the mash-tun should be thoroughly flushed out every day, and if it is not possible to take them down and pass the brush through, the pipes should be filled with a strong detergent once a

week. If removable, they should be taken down and out into the hot soda bath once a month.

Under-backs should be treated the same as mash-tuns. The walls of the mash-tun room should be kept thoroughly clean and free from dust, and once every few months sprayed with a solution of zinc sulphate.

The copper, or boiling back, should be thoroughly hosed out with water as soon as possible after the wort has been turned out, so that the sticky wort may be washed off before it dries. If a fire copper, the fire course should be thoroughly scoured every morning before use, and the whole copper scoured all over once a week. There are many materials for cleaning coppers, but the best method, in my experience, has been to use a 10% solution of sulphuric acid and fine pumice powder: with this, the copper very soon becomes clean with very little rubbing. A section of the copper should be done at a time, and as each section becomes clean, it should be instantly washed down with water and then mopped at once with a solution of soda. By this method the life of the copper is prolonged, and it requires the minimum amount of labor, which is an important item. Hop-backs should be treated the same as mash-tuns. The false-bottom plates of both hop-backs and mash-tuns should be periodically placed in a bath of hot caustic soda, and the slots, or holes, thoroughly cleaned. It is impossible to obtain a good extract with a bad and dirty false bottom.

Wort pumps require special attention from the engineer, and should be overhauled regularly, as pieces of hop, etc., are at times bound to get through the hop-back plates.

The rising main to the coolers or wort receivers is often a very neglected part of the plant, and I have known this main with an inside coating of $\frac{1}{4}$ — $\frac{1}{2}$ inch thick. This main should be taken down every two months and placed in the caustic soda bath, care being taken that plenty of hot liquor is pumped through it after every brewing.

If coolers that are covered are used, care should be taken that all windows, or louvre boards surrounding them, should be kept tightly closed, the steam escaping through the roof. Coolers or wort receivers should be treated the same as mash-tuns.

The cleaning of refrigerators is one of the troubles of the brewer, and although I place before you one or two methods of doing this, every brewer must find out the best means of cleaning his special type of refrigerator. There is one system by means of which the wort receiver, wort mains to the "friges," and wort mains to the fermenting vessels, may all be cleaned at the same time, which is as follows:—

A cast-iron tank is erected commanding the wort receiver; this vessel is fitted with either a steam coil or injector, and is used as a dissolving and collecting vessel for caustic soda solution. After the wort is all down, water is pumped through the whole system, and the wort receiver, pipes, and "friges" thoroughly flushed down. After draining, a solution of caustic soda is made in the above vessel and boiled. All cocks are left open, and the end of the filling main is connected to another tank of the same capacity as the above in the tun room, there being on this connecting main a cock, which is shut. The boiling caustic soda is then turned on into the wort receiver and allowed to run through the vessel, through the mains, over the "friges," and down into the filling mains; it fills these mains, and a certain amount remains in the "frig" pans. Care must be taken that the amount of caustic solution is not in excess of the capacity of the mains and "frig" pans. It should be understood that during this procedure the cold water has been turned off from the "friges." The hot caustic soda

is allowed to stand in the mains for an hour or two, and then is run into the receiving tank in the tun room. This caustic soda solution can be used several times by being pumped back into the top tank, more caustic soda being added to bring it up to strength. This method may be combined with that for cleaning the pumps and rising mains. This may seem a drastic system, and it certainly shortens the life of the plant, but most brewers know that unless "friges" and mains are kept thoroughly clean, trouble is bound to ensue.

Another method of cleaning refrigerators is to whitewash them all over once a week with hot soda and lime put on thick. The retained heat of this mixture seems to loosen the scale, and when the "friges" are afterwards cleaned, the scale comes off with the soda mixture. Another method is to clean the "friges" with a weak solution of HCl, and then wash down with soda. If care is taken, the solder does not suffer. Great care should be taken with the filling mains, and every brewer should see that when copper mains are joined, a good job has been made of the joint, for if the joint is made badly, the wort will get up behind the copper, and any amount of flushing will not get it all out, and then it gets putrid.

The method of cleaning mains is to have all mains and joints made to stand 30 lbs. steam pressure, and, after the mains have been flushed out, connect the steam at one end and blow through at full blast for several minutes, then close the other end and leave the steam on for one hour. But with this method the steam must be first blown right through the pipes until the heat of the pipes is up to boiling point. It is of no use whatever turning steam on to a closed main.

The cleaning of fermenting vessels is a big matter, and, where wooden tuns are used, a practically impossible one unless they are lined.

All tuns should be washed directly the beer has been racked, and no scale should ever be allowed to collect on any tun. Old wooden tuns should either be copper-lined, or, if this is not possible, coated with one of the enamels on the market, and, before every filling, should be sprayed with a solution of formaldehyde. This should then be allowed to dry before using. Copper-lined vessels should be softly scoured, so that, after cleaning, there is a dark brown oxidised coating left on the vessel. If scoured bright, this means that millions of very fine knife-edges are presented to the action of the beer, and in this way copper is taken up by the beer, with a deleterious effect on the yeast.

Experiments have been carried out lately, in coating the copper with an enamel, and very much better yeast crops have ensued, showing that the minutest amount of copper affects the yeast.

Aluminium vessels are in a class by themselves, and are cleaned from scale by a weak solution of nitric acid. With these vessels it is always best to follow the instructions of the makers, but on no account should any alkali be used for this purpose.

There is another type of vessel which is rapidly coming to the fore, I mean the concrete fermenting tun. This vessel is lined with a special lining, and is easily cleaned with cold water. But no matter what vessel it is, scale is bound to form; I believe the makers of this vessel will advise an acid solution for the removal of the scale.

The attemperators and parachutes may be cleaned in the same way as the refrigerators, by giving them a coating of hot soda and lime, and then, after standing, cleaning off with water and pumice.

(To be Continued.)

The Service of Aeration.

It is possible to trace the beneficial effects of aëration throughout the whole process of brewing. Starting with the harvesting of the barley, each grain requires a small but necessary quantity of air to preserve the vitality of the germ, and more is required during actual germination in order to facilitate that slow but persistent growth which results in perfectly modified malt.

Then again, the process of maturing the finished malt, thereby bringing it into safe condition for use, entails the absorption of a certain amount of oxygen.

The influence of air is scarcely less important in assisting coagulation in the copper, the deposition of sludge on cooler or receiver, and the stimulation of yeast both during primary and secondary fermentation.

It has sometimes been remarked that the installation of new plant, especially when the capacity of that previously existing is increased, has led to an alteration in the character of the beers, and we incline seriously to think that such alteration is attributable to differences in the extent of aëration during the brewing process. When small vessels are replaced by larger ones, there is necessarily a difference as regards the amount of aëration, since the smaller vessels naturally offer a comparatively large surface to exposure to the air, but with the installation of larger plant the conditions are different, the increased size of the vessels automatically decreasing the amount of aëration by limiting the area of the surface exposed. The effect of this in some instances is so marked that there has arisen the necessity for supplying the deficiency of air artificially, and means have been devised to force air into the worts both prior to and during fermentation.

Judiciously employed, excellent results may attend the use of such plant, but experience goes to prove that considerable danger exists when artificial aëration is carried too far, through failure to recognise that while a sufficiency of air is essential, an excess may exercise an opposite effect.

Whenever artificial aëration is considered advisable in brewing operations, the aim should be to imitate natural conditions as far as possible, and it must not be forgotten that though a supply of oxygen is necessary a comparatively small amount of that element is usually sufficient, while subsequent to each rousing a period of repose must be allowed for the effectual assimilation of the gas.

It is chiefly in connection with this question of physiological absorption that the modern plan of blowing air into worts sometimes fails to yield the results expected, and failure may ensue either because the method is too energetic, or repeated at too frequent intervals.—(London "Brewers' Journal.")

BURNING OF COAL. As is well known, the carbon in coal is never completely burned to carbonic acid gas but is often changed only into carbon monoxide. Even the carbon dioxide that is formed often prevents complete combustion if it comes in contact with overheated coal. It then forms carbon monoxide as it passes through the flues and chimney. If a pound of dry coal burned entirely to carbonic acid gas yields 14,600 B. t. u., that weight of the same coal burned only to carbon monoxide will give but 4,450 units of heat. If an engineer could, by using a carbon dioxide in the exit gases from 5 to 14%, it would effect a saving of coal of 21½%. If, in addition to this, he succeeded in reducing the temperature at the stack 100 degrees, the saving would amount to 24%.—"The Boiler-maker.")

Concentration of Hydrogen-Ions in Beer.

Phosphates play an important part in brewing, influencing the acidity, and thus the whole process of enzymatic degradation, "break," clarification, etc., but this influence is exerted solely by the actual acids, i. e., the hydrogen-ion concentration (H^+ or Ph.) Sorensen found, in the case of mixtures of primary and secondary phosphates, that the Ph. value increases as the latter predominate, and vice versa, and a similar state of things occurs in malt, wort or beer. After mashing, the (H^+) value of the wort is, for example, Ph. 6.25 (corresponding to 2 cc. of secondary phosphates and 8 cc. of primary phosphates per litre); but the (H^+) value slowly increases to about Ph. 4.5 in carbonate beers and 4.2 in gypseous beers, owing partly to the action of lactic bacteria and partly to the formation of acids by the enzymatic degradation of carbohydrate and protein complexes—the last named operation being probably the decisive factor. Wahl has found that additions of lactic acid do not improve the stability of beer, though acidification with the Delbrück bacillus does; and the author has traced this property to the proteolytic ferments of that organism. He has also found that the acidity is increased by the formation of acid protein groups, peptide combinations which add to the base-fixing capacity—a condition favored by predigestion or pre-mashing. If, then, the brewing liquor is high in salts of lime and magnesia, these acid proteids combine with the latter and acquire a more basic character, thus rendering the total reaction more alkaline. This view has been confirmed by numerous determinations in practice, the (H^+) value being lower in predigestion worts than in ordinary worts, though their total acidity is considerably greater. It is thus evident that the protein in predigestion worts is more unstable than that in ordinary worts, and therefore the alkali protein in beer must be the cause of poor keeping qualities, liability to chill, etc. To elucidate this point, beers were subjected to kataphoresis, i. e., the action of a 110-volt current in a U-tube, under which treatment the positively charged particles migrate to the cathode, and those negatively charged to the anode. On afterwards increasing the tube in ice water a powerful chill haze was observed in the anode limb, whilst the beer in the cathode limb remained bright, thus proving that the particles producing the haze are negatively charged, i. e., of alkaline nature.

The author has also observed that beers of high electrical conductivity fail to keep well, from which also it may be concluded that the highly conductive alkaline salts in the water play a principal part. He has also noticed that beers keep better in proportion as the acidity to litmus is higher in relation to the acidity to phenolphthalein, that is to say, in proportion as the amount of alkali required to produce neutrality in presence of litmus is the greater, and that needed thereafter to effect neutrality in presence of phenolphthalein is less. It follows that the more opportunity is afforded for the degrading proteins to combine with lime or magnesia salts, the less will the proteids share in the production of increased actual acidity, especially when the brewing liquor is high in carbonates. In the case of soft brewing liquors, however, the conditions described by Windisch will predominate, though the author has not been able to investigate this point owing to lack of material.—("Wochenschrift für Brauerei.")

THE MULTIPLE CHARACTER OF STARCH. By Tanret in "Bull. Soc. Chim. de France." This writer regards starch paste as a solution of amyloses inspissated by amylopectin. In cooling, the amyloses condense and assume the form of sols. If the paste loses water by evaporation, the amyloses are still further condensed, and form the known membranes.

The Bitter Principles of Hops.

By W. WOELLMER.

Hayduck was the first to isolate from hops, that is to say from lupulin, the three resinous substances to which he gave the names of α -, β - and γ -resin; but Lintner and his co-workers demonstrated that the first two of these were the impure forms of crystallizable compounds which they named α - and β -lupulinic acid. On the basis of analysis and molecular weight determinations, Lintner and Busch established the formula of the β -acid as $C_{26}H_{38}O_4$, but were unable to determine the molecular formula of the α -acid with certainty, since, owing to its very behavior in respect of solubility it could not be obtained in a pure state.

It was further ascertained that neither of the two acids is a true carboxylic acid, but that they both owe their acid nature to hydroxyls of the phenol type; and on this account Lintner and Schnell called the α -acid humulon. The present author proposes to apply the term lupulon to the β -acid.

Hayduck's γ -acid is not a true chemical entity, but a mixture, consisting primarily of oxidation products, and probably of polymerisation products as well, of the two crystalline bitter principles from which it can be separated by reason of its insolubility in petroleum spirit. Seyffert isolated from the γ -resin of Russian hops a golden yellow, crystalline substance, which dissolves to a reddish yellow solution in caustic soda, and is present in greatly varying quantity in different hops. The author did not succeed in discerning this in his own experiments.

According to investigations by Lintner and his co-workers, the amount of the several bitter principles varies considerably with the origin and age of the hops, and the season. In five hops, Siller, for example, found: Humulon 2.6%, lupulon 8.12%, γ -resin 2.4%.

Humulon has been prepared by the present author in the following manner: Lupulon was extracted with methyl alcohol in the cold, and the dark brown solution was treated, at 60° C., with a hot concentrated solution of lead acetate in methyl alcohol, so as to have lead in slight excess. The yellow, pulverulent precipitate of the lead salt of humulon was filtered by aspiration and well washed with methyl alcohol, the latter being expelled with hot water. The moist lead salt was freed from lead by agitation with sulphuric acid (1:3), and the ethereal solution was washed with water, the ether being distilled off. The resinous residue was redissolved in methyl alcohol, and, for additional purification, the reprecipitation as lead salt and decomposition were repeated 2-3 times. The final product is a pale-brown resinous mass, which slowly solidifies completely in crystalline form, but always remains sticky, and melts at an indefinite point between 45 and 55° C. Owing to its unfavorable conditions of solubility, the humulon cannot be further purified by recrystallization. On treating the well-cooled solution with 70% acetic acid, it is true that small crystals of the rhombohedral type are obtained, but only when the substance employed is already fairly pure.

The author obtained humulon in a pure state by combining the frequently reprecipitated preparation with o-phenylenediamine, and purifying it in this manner. The compound separates out in a short time as a voluminous precipitate composed of fine yellow needles, when molecular proportions of humulon and o-phenylenediamine (as a concentrated alcoholic or benzoic solution) are brought together in the cold. After recrystallization from benzol, the substance melts at 115-117° C. and turns red. It is decomposed immediately by hydrochloric acid and ether, and the humulon remains after the evaporation of the ether in vacuo,

as a faintly yellow crystalline mass which is perfectly free from nitrogen.

The humulon obtained in this manner is inodorous, and does not change even after prolonged exposure to the air. The melting point was found to be 65-66.5° C. The substance is not volatile at 105° C. in vacuo. In organic solvents it dissolves with great readiness. When boiled in water humulon dissolves in very small amount, and on cooling separates out, in part, as a slightly milky opalescence, a small remainder, however, staying in solution and imparting a pure bitter flavor to the water. Neither humulon nor lupulon is poisonous. In the solid form they both scarcely taste bitter, but the bitter flavor becomes more pronounced in alcoholic solution. Humulon has a powerful levo-rotatory action. According to the analyses made, the formula is $C_{26}H_{30}O_5$. Earlier molecular weight determinations showed that the molecule of humulon is not a multiple of the above formula, and this the author confirmed by titration, the substance titrating definitely monobasic, in either alcoholic or alcoholic-aqueous solution with phenolphthalein as indicator.

Humulon in alcoholic solution gives an intense red-violet coloration with ferric chloride, and reduces ammoniacal silver solution even in the cold. A keto group cannot be detected; humulon does not react with hydrochloric semicarbazide, but with an excess of free semicarbazide in aqueous-alcoholic solution, hydrazodicar-bonamide separates out, slowly in the cold, more rapidly on warming. By the further addition of water, amorphous resinous products are precipitated.

The methoxyl test gave negative results. Humulon has a faintly acid character, dissolves to a yellow solution in alkali, but is partially reprecipitated from the aqueous-alcoholic solution by carbon dioxide.

With lead acetate it gives the same amorphous lead salt, which can be obtained as fine acicular crystals. Copper acetate gives the amorphous green copper salt, which is more readily soluble than the lead salt in alcohol.

As already mentioned by Schnell, the action of alkali, in alcoholic solution, decomposes humulon into humulinic acid, acetic acid and isobutyl aldehyde, together with large quantities of resinous products. No phenols could be detected.

The author boiled the alcoholic solution of humulon with aqueous caustic soda under a reflux condenser, distilled off the alcohol and treated the distillate with semicarbazide. The resulting semicarbazone was decomposed by sulphuric acid, and the oil produced (isobutyl aldehyde) was distilled off. The residue from the steam distillation was acidified with hydrochloric acid, a yellow oil, which solidified quickly, being deposited. When treated with petroleum spirit of low boiling-point, humulinic acid $C_{25}H_{22}O_4$ remained undissolved, and was obtained, from petroleum spirit, in almost colorless flat needles and plates melting at 93° C.

The filtrate from the sparingly soluble fission products contained in addition the unsaturated acid, $C_6H_{10}O_2$, and acetic acid, together with red, resinous residues. This unsaturated acid has not yet been identified; it is nearly inodorous, and is fairly soluble in water.

Humulinic acid has already been described by Schnell as being sparingly soluble in water and in petroleum spirit of low boiling point, but readily soluble of other organic solvents. The alcoholic solution has a bitter taste, and gives a pale-red ferric chloride reaction. It is soluble in aqueous alkali, and titrates as a monobasic acid. A saponification test failed to reveal the presence of a lactone group.

It is improbable "humulinic acid" is a true carboxylic acid. It has merely a faintly acid nature, it dissolves in soda solution without liberation of carbon dioxide, and is

partially reprecipitated from the alcoholic solution by the prolonged introduction of carbon dioxide. It cannot be esterified.

As already demonstrated by Schnell—by the preparation of a phenylhydrazone—humulinic acid contains a ketone group, and a semicarbazone has now been obtained. The author, believing that the acid contained an enol group, tried to obtain a cyclical semicarbazone, but without success. He succeeded in preparing dihydrohumulinic acid, $C_{15}H_{24}O_4$, by treating humulinic acid, in solution in methyl alcohol, with colloidal palladium. In attempts to reduce humulin, as unexpected behavior in presence of palladium and hydrogen was observed, the absorption of 6 atoms of hydrogen being accompanied by a clean fission of the molecule into a pentane—diamethylethylmethane—and a yellow substance, $C_{10}H_{24}O_5$, which is transformed, by oxidation, into a red quinoid substance, $C_{16}H_{22}O_5$, possessing all the properties of a substituted dioxiquinone.—("Berichte.")

PROTEOLYTIC ENZYMES. In a paper read before the Chemical Society of Stockholm, Dernby has emphasized the importance of protein and proteolytic enzymes in metabolism. The study of the relations between the concentration of hydrogen ions and the degree of enzyme action has led to the enzymes being regarded as amphoteric electrolytes. The author showed that, in the decomposition of glycyl glycine, the reaction proceeds practically in accordance with the monomolecular formula, in so far as the concentration of the hydrogen ions remains constant throughout—a result obtained by the addition of phosphate mixtures.—("Chemiker Zeitung.")

BICHLORIN, A NEW DISINFECTANT. In composition, bichlorin is similar to antiformin (an aqueous solution of sodium hypochlorite with excess of free caustic soda), but it possesses twice as much germicidal power. Experiments proved that bichlorin is an excellent disinfectant, a 2% solution of it being sufficiently effective to kill in a very short time any micro-organisms detrimental in the brewery, including slime bacteria, and it furthermore will dissolve slime and beer stone. Bichlorin may be employed for disinfecting and cleaning fermenting cellars, storage cellars, brewhouses, coolers, pipe lines, beer-hoses and yeast troughs. The corrosive action of a 2% bichlorin solution on iron and aluminium is insignificant even after several days' contact.

SAMPLING COAL FOR ANALYSIS. The German Royal Institute for Testing Materials has issued the following instructions on the method to be adopted in taking an average sample of coal for analysis: For each barrow load arriving at the stock yard, one shovelful—or, in unloading a truck, one shovelful in every 20 or 30—is thrown into a basket or covered bin, care being taken that the proportions of lump and small coal correspond to those in the bulk. If possible, all lumps should be broken, on the truck, to about the size of a man's fist. This crude sample, weighing about 5 cwt., is spread out on a clean floor (concrete, stone, etc.) and crushed to the size of walnuts, the mass being then well mixed by repeated shovelling, and spread out in a square heap, about four inches deep, and quartered diagonally. Two of the opposite triangular heaps are set aside, and the rest again crushed to the size of hazel nuts, spread out and quartered as before; and this treatment is repeated until the sample is reduced to between 2 and 20 lbs., according to the weight of the consignment received. This final sample is packed in a tightly closed receptacle—a wooden box will do in cases where absorbed moisture is immaterial—and forwarded for analysis.—("Wochenschrift für Brauerei.")

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

K. A. Whether or not it will be advisable for you to install a grains drying plant would depend entirely upon the output and the price you are at present receiving for your wet grains. As a general rule, the installation of such plants have proven a paying proposition. If you wish to dry a certain amount of yeast with your grains, it will be necessary to install a special mixing tub where the yeast should be mixed with previously dried grains and then passed directly into the dryer. The feed value of such grains will be greater owing to the increased protein contents of the yeast and you should be able to demand a somewhat higher price for them.

G. J. It is possible that the trouble you complain of may have been caused by the drippings from the ceiling in your fermenting cellar. We, however, believe that your whole establishment is in a very filthy condition, brought about by negligence, and until you have gone over it thoroughly and cleaned out every nook and corner, you will continue to have a strong offensive smell in your beer.

R. Y. The species of budding fungi to which you refer is undoubtedly the *Saccharomycopsis*, which was first described by Schioenning. It consists of egg and sausage-shaped cells and forms a white film on the liquid where it grows. The main characteristic of this species are the double-walled spores which germinate after bursting the outer wall. This fungus is able to ferment levulose and maltose, but not saccharose.

H. T. We should not recommend you to wash your yeast because of its somewhat dark color. You may perhaps get it white by repeated washing, but you will also so weaken it as to greatly endanger its fermentative energy. If your yeast is biologically sound and otherwise satisfactory, its color should not in the least disturb you. Pumping over in the high krausen stage will greatly improve your yeast in every way.

F. H. We have made a very careful examination of the sample of Malt, submitted to us, and we believe it to have been made from a Wisconsin barley, although the kernels are a little smaller than the average barleys of that State. The malt is somewhat unevenly grown, but it is crisp; exhibits a satisfactory dissolution of the mealbody and has a clean, aromatic flavor. It is entirely free from mould and has good drainage capacity. Its bushel weight is 36 pounds. We consider it a satisfactory brewing material and we see no reason why you should not get a fair average yield of extract from it in your brewery, providing you pay proper attention to the grinding, washing, and sparging processes.

A. B. H. Your filters will be no protection against wild yeasts, no matter how tightly you pack them. If your beers are infected with them, they will pass through the filters very readily, for they are generally smaller in size than the culture yeasts. If any such beer is not immediately pasteurized, it will quickly spoil in kegs and in bottles. The best protection against such infection is to exercise the most thorough cleanliness in every part of the brewery.

R. W. The disinfectant of which you ask our opinion is a creosol combination of approximately the same disinfecting power as crude carbolic acid. Compounds of this character can only be used as stable disinfectants, and are under no circumstances to be employed in the cellars where beer is stored, not even when the beer is bunged down. The odor of these substances is extremely penetrating, and beers are very susceptible to it.

N. R. The mashing process which you refer to may be carried out as follows: Grind your malt rather fine and mash in at a low temperature, say 28 degrees R. After resting the first mash for 45 min., draw off about 3% of the liquid from the top of the mash and keep in a separate vessel. Then proceed to your usual conversion temperature, and after conversion is complete, bring the whole mash to a boil and boil for from 10 to 15 min. After boiling, discharge the mash into a *läuter* or filter tub and rest for a short period, say 15 min. Set taps and run off the wort while hot, and sparge with water of 75 degrees R. at the start and reduce it to 60 degrees at the end. When all the wort and spargings are in the kettle, the temperature should be reduced to 58 degrees R. Then add the diastatic liquid, which has been set aside from the first mash, which will convert all the starch which has been set free by the boiling of the main mash. It is claimed that through the boiling of the mash and subsequent running off of the wort while hot, a much higher yield of extract is obtained.

S. F. J. The sample of hops appears to be a Pacific of this year's crop. Its color is rather unsatisfactory, while its flavor is strongly aromatic. The amount of seeds is very small and it has also been very well picked. The quantity of lupuline is normal, but the quality is somewhat variable. They appear to have been carelessly harvested and unskillfully treated on the kiln. They can be considered of fair brewing value, but by no means "first class" or "choice."

B. C. Under the conditions we would advise you to procure a so-called boiler tube cleaner for removing the scale in your boiler tubes. These devices are operated by steam or compressed air. In the head of the tool is a revolving cutting device, which cuts or scrapes off the scale. If you wish to apply a chemical method, fill your boiler with water and add enough caustic soda to get a solution of from 1½ to 2% strength. Then bring to a boil and boil slowly under atmospheric pressure for from 24 to 48 hours, depending upon the thickness of the accumulated scale. The caustic soda will cause the scale to disintegrate and in time will loosen it completely from the boiler iron. The solution is then run out and the boiler thoroughly washed. When this method is employed, all packing or gaskets should be looked over carefully because they may have been affected by the alkali.

R. G. The sample of Western malt which you recently submitted to this laboratory is made from a somewhat lean barley and its yield of extract on the fine laboratory grist is 68.64%. It is, however, very evenly grown and we can see no reason for its objection; the more so, because this season's barley is more or less deficient in the size and weight of its kernels. Your sample of California malt is about 3% higher in yield of extract than the Western sample and must be considered a good brewing material. We should, however, caution you not to make too radical a change in your materials, and it will be much safer for you to begin by replacing only one-third of the Western malt by the California malt and gradually increase it to equal proportions of each.

— THE —

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Orders for the discontinuance of advertisements must be received at this office on or before the 15th of the month, otherwise they will be published in the following number and charged for.

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Four More States Dry!

With ignorance and stupidity even Gods cannot fight!

Four additional States have been voted "dry," November 7th, 1916:

Michigan—with 56 breweries;
Montana—with twenty;
Nebraska—with sixteen;
South Dakota—with four breweries.

In every one of these four American States the manufacture, importation, or sale and giving away of "liquor"—except for medicinal, mechanical, scientific or sacramental purposes—more or less—is henceforth to be prohibited.

And this is the Twentieth Century!

To destroy, over night, without compensation, economic values amounting to millions of dollars; to deprive thousands of children of the inheritance of their father's property, accumulated through a lifetime of honest and legal industry and commerce; to throw into the street the families of thousands of workmen by depriving them of their employment, is as barbarous as the destruction of cathedrals with 42-centimeter guns, the killing of innocent men, women and children who dare to defend their homes against ruthless invaders.

But this is what is being done in the United States—at the behest and the fanatic appeals of hypocritical theologians, unscrupulous agitators and jobless politicians, today.

Can the United States endure as a republic if such things are possible?

Already the destructionists are telling us that in 1920 one of the great political parties by the machinery of which presidents, legislators, judges and all other public officials are made and unmade will be "compelled" to embrace Prohibition as its principal issue and that, having fooled the masses of the citizenry into voting for that issue, the whole country will be made "dry."

It seems to be impossible that this can be done—that the American people will enslave themselves for no other reason than to do the bidding of a few desperate adventurers who would live a life of idleness at the expense of an industrious nation; who would make us return to conditions as they existed thousands of years ago when a reckless hierarchy dominated the world and the masses, being ignorant and indolent, blindly obeyed their theological masters.

It *must* not be done!

The efforts of the trade and of all those depending upon it for a living must redouble their efforts to ward off the calamity which is threatening them.

The campaign of education, enlightenment and organization must be continued with that zeal, seriousness and determination which an honest cause engenders in the hearts and brains of intelligent men and women.

If we all do our duty the enemy will be defeated!

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Henry Ford's Kind Advice.

Henry Ford is a clever businessman; also a philanthropist. Among others he now befriends the brewers whose property is being destroyed by Prohibition preachers and politicians, advising their victims to remodel their breweries into distilleries to manufacture alcohol for automobiles.

He thinks that will be a very profitable business.

But how long will it take to make alcohol manufacture for automobiles pay acceptable dividends?

So far we have not seen any auto that can effectively be run with alcohol, and it will undoubtedly take some time until that sort of vehicle has been constructed and universally introduced, replacing the gasoline machine.

It will also take many years until the present gasoline autos have all been worn out and their owners will purchase alcohol-driven ones.

Until then the brewery owners and their thousands of workmen will probably be dead and gone, and their children be reduced to pauperism.

Does Mr. Ford consider that probability? If so, what will he advise brewers to do in the meantime?

Is he to use part of his wealth to assist in the agitation for compensation?

Don't be afraid to say a good word for your competitor. People know it and notice it at once when you begin running down the other fellow. They are not impressed favorably by it.

Breweries and tanneries and printing ink factories confer an exemption from tuberculosis, and employes in turpentine factories never have rheumatism. Copper mining excludes the possibility of typhoid among the workers. Shepherds enjoy remarkable health. Men and women working in lavender, whether gathering or distilling it, are said never to suffer from neuralgia or nervous headache. Lavender, moreover, is as good as a sea voyage for giving tone to the system. Salt miners can wear Summer clothes in blizzard weather without fear of catching cold, for colds are unknown among these workers.—(New York "Telegraph.")

"The Amazing Story of Girard" is the title of a pamphlet recently issued by one of the Merchants' and Dealers' Associations, whose members are busily agitating against Prohibition in this country. Girard is a city in Russell county, Alabama, from where large quantities of "liquor" were smuggled into the interior of Alabama and Georgia. The authorities of Alabama all but sacked the town, raiding stores, cellars and attics where whiskey and beer was concealed. Values exceeding hundreds of thousands of dollars were destroyed and militiamen inaugurated a reign of terror, with bullet and bayonet, until the last bottle and the last barrel had been smashed. Conditions as they prevailed in Girard a few months ago are the ideal of the theologians and their wily political tools would like to bring about everywhere in the United States if its citizens were stupid enough to sanction them at the ballot box.

Woman Suffrage.

What we have said many times, that women will vote according to their surroundings and conditions in life, and not according to the wishes of schemers who would like to use the enfranchised women for their own sordid political ends, has been demonstrated again by the results of last month's general election: The votes of the women in the States where equal suffrage prevails, could not be delivered by the agitators who junketed through the country to "organize" the women's vote for one or the other of the political parties, nor for Prohibition either.

The States where majorities for Prohibition were obtained would have voted for it, whether women had the franchise there or not, simply because the voters, men as well as women, are still ignorant of what Prohibition will do to their States, and because, being still in the clutches of unscrupulous theological and political agitators, they believe what these enemies of freedom and enlightenment have told them.

While in the States, like California, the women voted with their male fellow citizens to reject Prohibition, knowing that it would injure the prosperity of their commonwealth.

We agree with Mrs. Arthur M. Dodge, President of the National Association Opposed to Woman Suffrage, that "The so-called 'Woman's Party' failed completely to make good its claims with the women voters. It failed absolutely to carry out the purpose for which it was organized," and that "the woman in politics and the woman trying to get into politics have contributed nothing to politics, but increased election costs, more expensive and spectacular stunts, more bitter partisanship and bigger bluffs than the men have made. The dignity, power and status of woman in public life have not been elevated. Politics have not been purified. The exhibit at the election shows suffrage is an expensive experiment to the State and a burden of no benefit to women."

Last month we noticed in some of our exchanges lists containing the names of more than one hundred clergymen, church members, deacons, elders and such, most of them Prohibitionists, who had been arrested, respectively convicted, of various crimes—theft, forgery, murder, rape, etc.—the cases of ruining young girls and seducing young matrons far outnumbering all other violations of criminal law, and in every case the question was asked: "Did Drink Do This?" Now what is the use, we ask once more, of trying to point out that but in few instances crime can be traced to alcohol? Every intelligent and well-informed person knows that alcohol is not the source, much less the cause, of crime! That clergymen and church people commit as many crimes, proportionally, as other human beings, is entirely natural—because the so-called "profession of religion" does not eliminate from the brain of man the inherited tendency toward violating the golden rule. Only time and education will make us "good" and law-abiding. That clergymen, more than other people, fall a prey to criminality

in regard to matters of sex, is a natural consequence of their peculiar calling, their seclusion, their being removed from the contemplation of "worldly" affairs and their frequent contact with emotional women who come to them for consolation in distress and misfortune. No, Drink doesn't do it! And, therefore, give us a rest with asking that altogether superfluous question.

Anti-Saloons the Enemies of Workmen.

That the Anti-Saloon League obtains money from big manufacturing concerns to whose managers it advances the theory that to eliminate the saloon will make of their workmen total abstainers and, therefore, more effective producers, has been suspected for some time; but now the League's General Superintendent, the notorious Purley A. Baker, and its National Executive Committee brazenly acknowledge the fact.

They have organized a "department," and appointed agents whose particular work is to induce manufacturers to contribute to the League's fund, the League promising to drive the saloon from the vicinity of the respective factory. And while the agitation to that effect is proceeding, the League will furnish spies to hound workmen and denounce them to their bosses when found to go to saloons or purchase liquor from grocers, wholesalers or "blind pigs."

It is obvious that many manufacturers will be induced to thus pay tribute to the League and fatten its increasing horde of grafters, whose principal object will be to throw workingmen out of employment if they dare to take some needed refreshment after a hard day's work.

But organized labor is also a factor with which these grafters will have to reckon in the end. The more unscrupulously the Anti-Saloon League proceeds against the liberty and the material interests of American workmen the more rapidly the eyes of the laboring class in this country will be opened and, as that class represents the majority of the voters, the Anti-Saloonists will be wiped out at the ballot-box—sooner or later—but it will be wiped out as sure as the sun rises to-morrow.

SELLING A SCIENCE. "If selling is hard work for you, it is because you do not go about it in the right way. Try to develop more science. If you do not cultivate good taste in yourself, how can you expect your customers to develop confidence in your judgment of such matters."—(Frank Farington.)

BARKING WITH A PATENT REMEDY. "In attempting too much the law accomplishes nothing. If the American citizen cannot be trusted to handle his own tastes and desires, then citizenship has deteriorated. Preachers who turn their churches over to political agitators are crippling the power of the gospel. Beware of the type of reformer who goes barking about the country with a patent remedy up his sleeve guaranteed to cure all human ills. Temperance is a matter of individual decision. Every man must work out his own salvation."—(Omaha [Neb.] "Bee.")

"UNNECESSARY, UNDESIRABLE, IMPOSSIBLE. Real estate men are a level-headed, moderate, reasonable class of citizens. They favor rational reform and evolutionary progress. They are for temperance, for the elimination of admitted evils in certain types of the American saloon—the saloon that allies itself with lawless vice and crime—but they should vigorously and unitedly oppose every move toward prohibition because, to repeat, prohibition is unnecessary, undesirable, and at bottom impossible in a country of free, intelligent and independent men."—(Edward C. Wentworth.)

Prices.

The United States Department of Justice is at present engaged in an "investigation of the high cost of living," and notice has been given that wherever an increase of price "is found to have been due to conspiracy or other unlawful action," those responsible for it will be severely punished.

We predict that the investigation will uncover but very few instances of "conspiracy or other unlawful action," and the officials who undertake this investigation probably know this, but they perform their altogether unnecessary and futile function because millions of people are suffering from high prices and, therefore, are clamoring that the Government relieve them in their distress.

High prices are a natural consequence of industrial and commercial development and organization. Prices are rising throughout the civilized world. They have been rising ever since the Pharaohs had their pyramids built and before that they were rising in Babylon, India and anywhere human beings had formed social and political organizations. Prices do not rise among savages, each of whom exchanges his superfluous wealth with some other fellow who has produced something worth exchanging.

The higher a community is developed and the better and more universally its citizens are organized, the higher will be their cost of living. The climax of organization is monopoly. If a monopoly be centred in a few hands, the masses buying from the monopolists will have to pay the prices demanded by the monopolists.

This cannot possibly be changed under present conditions. As long as men are permitted to produce and sell their products for personal gain, so long we shall have private monopolies. Prices cannot be fixed under these circumstances by government action. At least not the prices of all commodities. They may be fixed for the rendering of public service, as in the case of railroads, gas companies, etc., whenever State or National Legislatures take action to that effect. And this can only be done when the voters have organized and made a collective demand in this direction.

The solution of the question of prices lies with universal cooperation. But that ideal will not be achieved for many generations to come after us.

Federal Licenses in Prohibition Territory.

Prohibition agitators frequently take the United States Government to task for issuing tax certificates to people selling intoxicants in Prohibition territory. They whine and squawk, calling Uncle Sam a reprobate because he goes counter the will of his own people, who by State laws and county and city regulations have ordained that alcoholic drinks must not be manufactured or sold within the limits of their State or local jurisdiction.

But they do not propose any remedy for this to them disagreeable condition.

Why?

They are too narrow-minded, too ignorant, too reactionary, to propose the only remedy which would remove the obstacle over which they are stumbling: The abolition of State and Municipal Government!

The silly dream of these theorists, that they can deprive 100,000,000 human beings of their inherited desire for certain joys of life by making laws prohibiting the production of certain commodities, could only be carried into reality by organizing a central government, endowed with immense powers for repression, so that even the silliest and most

brutal law could be enforced against the will of an overwhelming majority.

The men who designed the constitution of the United States knew what they were doing. They foresaw that centralization would lead us back to despotism.

If the Prohibitionists want to enforce their infamous scheme in the United States they must agitate for a revolution; for the overthrow of the constitution; for the abolition of the State government; for an immense army and navy; for a horde of spies; for tens of thousands of prisons; for a return to mediaeval conditions.

The constitution of the United States permits the issuing of certificates for taxes it needs to support its officials and institutions, no matter where the taxpayer is living and no matter what State or local governments may decree against manufacturing and selling certain commodities desired by millions of citizens and their families.

A reactionary revolution as the Prohibitionists need it, is impossible. The historical development of the American people and its government, from a small band of colonists to a world power, forbids it. The millions who have grown up on this soil will hold fast to their traditions for many centuries to come and they will develop to more freedom, to greater wealth, to more happiness. They cannot possibly grow and develop backward!

In New Zealand they now have a law prohibiting shouting in bars and hotels. The shouting in churches and Prohibition meetings goes on as merrily as ever.

It is predicted that next year's Legislature of Mississippi will pass a law prohibiting the growing and selling of tobacco in that State; also prohibiting tobacco advertisements in newspapers. What's next?

There are 30,000 simple-minded persons in Kansas today, and insanity in that State has increased 108 per cent. during the last seventeen years. This is a sad showing for a commonwealth for which some theological and political fakirs claim that Prohibition has raised its economic, sanitary, moral and ethical standard. May be, Prohibition has lowered it?

BEER, TOBACCO AND CANCER. "Smoking and drinking are once more indicted as a predisposing cause of cancer. This time it is the medical officer for Woolwich who acts as counsel for the prosecution. He analyses the habits of 135 men and 77 women, who died from cancer in Woolwich last year and comparing persons who suffer from cancer with those living at advanced ages, or who died at advanced ages through other causes, he says that the great differences are as to habits with respect to alcohol and smoke. Amongst cancerous persons the percentage of excessive alcohol users was 32 and of excessive smokers 41. Non-cancerous persons living to a greater age had 14 per cent. of excessive alcohol users and 16 per cent. excessive smokers. The percentage of excessive alcohol drinkers and excessive smokers amongst those dying from cancer is more than twice as high as among other persons. The doctors delight in frightening us, and probably every commodity or luxury known to civilization has at one time or another come under the ban, but still the world goes on and the public refuse to be reformed. It will be interesting to see if there is any diminution in the sale of alcohol or the soothing weed in Woolwich as a result of the M.O.H.'s report."—(Bolton [England] "Evening News.")

Who Reduces the Death Rate?

The Government of the United States recently made known the following facts:

"The lowest death rate on record for the registration area of the United States is shown in the 1915 figures compiled by the United States Bureau of the Census. The rate of 13.5 per 1,000 estimated population establishes the new low mark. It was based on 909,155 deaths returned from 25 States (in one of which, North Carolina, only municipalities of 1,000 population and over in 1910 were included), the District of Columbia, and 41 cities in non-registration States. The total population of this area in 1915 was estimated at 67,337,000, or 67.1 per cent. of the total estimated population of the United States.

"There is a widespread and increasing interest throughout the country in respect to vital statistics. The States of North and South Carolina, which recently enacted the 'model law' for the registration of births and deaths, were admitted to the death-registration area for 1916, increasing the estimated population of the area to 70.2 per cent. of the total for the United States in that year.

"The most favorable year prior to 1915 was 1914, for which the rate was 13.6. It is markedly lower than the average rate for the five-year period 1901 to 1905, which was 16.2. The decrease thus amounts to 16.7 per cent., or almost exactly one-sixth, during a little more than a decade.

"When due allowance is made for the addition of many new States to the registration area between 1905 and 1915, and the comparison is confined to the group of registration States as constituted during the period 1901-1905—the present population of which is about one-fourth of the total for the country—there is still shown a very considerable decrease, from 15.9 to 14.3 per 1,000 population, or 10.1 per cent. This decrease, on the basis of the present population, would amount to 42,876 deaths. On the assumption that a corresponding reduction has taken place throughout the entire country this would indicate a saving of approximately 170,000 lives in 1915 for the United States as a whole.

"In the States for which death rates for 1901-1905 are given, the greatest proportional decrease between that period and 1915 is shown for Rhode Island—16.9 per cent. Next in order are New York, with a decrease of 14.6 per cent.; New Jersey, 14.3 per cent.; Massachusetts, 12.7 per cent.; Vermont, 9.3 per cent.; Connecticut, 5.1 per cent.; Indiana, 3.8 per cent.; New Hampshire, 3 per cent.; and Maine, 1.9 per cent. Michigan alone showed a slight increase—eight-tenths of 1 per cent.

"Among the cities having 100,000 or more inhabitants in 1910 the tendency is toward a still greater reduction in mortality. The following-named cities show, for 1915, decreases of 20 per cent. or more as compared with the five-year period 1901-1905: Newark, N. J., 29.9 per cent.; Atlanta, 28.4 per cent.; New York City, 26.8 per cent.; Los Angeles, 25 per cent.; Jersey City, 24.9 per cent.; Pittsburgh, 23.9 per cent.; St. Louis, 22.9 per cent.; Denver, 22.7 per cent.; Providence, 22.3 per cent.; Paterson, 21.9 per cent.; San Francisco, 21.7 per cent.; Fall River, 21.7 per cent.; Louisville, 21.1 per cent.; and Nashville, 20 per cent."

Has Prohibition had anything to do with the decrease of mortality in our big cities? It has not! Our big cities are "wet." The intelligence of their population and the consequent intelligence of their municipal officers reduce the death rate. It is only in the "dry" back-woods districts, where the ignorant pastor and his political tools are bamboozling ignorant and, therefore, credulous inhabitants and are running things, that the death rate does not decrease.

Prohibition has never saved a single life!

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

WASHINGTON, D. C. The excise board of the District of Columbia has granted 259 retail liquor-selling licenses for the coming year. The Jones-Work law, which is in force here, permits a maximum of 300. There were 281 applications, 21 were refused and 1 was withdrawn. Last year 266 retail licenses were in force. Wholesale licenses were granted to 84 establishments. There were 95 applications, 10 were refused and 1 was withdrawn. The law does not place a limit on the number of wholesale licenses to be granted.

The results of the board's decisions are considered here to be a decided setback for the Anti-Saloon League, which interposed objections to granting licenses on every possible pretext, and on some grounds that were impossible. In every case where strong objection was made by the League the excise board granted the license.

In the United States Supreme Court arguments have been completed and the case submitted in the important action against the Western Maryland Railroad Company and the American Express Company. The case is in reality one brought for the purpose of testing the constitutionality of the federal Webb-Kenyon and the West Virginia liquor prohibition laws. It seems that the issue at point is the refusal of the defendants (the Western Maryland Railroad and the American Express Company) to accept from the complainant for shipment into West Virginia a number of liquor consignments. The case is exciting much interest here, its vital bearing on the interstate shipment of liquors being recognized. The attorney for the complainant is Lawrence Maxwell and for the defendants W. B. Wheeler and Fred O. Blue. A number of attorneys in the employ of the Anti-Saloon League were present and conferred frequently with counsel for the transportation companies and the State of West Virginia. It is expected that a decision will be rendered early in December.

Clarence True Wilson, representing the prohibition organizations of the Methodist Church, claims that plans are all completed for demanding of Congress, in the name of over 4,000,000 Methodists, that liquor be obliterated from the United States of America. "We intend as a church," he says, "individually and collectively, to throw ourselves at the throat of the liquor traffic and throttle the life out of it. We will not allow many days to elapse after the next session convenes before moving on Congress and demanding this legislation. It has got to come. The time for talking has passed. What's the use of Congress investigating or hearing this side or that side? Every person knows what the liquor traffic is doing to our country."

Absolutely astonishing! Here comes a man claiming to represent the Methodist denominations and gives orders to Congress that it shall pass certain legislation! Of course, the likelihood of Congress paying any more attention to these verbal pyrotechnics than it has in past sessions is very remote, but the idea of these people "demanding of Congress" is worth making a note of. Is the Methodist church really running this country or have we a constitution, Congress and President?

According to a bulletin just issued by the United States Health Service here "it is a well-known fact that as prohibition territory has extended and the legal sale of liquor correspondingly closed out, an enormously increasing business has sprung up in the widespread manufacture and sale of alleged patent medicines. A large number of these nostrums contain so great a percentage of alcohol that many of them have from one-half to the full strength of whiskey, and a considerable number have an even greater percentage of alcohol than has whiskey." This is official, and gives in brief but conclusive form the results of constant experiments and analyses.

Now that Virginia has placed itself in the "dry" column, Washington's down-town saloons are doing a "land office business." The Alexandria & Mt. Vernon Railway, at certain hours of the evening, has been compelled to put on additional trains, while on Saturday afternoons and evenings the rush to Washington tests the capacity of the transportation facilities. Incidentally comes the report that more drunkenness is seen on the streets of Alexandria and other places near Washington than ever before. The explanation is that where the citizens of those cities are compelled to "stock up" for use between visits to Washington, and have liquors always at hand, they are likely to drink much more than would be the case were they able to drop into the saloon for the drink when they felt that they wanted it. It would end right there in that case, but to have it stored at home is a constant invitation. Just another fallacy of prohibition.

The result of the elections and referenda in Michigan, Nebraska, Montana, South Dakota, Utah, Florida, Washington, Iowa, Colorado, Arizona and Arkansas, and the fact that among the States carried by President Wilson are seventeen Prohibition States, will certainly react upon Congress and Representatives and Senators from these States, although personally opposed to Prohibition, will be in a perplexing position when they are called upon to vote for or against Nation-wide Prohibition. But then the Representatives and Senators from the great industrial States will still be more perplexed when they consider the fact that their constituents will certainly not re-elect them should they vote for Prohibition. So we see that there will be a great mixup and heaven knows what the end will be.

Under the Jones-Works excise law, President Wilson's second inauguration is to be "dry." For the first time in its history, the District of Columbia will see its saloons closed for forty-eight consecutive hours, from midnight of Saturday, March 3rd, until the same hour March 5th.

AUGUSTA, ME. The Legislature of Maine, which is to convene January 6th, 1917, will have to pass upon two more bills which are intended to make Prohibition enforceable in this State; one is to empower the Governor to remove sheriffs who fail to enforce the law, and the other a bill which would compel judges to give straight jail sentences in liquor cases. As the law reads now the only way that a Governor can reach a sheriff or county attorney who nullifies the law is through impeachment proceedings by the

Legislature. That might apply all right if the Legislature were in session, but during the interval the only recourse that he has by law is to call a special session of the Legislature, which would be expensive. Should the next Legislature pass a resolve for a constitutional amendment giving the Governor the right to remove delinquent sheriffs, the Governor may call a special election for the people to pass on the question or he may defer the action until the next general election. Should the people accept the amendment, the law would be operative in 30 days after its acceptance by the voters.

ALBANY, N. Y. Next year's Legislature of NEW YORK will have an overwhelming Republican majority and, as Governor Whitman (reelected) is said to be favorably inclined toward the "drys," some predict that the Anti-Saloon League will at last succeed in having a drastic Local Option bill passed to cover the entire State.

The notorious W. H. Anderson, State Superintendent of the Anti-Saloon League, triumphantly declares: "Governor Whitman's reelection was a decisive victory over the liquor interests which opposed him because of his public statement in favor of the right of every community to settle the liquor question for itself. Only one other Governor ever took this position and he was not reelected. The present election proves conclusively that the time has come when even in New York, which still passes for a liquor stronghold, a Governor who meets this issue of self-government in a courageous but sane way, in the ordinary course of business, not only does not weaken himself but actually strengthens himself before the public."

SALEM, ORE. OREGON's absolute prohibition, "bone dry" amendment, will not become effective until the State Legislature provides the necessary legislative machinery for its operation, according to an oral opinion rendered by Attorney-General George M. Brown. The Legislature meets in January. The amendment, which was ratified November 7th, bars all shipments of liquor into Oregon.

HARRISBURG, PA. The next Legislature of PENNSYLVANIA will not pass a Local Option bill. That is a settled fact. The legislative candidates of the Anti-Saloon League have been overwhelmingly defeated, while the Assembly will have over 130 and the Senate 15 new members opposed to Local Option.

CHARLESTON, W. VA. The Legislature of alleged "dry" and virtuous West Virginia has been called by Governor Hatfield to a special executive session to pass laws by which it is proposed to prevent fraud and corruption as they were recklessly practiced at this State's last election.

Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc Action by Civic Bodies and Others For or Against Prohibition.

ALABAMA. The municipality of Montgomery, being out of funds, is about to abolish its public free schools.

ALASKA. Prohibition has been voted for in the Territory of Alaska.

ARIZONA. In this State a constitutional amendment has been adopted making it unlawful "to receive or cause to be received" from any other States liquor "for any purpose"; "to have in possession for any purpose" liquor so introduced; "to transport liquor within the State"—except for sacramental or scientific purposes.

Charging a jury in the Federal Court at Montgomery, Judge Henry D. Clayton recently scathingly denounced the Prohibitionists for their sniveling hypocrisy in forcing upon the people laws which they know will not be obeyed, cannot be enforced and do not produce the effect which they are falsely alleged to be certain to produce.

ARKANSAS. The amendment to modify the Prohibition law of Arkansas has been rejected.

Fort Smith has been practically bankrupted by Prohibition, although the prohibitive law is in force only since January 1st, 1916.

CALIFORNIA. In this State Prohibition has been overwhelmingly defeated, both of the "dry" amendments to the constitution having been rejected by large majorities, which would have still been larger if all men and women depending upon the "liquor" industry had registered their names before the election.

COLORADO. The amendment to make the manufacture and sale of liquor legal in Colorado has been defeated.

In Denver the State government will establish a distillery for the manufacture of alcohol for the State, the plant of the Tivoli-Union Brewing Co. to be remodeled for the purpose.

There is no lack of liquor anywhere in the State. In Denver the majority of liquor shipments are to women. They drive up to the freight depots in drays and load in the beer and whiskey cases by the wholesale. One woman recently received six barrels of beer in this manner—and she said she was going to drink it herself. Another woman received ten gallons of whiskey and still another got ninety-six pints of whiskey. All of them must drink this stuff themselves or violate the law. The freight people estimate the amount of beer received in Denver at 100 barrels each day. Whiskey goes there in quantities equally imposing.

From one end of Colorado to the other there are more than a thousand saloons, each doing a lively business, not only every week, but on Sunday also. They pay no license, either government, State or city, and every cent they charge over the cost of the rotten whiskey they sell is clear profit, according to Robert H. Kane, deputy district attorney, who is designated by District Attorney Rush to try liquor cases in the county court. According to Kane, these saloons are automobiles, but saloons, nevertheless. "They are operating in all parts of the State," said Kane. "In most counties the authorities are doing all they can to suppress the business, but are not able to do so."

FLORIDA. The newly elected Legislature of Florida has a Prohibition majority.

IOWA. This State has given a large majority to the "wet" candidate for Governor, J. C. Harding.

The courts of Iowa are clogged with bootlegging cases.

In Marshalltown, former Judge Eugene J. O'Conner has been sent to jail for illegally selling liquor and the court has debarred him from the further practice of law.

KANSAS. Several police officials of Topeka have been compelled to resign because it was discovered that they were in league with bootleggers and keepers of disorderly resorts.

KENTUCKY. The Kentucky Supreme Court has ruled that there is no statute in Kentucky making it an offense to solicit persons, in territory where the local option law prevails, to make purchases of whiskey, from a licensed dealer, in territory where the local option law is not in force, and when one makes an order upon a dealer for liquor, by mail, enclosing the price of the liquor to be purchased, with directions to forward the liquor by a common carrier, and the dealer, at his place of business accepts the order and delivers the liquor to the common carrier, consigned to the purchaser, the sale is made where the liquor is delivered to the common carrier, and not where the purchaser receives it from the carrier.

In another decision Judge Hurt says: "It is not essential, in order to sustain an indictment, for having spirituous

liquor in possession for the purpose of selling it in a territory where the local option law prevails, to prove that the accused had the purpose of selling the liquor in the county where he had it in possession, but the offense is committed by having such liquor in possession for the purpose of avoiding the inventory wherein the local option law is in force. The purpose of a party, who has liquors in his possession, to sell them in local option territory may be shown by circumstantial, as well as by direct evidence.

Supreme Court Justice Miller has ruled that "no trick, device, subterfuge or pretense will be allowed to evade the operation, or defeat the policy of the law against selling intoxicating liquors in violation or evasion of the local option laws of the State."

LOUISIANA. So as not to discommode their Sunday afternoon passengers on trains between New Orleans and Mobile, the Louisville & Nashville railroad has placed a special coach on the Sunday afternoon Gulf Coast train, in which none but those who are intoxicated may ride. Since no liquor can be secured at points in Mississippi and many places in Alabama, between New Orleans and Mobile, Alabamians and Mississippians took advantage of the Sunday Coast trains to come to New Orleans and "get all tanked up." These passengers made it unpleasant for others. Hence the special coach.

MARYLAND. A very large majority of the voters of Maryland have defeated State-wide Prohibition. In Baltimore the majority exceeded 40,000, and Allegany county gave a "wet" majority of over 1,500. Frederick and Washington counties voted "dry."

MICHIGAN. This State has adopted State-wide Prohibition, forbidding the "manufacture, sale, keeping for sale, giving away, bartering or furnishing" liquors except for medicinal, mechanical, chemical, scientific or sacramental purposes.

Governor-elect Sleeper says he considers it to be his plain duty to strictly enforce Prohibition as soon as it becomes operative.

MISSISSIPPI. Through a decision of the Mississippi Supreme Court, the proposed referendum on two anti-liquor laws passed by the legislature could be held. Under the Initiative and Referendum provision of the Constitution a referendum on these measures had been invoked and the measures were to be passed on by the people on November 7th. An injunction was asked on the ground that the Initiative and Referendum had not been legally adopted. This was disapproved by the court in an earlier decision, but the main question as to legality of the Constitutional provision was not passed upon. This is also avoided in the present decision, which finds that these acts are not subject to the referendum simply because they were passed prior to the formal insertion of the Initiative and Referendum amendment into the Constitution, and consequently this amendment could not affect them.

MISSOURI. The State of Missouri has rejected State-wide Prohibition by a large majority. St. Louis's majority was unprecedented, but Kansas City voted "dry."

The St. Louis Liquor Dealers' Benevolent Association has decided upon a vigorous prosecution on its own account of grocers and others selling liquor without licenses. Counsel has been engaged and members requested to furnish whatever information on the subject they possess.

MONTANA has voted for the Prohibition of manufacture, introduction into the State and sale of intoxicants.

During the campaign, Samuel Gompers, president of the American Federation of Labor, sent the following telegram

to M. M. Donoghue, president of the Montana State Federation of Labor:

"Anyone who states that I am in favor of Prohibition in any State or locality, not only states that which is untrue but does me a great injustice. My travels, observation and study in this and other countries prove the utter failure of Prohibition. It is not only a failure of its purpose, but in addition is a denial of rights of American citizenship and makes law abiding men law breakers. The liquor traffic requires and should receive proper and fair regulation. There is no more important factor in all the affairs of life than the organized labor movement, in making men more temperate in all things by reducing their hours of labor and raising their standards of work and life."

At Helena there are forty "blind tigers" within pistol shot of police headquarters.

NEBRASKA. Nebraska has adopted State-wide Prohibition, forbidding the manufacture, sale, keeping for sale or barter, or sale or barter, of liquor except for medicinal, scientific, mechanical or sacramental purposes, to take effect on May 1st, 1917.

NEW HAMPSHIRE. The Prohibition vote in New Hampshire has dwindled down to 296, from 535 in 1912.

NEW JERSEY. Most of the Local Option candidates for the New Jersey Legislature have been defeated.

Seven saloon men of Bayonne are suing that city for damages sustained by the police closing saloons during the recent strike at the works of the Standard Oil Co.

At Beverly the Rev. W. T. Snead, member of the City Commission, has prevented the granting of saloon licenses for the next four months.

NEW YORK. Although Grape Juice Charles E. Welch, candidate for governor of New York on the Prohibition ticket, has received only a beggarly number of votes, his followers say they will make the state "dry" next year!

During the campaign, Hugh F. Fox, Secretary of the United States Brewers' Association, in a debate at the Brooklyn Academy of Music, with ex-Congressman Hobson and J. Frank Hanley, ex-Governor of Indiana, and Presidential candidate of the Prohibitionists, scathingly denounced and exposed his opponents as hypocrites and false pretenders.

The General Convention of the Diocese of New York of the Episcopal Church, at its meeting held in New York City, November 16th, unanimously adopted a resolution indorsing total abstinence for the individual, the enforcement of existing excise laws, and the demand for local option for the State of New York.

Mayor Mitchell, of New York City, has served notice on the restaurant proprietors of the city—as he had already done with the hotel men—that he would expect "a real, substantial and actual compliance" with the Excise Law on Dec. 31. The restaurant men, giving every indication of a desire to agree with the Mayor, immediately got under way a movement to have the birth of 1917 celebrated on the evening, and not on the eve, of its advent. In this they followed the example of the hotel men.

The New York State Hotel Men's Association, at its convention held in the Grand Central Palace, New York, November 22nd, pledged itself to assist the trade, with all means at its disposal, in a determined fight against the withering curse of Prohibition.

OHIO. Circuit Judge Otto Wolff, Cincinnati, has reversed the judgment of the Dayton police court in assessing a fine of \$50 and costs against the Jackson, Herancourt, Moerlein and Crown Brewing Companies for selling beer without a license in Dayton. Judge Wolff holds that the

companies, being engaged in interstate commerce, are exempt from a local business tax license.

During the late election campaign the National Protective Bureau, Cincinnati, fighting the battle for the trade, sent out large amounts of enlightening literature among which was a new form of bottle wrapper upon which telling arguments against Prohibition were printed. These wrappers will also be used in the future, throughout the year. When a bottle is opened, the wrapper is handed to the purchaser.

OREGON. The Brewers' amendments to modify the drastic Prohibition law of Oregon have been defeated by the voters of this State. By one amendment it was proposed to allow the manufacture of fermented malt liquors containing 4 per cent. or less of alcohol, for shipment outside the state and for sale and delivery within the state by the manufacturers in original packages only, in quantities and under regulations that may be provided by law. Unless otherwise provided, sales within the state are limited to the same quantity set in present prohibition amendment, but same person may not both buy locally and import within any one period fixed by law. The other amendment was to change present law to prohibit also "the importation of intoxicating liquors for beverage purposes."

PENNSYLVANIA. The election campaign being over, United States District Attorney Humes in Pittsburgh proceeds with his suit against the brewery corporations of Pennsylvania who are charged with having been bled for campaign funds by professional politicians in years gone by.

In its campaign against the tools of the Anti-Saloon League who hoped to be elected to the Pennsylvania Legislature, the Pennsylvania State Brewers' Association, assisted by the Liberals of the state, has been eminently successful, most of the Local Optionist candidates having been defeated.

According to the latest decision of the Pennsylvania Superior Court a License Court judge in the state can do just as he pleases in the matter of granting or refusing liquor licenses. The judge is not compelled to give reasons for either refusing or granting licenses.

Through a temporary injunction granted by Judge George A. Baldwin, officials in Ambridge are restrained from making further arrests in connection with violations of an ordinance regulating the distribution of liquor by wholesale in that borough. The action has been pending since officers arrested a number of solicitors for liquor orders.

Because they worked on Sundays in Pittsburgh securing evidence against violators of the Sunday blue law, and received wages for doing so, according to the testimony at a hearing before Alderman Martin J. Griffin, five investigators for a private detective agency were each fined \$25 and costs. The men will carry the case to the Supreme Court.

The Board of Workmen's Compensation of Pennsylvania has ruled that an insurance company, in a fight to deny compensation to the dependents of a workman who has lost his life as the result of an accident sustained in the performance of duty for his employer, may not use as material to invalidate the claim the fact that the employé took several drinks of liquor just prior to the accident which caused his death. Such use of liquor will not invalidate a claim for compensation where the death was caused, as stated, by an accident sustained in the performance of duty.

SOUTH CAROLINA. Liquor raids continue in "dry" South Carolina. Several weeks ago 6,000 gallons of beer were seized and destroyed at Greenville and on Brasstown creek, Oconee county, and in Pickens county two large moonshine distilleries were razed to the ground by Internal Revenue officers.

SOUTH DAKOTA went into the "dry" column on November 7th, and for woman suffrage 22,934 votes were cast—25,248 against.

UTAH. The Mormon State has elected a pronounced Prohibitionist governor and legislature and they will undoubtedly make the State "dry" by legislative action.

WASHINGTON. The amendment to the State constitution of Washington proposed to abolish search for and seizure of liquor in private residences, and to permit the operation of breweries for export, has been defeated by a large number of votes on November 7th.

WEST VIRGINIA. Orders issued by the Chesapeake and Ohio Railroad have created two special trains on which persons carrying legally labelled liquor will be permitted to travel. The trains move each Tuesday, Thursday and Saturday between Ashland, Ky., and Charleston. Each passenger may carry one suit case filled with liquor, the case to be no larger than 24 by 13 by 8 inches. Persons are permitted to transport liquor on regular trains.

CANADA. The Ontario License Board has notified bakers and confectioners that under the new Prohibition law brandy and other liquors must not be used in puddings and pies.

Since the minimum fine for the offense of drunkenness in Ontario has been increased from \$5 to \$10, this class of offense has increased in Windsor during the time Prohibition has been in effect. From September 17th to October 27th, 59 charges of drunkenness were disposed of by Magistrate Leggett, against 39 cases during the same period of last year, an increase of 20 cases.

AUSTRALIA. Since the Federal Ministry announced that a referendum of the electors of the Commonwealth would be taken on the question of conscription for war service abroad, indications were given of the probability of the State Ministry's abandoning its Liquor Referendum Bill. Definite action was taken when Premier Sir Alexander Peacock informed a meeting of Ministerial supporters that, instead of proceeding with the bill, it was intended to take direct action in the fixing of the closing hours for the sale of intoxicating liquor. Subsequently, when the resumption of the debate on the second reading of the Liquor Referendum Bill was called, the Premier made an announcement on the subject to the House.

BREWERY WORKERS' UNION A "TRUST"? The International Union of the United Brewery Workers of America is being sued by one William E. Kelley, who wants \$30,000 damages, alleging that the Union caused him to lose his job as a driver for the Arlington Brewing Co., Rosslyn, Va., and thereby committed a violation of the Sherman Anti-trust law.

RIGHT OF BREWERY TO SEIZE LIQUOR LICENSE. Acting City Judge Sommer, of Mount Vernon, N. Y., October 23rd decided that a brewery has a right to seize a liquor tax certificate. The case was one of Marcello Luciano, saloon-keeper, who charged Joseph Blank, secretary and treasurer, and William Lee, collector, of the Westchester County Brewing Co., Mount Vernon, with larceny, for having taken away his certificate. The seizure was admitted by defendants, but it was claimed that the complainant was a debtor to the brewing company. Judge Sommer, in dismissing the complaint, declared there was no crime shown, as the certificate had not been proved to be of any monetary value and it had not been taken away surreptitiously, but in broad daylight and in the presence of complainant's wife, who said, pointing to the document: "There it is, take it away."

United States Brewers' Association.

Fifty-Sixth Annual Convention, held in Cleveland, Ohio, November 21st to 24th, 1916.

FIRST DAY.

The Fifty-Sixth Annual Convention of the United States Brewers' Association was called to order by its president, Gustave Pabst, at 10.30 A. M., November 21st, in the handsomely decorated hall of the Hollenden Hotel, Cleveland, Ohio. Delegates and members were present from all parts of the country, particularly from the States which have been invaded and conquered by the Prohibition destructionists at last month's general election.

Hon. Harry L. Davis, Mayor of Cleveland, and Charles A. Otis, chairman of the Cleveland Chamber of Commerce, were then introduced to the large assemblage, and they welcomed the organized brewers of the country to the great and progressive city which had been chosen by the brewers for their yearly discussions and deliberations.

Address of Welcome by Mayor Davis.

Mayor Davis, received with great applause, spoke as follows:—

Mr. Chairman and brother citizens: it is a pleasure, indeed, for me to have an opportunity to greet you to our city, and on behalf of the people of Cleveland I want to say that we are thankful to you for coming here, and that of all the beautiful cities of the country you have selected ours, and it makes us feel doubly appreciative of your coming. There is much that can be said about all cities, and we here in Cleveland feel that we are about the most wonderful city in all the universe, but I believe that every man sitting here thinks that his home town is about the best place there is in which to live. I would not think very much of him if he did not, but we in Cleveland here want you when you leave to go away feeling that you have met a kind and hospitable people, a people who are glad to have you with them, and next to your own we have the very best town in all the United States. (Applause.)

There is so much that can be said as to things we manufacture, the things we do, the things we have constructed. We can also boast of the wonderful buildings and edifices, and parkways and streets, and all those things that other cities possess, but here in Cleveland we are more proud of the kind of people that live here than anything else, and we want you to feel that way. (Applause.)

I, on this occasion, will have to judge brewers by the kind of men whom I know here in Cleveland, the kind of brewers we have here in Cleveland, and so if I misjudge you I trust that after I am through you will excuse me or correct me. In Cleveland we have a class of men who do not devote all their time to their own business, and they never have been called upon for assistance, either to assist the city at large or individuals in need and others, that they have not readily answered to the call and been very liberal in all their acts toward the public, and so I trust that all of you are as the men who represent Cleveland. We, too, have a class of men here who belong to our civic association. I doubt if there is a brewery in Cleveland which is not represented in the Chamber of Commerce of Cleveland. There is not one of them that does not become active in every movement for the upbuilding, for the making of Cleveland a better place in which to live. Those are the things which have caused Cleveland and have caused the State of Ohio, I believe, on two occasions, to extend them a vote of confidence, and I refer to a year ago and two years ago when the State of Ohio voted against prohibition. (Applause.)

So, I say I, myself, in behalf of the administration which now has control of the affairs of Cleveland, and on behalf of Cleveland itself, extend you hearty welcome and sincerely hope that your meeting will prove profitable, but in addition to that we want your stay here to be a most enjoyable one all of the time, and we trust that you will make it possible for the people of Cleveland

to display their hospitality and to help to make your stay here a pleasant one.

Then, I could go on, too, telling you much more of Cleveland, but I am not going to detain you on this occasion. I simply want to say this, that I believe that the work in which you are engaged, or your line of business, is closest and dearest to you, but there are things that you must do. You must engage, or rather prove to the public that you are interested in someone else, that you are interested in the man who is possibly less fortunate than yourself, that you are interested in the city in which you live, that you are ever ready to give your services and to do your part along with all other business men towards the making of a better city in which you dwell, and those things I am sure will cause the public to say that when these men come to us for our assistance we will feel that they are entitled to it because they have not failed us at any time that we have needed them. (Applause.)

So, I say again, I wish you a happy time here, a most enjoyable time, and also on behalf of the people to wish you much prosperity and success all through life. I thank you. (Great applause.)

Welcomed by the Commercial World.

Charles A. Otis, Member of the Convention Committee, Chamber of Commerce, Cleveland, said:

Gentlemen, in representing the Cleveland Chamber of Commerce, which I have the honor to do here, and being a director in two breweries, I appear in more or less of a dual situation.

The representing of the Chamber of Commerce by a man, of course, puts him in a position of talking for a body whose ideas and interests are made up of all the things that come into a community. There are wets, there are dries, there are hard liquor men, there are soft liquor men, and other kinds of men in the Chamber of Commerce, and those who predominate, it is pretty hard to tell, but I believe that nearly all of the best fellows in the Chamber of Commerce—while they may think that maybe I ought to take a drink, like to take one themselves, so that the body, you see, in that way, is a body made up of the liberal men for their own personal living, and I think of every one else. That is a question which is so debatable and so mixed and confused in the minds of everybody of how the situation should be handled, that a body of business men must do their own thinking. Our Chamber is, I think, one of the prominent Chambers of Commerce of the country. Yesterday Mr. Dennison, of the Dennison Tag Company, spoke to us, and said that in Boston and in the East that the Cleveland Chamber of Commerce are constantly putting up to them more problems to make the appointment of committees than any other Chamber in the country. We took that as a great compliment, meaning that our Chamber is thinking and trying to think of the best for every one in this community, and as members of the Chamber of Commerce of the United States are doing what they can to uphold that large organization which to my mind is one of the great organizations of the country and should be supported by every business man. There are organizations in almost every business in the country, except the organization representing the general business interests of the country. There are unions of all kinds, associations of bankers and so forth, but the Chamber of Commerce of the cities should in my opinion be the great body that represents the community, and by their union in the Chamber of Commerce of the United States we will reap great good politically and every other way.

The Chamber of Commerce has its Convention Board. The Mayor has told you what a nice city we have and what nice fellows he and I are to live with (laughter), and we will always try and show it outside of official capacities, as well as inside, and this Convention Board of ours is working hard to bring as many conventions as possible to Cleveland, of course, and is now in competition with all of the larger cities. The convention to a city is just beginning to loom in the minds of the Chambers of Commerce and other bodies that represent the city, as a great thing for the development of the town. We have never had a

Convention Board here that has worked as hard as it will in the future. Cleveland is well located, as you all know, and in behalf of the Convention Board I want to say that any convention to which you men come will always be solicited by the City of Cleveland.

In my other capacity as a director of the Hoster-Columbus and the Independent Breweries of St. Louis, I can join you as Otis of the brewer clan. (Laughter.) I have been associated with many business men, but I say sincerely that I have never had a more friendly or better group of men of any kind to be with than my associates that I have been thrown with in the brewer business. They are whole-soul citizens. They are men who want to do their part in what is right in everything, and all of their contentions for their business in my way of thinking have been on a fair basis, so far as they were personally concerned.

I could go on complimenting brewers, but in my other capacity as representative of the Chamber of Commerce I have to be very careful. I might be accused of being pro-beer, and the hard liquor men might say something mean of me, so I have to be neutral and drink a little of both. (Laughter.)

I know you are going to have a fine time here, and I hope to see you all personally as I want to attend one or two of the meetings that are going to be held, and the one that appealed to me very much is the one Mr. Wolf invited me to, where it is held at a brewery, and Mr. Kahler will tell you that I like to examine breweries very much when I come to St. Louis.

I thank you very much, indeed. (Applause.)

JAMES R. NICHOLSON: I am sure we all listened with a great deal of interest to the remarks of his Honor the Mayor, and the representative of the Chamber of Commerce, and I am sure we have been most impressed by the cordial and hospitable spirit that has dominated and characterized their remarks. I am sure that every member of this Association here present is appreciative of the splendid friendly and cordial manner in which they have welcomed you, and I move, sirs, that by a rising vote of appreciation we show them that we do appreciate that cordial and hospitable spirit in which they have received us here to-day. (Applause.)

THE PRESIDENT: Will you please signify your appreciation by a rising vote?

(The suggestion of the president was unanimously complied with and the speakers were loudly applauded.)

President Pabst then spoke as follows:

President Pabst's Message

I testify to the great pleasure which I believe all of us feel at the opportunity of holding our Convention in the interesting and important City of Cleveland, and I desire to convey now to his Honor, the Mayor, and to the President of the Chamber of Commerce, the hearty thanks of the United States Brewers' Association for their cordial greetings to this body. Cleveland, I take it, is our kind of a town—a city of really progressive spirit, of sound common sense, of liberal views, inspired in her actions as a community by her love of justice and fairness, her feeling of hospitality and friendship, and her appreciation of those things which conduce to her own well-being. Cleveland, indeed, occupies a distinctive place among the great municipalities of the country. She is not as large as some, though her rapid growth and surprising development make her the envy of many. Her trade and commerce extend far beyond the boundaries of the territory which is naturally tributary to her; she has won a name for enterprise, quality of produce, and fairness of business dealing which extends throughout the United States. Moreover, in her purely municipal affairs she has earned just fame for notable achievement in solving questions that are still vexing problems elsewhere. Never disdaining the experience of others, she has in such matters approached the issue with a courage, candor and intelligence and independence which may well be held to typify and exemplify the spirit of her citizenship.

And as it is a pleasure and privilege to meet in Cleveland, so is it also a pleasure and privilege to meet in the great State of Ohio. It has often been observed that Ohio is West to the States lying toward the rising sun, and East to the States ranging to the Mississippi and beyond; that she united the good qualities of both sections with many of her own, and occupies, as a people, a position as unique as her geographical situation is favorable. Certainly she is great in many ways:—great in natural resources, great in industry, great in transportation, great in business enterprise, in political acumen, in hospitality and friendliness. She is

great in brewing as the attendance to-day signifies, and I desire to give now a special word of thanks to the Cleveland Brewers' Exchange for insisting that we meet this year in their city and State, and a particular greeting to the brewers of Ohio, who manifest by their attendance in such numbers their devotion to the common cause and their fraternal feeling to the trade throughout the country.

As President of this Association I desire to acknowledge the cordial cooperation during the year, of my fellow officers of the Association, and their efficient assistance in many matters of importance, to express appreciation of the loyal and intelligent support of the official staff, and to record the faithful and fruitful effort of the Committees, whose members have never hesitated to sacrifice time and personal interests when there was work to be done. It has been gratifying also to observe the keener interest of the membership in general in the vital work of the Association. It is this spirit which, more than anything else, will enable us to fight on until the enemy is routed and victory is in sight.

Since our last Convention prohibition elections have been held in eight States. The "wets" won by large majorities in California, Maryland, Missouri and Vermont. The "drys" won in Michigan, Montana, Nebraska and South Dakota.

It is not worth while spending any time in holding post-mortems over these elections, unless it be for the purpose of guiding our judgment as to the future. We know that logically we are on the side of temperance and that we ought to be leaders in the true temperance crusade. We have plenty of evidence that the thoughtful men and women of the country are not opposed to the reasonable use of beer, and we believe that the people are willing to meet us half way in establishing conditions that will promote the welfare of the community.

The first and most important thing is to put the facts before the people—all the facts; the facts about beer, about the way in which it is made, and how it is regarded in other countries; the discrimination in favor of light beers in those countries where the anti-alcohol sentiment is the strongest. Under our system of government, excise legislation and the administration of licensing laws are local functions, and it would be futile to try to get uniform legislation on the subject. Undoubtedly there is a real demand on the part of the large centers of population for the right of self-government, which will give local bodies the opportunity for the fullest exercise of initiative and discretion in shaping and administering their regulations of the traffic. Some communities are satisfied with existing conditions, while others insist upon changes which will revolutionize the entire business. We as brewers must not only put ourselves abreast of public sentiment, but must be willing to lead it wherever the conditions are such as to make our action of practical value. The main thing is to establish our good faith with the public, by our attitude and our willingness to cooperate in all measures of practical reform. There has been such a vast improvement in saloon conditions that the great majority of them are now decent and law-abiding, but the traditions of the past have given the opposition to the saloon an impetus which is difficult to overcome. It cannot be denied, moreover, that over-competition has accentuated the opposition, even where the letter of the law is observed. There are a number of cities which still have many more saloons than are needed for the convenience of the public, and the brewer cannot escape his share of responsibility for this over-stimulation of the retail trade. I mention this because it is futile for us to undertake a publicity campaign unless we are sure that the rank and file of our members have the right mental attitude of progress in methods of distributing our product, and are willing and ready to accept the sacrifice that this may involve.

Assuming that you are in accord with me in these statements, and that you will ratify them in a resolution of approval, let us consider the situation from the national standpoint.

The prohibitionists assume that all of the people in the dry States are opposed to the license system, and they make the extravagant claim that the majority of the people have already registered their approval of the prohibition principle. The record of the vote of the 17 States that have voted for prohibition gives a total majority of 394,000 for it, while the 15 States that have voted it down, gave a total majority of 652,000 against it—or a net difference of 250,000 in opposition to prohibitory laws. In this connection it may be mentioned that our opponents have misrepresented the facts in regard to the recent elections in Canada. In adopting prohibition, Ontario, Manitoba, Alberta and other Provinces have not extinguished the breweries, but have specifically provided that the brewers may continue to make light beers for sale to the individual consumer.

An analysis of the vote in the States wherein prohibitory laws have been adopted, demonstrates the prominent fact that the cities located in those States have voted by a considerable majority in favor of the licensed traffic, but have been over-ruled by the large rural vote; forcing upon the cities the wishes or desires of the rural population outside of their limits.

The agitation for an amendment to the Constitution of the United States to provide for National Prohibition will undoubtedly be pressed with renewed vigor. The interest of the government in this question is very great since the adoption of national prohibition would deprive the Federal Government of more than one-third of its entire revenue. The magnitude of the fiscal problem can be sensed when one realizes that to make up this deficit it would be necessary to multiply the new corporation income tax by five, or the individual income tax by four, or double our customs duties, and this is assuming that there will be no material increase in our national expenditures.

The enactment of national prohibition would, of course, wipe out the revenue of the States and municipalities from license fees, which in 1916 was estimated at a total of one hundred and ten million dollars, which does not take into account the tax receipts on the real estate and other property involved. In the State of New York, for example, the total receipts from the retail liquor licenses amount to over twenty-two million dollars, of which approximately ten million dollars goes direct to the State. This is about one-fourth of the total receipts in New York State from all sources.

The Economic Aspects.—The issue is of momentous importance from other aspects than that of public finance. The ruin and waste which national prohibition would bring to all of those who are directly or indirectly dependent upon the liquor industry, involve a question of economic disturbance that would be nationwide. It is estimated that the capital invested in the liquor industry, which includes brewing, distilling, wine-making and malting, and the fixtures and furnishings for the retail trade amounts to the enormous sum of one billion three hundred million dollars, and the total annual disbursements in all branches of the industry for materials, transportation and wages, reached the amazing total of seven hundred million dollars. This represents the sum of the money values involved in national prohibition. These bare figures yield totals that baffle ordinary comprehension. The disbursements for materials, taxes, rents, supplies, wages, etc., directly support millions of inhabitants, and constitute large items in agriculture, general manufacture, transportation and real estate.

Confiscation or Compensation.—All other civilized countries have recognized the immorality of destroying property values that from time immemorial have been protected by law, and by which governments—local, State and national—have been so largely maintained. The Federal government cannot fairly evade its responsibility for this enormous destruction of property values of passing it on the States. If the principle of honest compensation cannot be ignored, the remedy must be provided by the Federal government.

The Practical Effect of National Prohibition.—It is urged by advocates of prohibition that no price is too great for the government to pay, if it can, by its action, overcome the drink evil. The question is whether the destruction of the liquor industry would bring us nearer to the real object, which is the cessation of intemperance. The immediate effect of national prohibition would be the wiping out of beer as a beverage, and, if human experience is any guide, this would be followed by the rapid development of home distillation of spirits. It is conceded that the law cannot prohibit man from making his own spirits for his home consumption. The process is cheap and simple, and the materials can be readily obtained in many sections of the country. In other countries, such as Sweden and France where home distillation has developed, the drink evil has been driven into the homes with most deplorable results.

Enforcement.—The burden of enforcing a national prohibitory law would inevitably fall upon the State or local authorities, unless it is proposed that the national government should take over their police power. Possibly the Federal Government might undertake the duty of patrolling our international borders and the enormous stretch of coast line to prevent the smuggling in of liquor, but the magnitude of this task is almost appalling. The task of supervising the home distillation so as to prevent the householder from trafficking in his own product would have to be met by the local authorities, and when it is recalled that in all prohibition elections the people in the large cities have registered their disapproval of prohibition, the police would constantly be confronted with the difficulty of compelling the people to submit to

a law that is not supported by public sentiment, and which they regard as a species of tyranny.

How to Obtain a Remedy.—National prohibition under our form of government could not be brought about as the result of the popular vote of the country at large, though this, we believe, would mean an overwhelming majority against it. It can only come through compulsion which may now be directed by sparsely inhabited rural States, against the far more populous and wealthy urban States. So far as can be reasoned from experience gathered through generations of experiments, backed by all the force there is in law, the abolition of the legalized traffic in alcoholic liquors would mean its replacement by an unregulated manufacture and sale so extensive and of such a character as not only to exclude the possibility of diminishing the actual drink evil, but certain to intensify its worst forms.

We have cited these points to call attention to the enormous importance of the practical problems and difficulties involved in the stupendous question—national prohibition.

The question for thoughtful men is how this industry may be so regulated that the evils incident to it shall gradually diminish, and intemperance be reduced until it becomes a negligible social factor? What suggestions can be made to stem the tide of national prohibition, which if continued, while it will not result, as has been proven, in bettering conditions, will spell ruin to present investments, and disaster to the cause of real temperance? While it can be easily established that some of the causes which have been suggested are exaggerated, and are not the sole fault of those in the business, this will not satisfy the public demand. Promises, advice to the trade, resolutions of condemnation, etc., will not suffice. A policy must be agreed to and acted upon. More temporary action will not do. It must be persistent, energetic, thorough and continuous. Any policy we may agree upon will find objectors in our ranks; reasons why it is impracticable will be urged; but we must overlook our immediate personal interests and the effect upon our business, in order to arrive at a possible solution which will ultimately result in permanency to our industry.

I would therefore suggest for your serious consideration some suggestions which occur to me, which may be influential in stemming the growing sentiment in opposition to our industry, and to the saloon as a method of distribution of our product.

1. An energetic and active demand on local authorities to exercise greater discrimination in granting licenses, and in the prompt and efficient prosecution for repeated or wanton violation of law as distinguished from an honest mistake.

2. The advisability and practicability of a gradual decrease in the number of licensed stands, particularly with reference to the maintenance of several in the immediate vicinity of each other, and also of making all stands in the immediate vicinity of industrial plants, beer saloons only, where the men can get good hot food at a low price with their glass of beer, under comfortable surroundings.

3. We would commence an active and aggressive campaign in the interest of truth respecting our industry and its product. Much misunderstanding exists in the minds of the public as to what our product is; of its importance as a temperance beverage; of its health and strength-producing qualities; of its purity; of the good effects of its temperate and moderate use; of the possibilities of its supplanting beverages of greater alcoholic content; of its influence in building up new energy in the human system. These, among other benefits, inherent in the proper use of our product, should be persistently brought to the public attention.

It is my belief that the adoption and enforcement of the suggestions above referred to will, if persisted in, and honestly carried into effect, change public sentiment in respect to the beer industry.

Such a campaign depends primarily upon the adoption of this constructive program. Assuming this, the question is one of large expense, because if such a campaign is inaugurated, it must be a continuing one; more temporary or sporadic attempts will not produce results. We are not prepared to present a plan in detail because it must be worked out with reference to the cooperation of the State and local associations. The main question is to determine first our policy, and then develop the plan.

Telegrams.

The President's address having taken its proper course, secretary Hugh F. Fox then read the following telegram

from the Association's treasurer, Mr. Lembeck, who is at present in Guatemala:

"Best wishes and good luck."

Also a telegram from W. T. Kernahan, secretary of the Ontario Brewers' Association: "Regret inability to attend the convention. The Ontario Brewers extend fraternal greetings."

President Pabst then appointed on the Committee on Resolutions William Hamm, James R. Nicholson and Stephen B. Fleming. The Nominating Committee was appointed as follows: Harry A. Poth, chairman; William H. Rehm, Lawrence Fabacher, Arthur Alley, Charles Gluck, Hugo A. Koehler, George Ehret, Jr., Philip Schaefer, J. Geo. Jung, Geo. C. Dempsey, Henry Gund, Carl S. Plaut, Charles Bradley.

The reports of the Standing Committees were then submitted and took the usual course.

Report of the Advisory Committee.

Many inquiries having been received from members as to the import of recent rulings of the Treasury Department concerning the character of packages or containers, in which malt beverages containing less than one-half of one per cent. of alcohol could be removed from brewery premises, your Advisory Committee consulted the counsel of the association on this matter. The committee is advised by the counsel that the Commissioner of Internal Revenue has not ruled that such beverages, produced concurrently with the regular product, can be removed from the brewery in the ordinary beer keg.

Beer Kegs not to be used.—The prevailing instructions on this point are those contained in Treasury Decision 1360, which are to the effect that "the temperance beverage, when removed from the brewery premises, must be contained in packages unlike those ordinarily used for fermented liquors." Instructions have been given that this product may be removed in cans, whiskey or vinegar barrels, or in any other containers except the regular beer cooperage. If it is desirable to have packages of extra strength on account of the high pressure, the regular beer cooperage may be remodeled or new packages may be made out of materials similar to those employed in the manufacture of beer packages, the shape being so modified as to make them readily distinguishable from the latter. The mere painting of beer packages is not a sufficient distinction.

It is to be understood, of course, that the so-called temperance beverage can be removed to the bottling house by way of a pipe line, pursuant to the Act of September 8, 1916, amendatory of Section 3354, R. S., as amended by the Act of June 18, 1890, such removal to be in compliance with Treasury Decision 2359, from which the following is quoted:

"Such transfer is to be made under rules and regulations to be from time to time prescribed by the Commissioner of Internal Revenue, subject to the approval of the Secretary of the Treasury. Until the promulgation of such rules and regulations more in detail it is hereby prescribed that until further notice brewers having an established pipe line for the transfer of fermented liquors may set aside and utilize one or more cisterns pertaining thereto for containing the non-taxable liquor above referred to for transfer through the pipe line for the sole purpose of bottling under the same conditions and restrictions as now apply to the transfer of fermented liquor, except that the deputy collector in attendance shall first satisfy himself that the liquid about to be transferred is of the non-taxable kind, in which case it will not be necessary for him to note the quantity or to require payment of tax thereon. He will, however, be required to see that the inlets and outlets of the various cisterns are so controlled by the Slight seal locks provided therefor that there shall be no opportunity to utilize the pipe line for the transfer of fermented liquors except such as have been duly covered by the cancellation and delivery to him of the appropriate stamps."

Ruling on Non-Alcoholic Beverages.—There was also referred to your Committee by the Board of Trustees the question of obtaining a broader ruling relative to the taxation of non-alcoholic beers. The co-operation of the counsel of the association was likewise secured in this matter with the result that the Commissioner extended the scope of an earlier regulation, under which such beverages were taxed, if at any time during the process of manufacture, more than one-half of one per cent. of alcohol developed. Under

the revised ruling, if the beer when finished and ready for sale, does not contain more than one-half of one per cent. of alcohol, it will be regarded as non-taxable, irrespective of whatever alcoholic content developed in the process of manufacture.

The Internal Revenue authorities have found occasion to issue warning that beverages, which may develop more than one-half of one per cent. of alcohol after being placed on the market cannot be regarded as non-taxable.

The Burden is on the brewer not only to know that the beverage which he sends out unstamped is within the limit, but also to know that the condition of the liquor is such that no increase in the alcoholic content can take place after the beverage leaves his premises sufficient to remove it from the non-taxable class. In all cases where beverages containing alcohol in excess of the limit are found on the market, the brewer who produced the same will be held liable to the tax thereon, the packages with their contents will be subject to seizure and forfeiture, and the brewer will be liable to prosecution.

State Laws on Malt Beverages.—It is thought proper to present herewith a complete statement of the limitations imposed upon malt beverages by prohibition States or those having large areas of dry territory:

ALABAMA.—New Prohibition Law effective January 1, 1916, includes in the term "Prohibited liquors and beverages," malt, fermented or brewed liquors of any name or description manufactured wholly or in part or from any substitute therefor; such as near beers or malt tonics by whatever name called.

ARIZONA.—Prohibits the introduction into the State of any malt liquors or imitation malt liquors under any circumstances. However, by a Supreme Court decision, liquors may be introduced for the personal use of the consignee. An affidavit is required from the shipper at the shipping point and an affidavit from the consignee at destination showing that the shipments are intended for lawful personal use.

COLORADO.—Defines "intoxicating liquors" as including all fermented or malt liquors. No limitation on shipments for personal use.

GEORGIA.—Law effective May 1, 1916, similar to the Alabama prohibitory law given above.

IDAHO.—Malt and fermented liquors are declared as a matter of law to be intoxicating, and for which no proof is required, that they come under the head of prohibited liquors, except to show that they come within the enumeration. It is conceded that "near-beer" is a malt liquor; it follows therefore that it falls within the prohibitory law and cannot be sold in the State. The only liquor that may be shipped into the State is pure alcohol for scientific and mechanical purposes, under permit, and sacramental wine for religious purposes.

IOWA.—Construes "intoxicating liquors" to mean ale, beer and malt liquors. No limitations on shipments for personal use. Prohibits the collection of liquor bills within the State.

LOUISIANA.—Prohibits the sale of near beer in dry territory; effective August 1, 1916.

MISSISSIPPI.—House Bill No. 264, effective April 15, 1916, prohibits, among other things, any form of liquor advertising, and allows the shipment of three gallons of malt liquors every 15 days.

OREGON.—Construes "intoxicating liquors" to embrace all malt or fermented liquors; and dry compounds which may, by the addition of water, produce any fermentation, or intoxicating liquor. 24 quarts of malt liquor may be shipped into the State for personal use within four successive weeks. (Indications are that at the recent election a law forbidding the importation of any alcoholic beverages whatsoever, was adopted by referendum vote.)

SOUTH CAROLINA.—The words "alcoholic liquors and beverages" as used in the new prohibition law, includes any beer or beverage, whether fermented or otherwise, by whatsoever name known or called which will produce intoxication, or which contains in excess of 1 per cent. of alcohol. Shipments of one gallon of malt liquors are permitted in any calendar month.

VIRGINIA.—The Legislature enacted a prohibitory law, which exceeded in its drastic measures the provision of the Enabling Act, adopted by popular vote. The Enabling Act provided for the manufacture of malt liquors containing not more than 3½ per cent. of alcohol for sale outside of the State. Under Chapter 146, of the Laws of 1916, the manufacture and sale of all malt liquors is forbidden as well as advertising of any kind of liquors, and statements concerning the liquor traffic are not allowed if compensation is given unless marked "paid advertisement." Shipments of beer for personal use must be confined to 3 gallons once a month. Cider may be sold only if it contains less than 1 per cent. of alcohol, and Jamaica Ginger only by druggists upon a physician's prescription. The law became effective November 1st.

WASHINGTON.—The phrase "intoxicating liquor" as used in the prohibitory Act, includes ale, beer and any fermented or malt liquor. 24 pints of beer may be shipped into the State in any 20-day period. Effective January 1, 1916.

Development of the Bottled Beer Trade.—In the last twelve months the sale of beer in bottles has increased extensively, particularly in the East, due in the main to publicity. Stress has been laid on the food value, healthful qualities, temperance character, and scientifically clean process of manufacture with gratifying results.

Little shipping is done into "dry" States, for the reason that the amount of beer allowed a person each month in most of such jurisdictions, is too small to make it worth while to go after the business. Bulk shipments are made to distributing points near "dry" States and districts, but the amount actually intended for such States and districts is difficult to determine accurately.

Return of Bottles.—Your Committee has been active during the year, as opportunity presented, in endeavoring to develop among the brewers of the country the practice of charging for bottles, and while the custom is not as generally observed as is desirable, we feel that the brewers are coming more and more to recognize the impressive saving that it effects. Wherever the practice has been adopted the saving is quickly apparent.

The distributor and the consumer are coming more and more to recognize the soundness and reasonableness of the practice, and are less and less inclined to object.

The Committee has impressive figures of the saving that is effected by the system of charging for bottles, which it will be very glad to furnish to any brewer or set of brewers who desire some further light on this question.

Drugs.—The United States Supreme Court has handed down an interpretation of the clause of the Harrison Federal Drug Act of 1914, making it unlawful for any person not registered under the law to have opium in his possession, ruling that this applies only to those who deal in the drug and not to those who use it.

In announcing the opinion Mr. Justice Holmes said that "only words from which there is no escape could warrant the conclusion that Congress meant to strain its powers almost, if not quite, to the breaking point in order to make the probably very large proportion of citizens who have some preparation of opium in their possession criminal."

If we substitute for the word "opium" the words "intoxicating liquors," it will be seen that the possession of the latter article by private individuals should be protected, and only liquor in the hands of dealers should be affected by the laws of the various States regarding the matter. This new decision seemingly establishes an important precedent.

Coca-Cola.—The United States Supreme Court has decided against contentions of the Coca-Cola Company of Atlanta, Ga., the holding that caffeine introduced into a syrup during the second or third malting is an "added" ingredient within the meaning of the Federal Food & Drug Act of 1906, condemning as adulterated any article of food that contains "any added poisonous or other added deleterious ingredient which may render such article injurious to health," although it is called for as a constituent by the secret formula under which the syrup is compounded. The name Coca-Cola cannot be said as a matter of law to be distinctive rather than descriptive of a compound with coca cola ingredients so as to escape condemnation, under the Food & Drugs Act, as misbranded in case of the absence of either coca or cola. This case was reversed and remanded for further proceedings.

Canada's Brand of Prohibition.—Under the guise of war measures, prohibition laws have lately been forced upon almost all of Canada, the Province of Quebec being the notable exception. It is to be noted, however, that prohibition in Canada is a very different thing from prohibition in the United States, where any beverage containing one-half of one per cent. or more of alcohol is sought to be put under the ban. A number of States even go to the extent of forbidding all malt beverages of whatsoever description.

The law of Ontario may be taken as a sample of the Canadian system. The Act does not touch any liquor containing less than 2½ per cent. proof spirits, equal to 1.43 per cent. of alcohol by volume, or 1.13 per cent. by weight. Such beverages may be manufactured anywhere and sold even without the payment of special license fees. Beer having the usual percentage of alcohol, may be manufactured in the Province for export, and may be imported for personal use and consumption. Ontario's law also contains a special concession to the wine growers of the Province, though their product at times runs as high in alcohol as 23 per cent. by volume. Manitoba's standard of alcoholic content is the same as that of Ontario. Saskatchewan prohibits beverages containing

more than 1 per cent. by weight. New Brunswick, where the law will come into effect May 1, 1917, fixes its standard at 2 per cent. by weight. It is apparent that a market can be found in Canada for beers having a low percentage of alcohol.

The European Situation.—There has been little change during the year in the situation in the European countries, the tendency among the warring nations and those at peace as well, being to place severe restrictions around the sale of ardent spirits, and to encourage the use of beers and light wines by discriminatory taxation. In Russia, which has been loudly proclaimed as a prohibition country because of the ban on vodka and other strong liquors, the Duma recently adopted a measure intended to give the popular approval to the Czar's prohibition rescript or decree. It is significant that this measure expressly exempted beverages containing under 12 per cent. of alcohol from the operations of the prohibitory system.

In France, legislation which has affected liquor, bears a fiscal aspect entirely. While very light taxes are imposed upon the native wines and beers, the tax on spirituous liquors has been quite heavily increased, and household distillation will bear its share of these burdens.

The Central Control Board (Liquor) of Great Britain has from time to time increased the area of its operations, and as a consequence has taken over a large number of public houses during the year. While some of the Board's measures evoked strong protest from the retail trade and the manufacturers as well, there seems to be no substantial basis for believing that it is working toward prohibition in any form. The Board has in its activities, encouraged the use of the lighter alcoholics as against the stronger liquors.

Germany, France, Austria-Hungary and Great Britain continue to serve liquor rations to their soldiers. In France the wine ration has recently been increased.

Respectfully submitted,

JAMES R. NICHOLSON, *Chairman.*
GUSTAV W. LEMBECK,
WILLIAM HOFFMANN,
LOUIS B. SCHRAM,
N. W. KENDALL,
HUGH F. FOX, *Secretary.*

Report of the Publication Committee.

The year has been a busy one for the Publication Committee, and there have been many evidences that its work is growing in effect and in the appreciation of the members and of State and local organizations. The unprecedented advances in the cost of printed matter have made it necessary to adopt extraordinary measures governing the distribution of literature. Notwithstanding this circumstance, the demand has been so great that it seems altogether probable that the output of literature during the present calendar year will equal, if not surpass, the record made in 1915, when between eleven and twelve million pieces were distributed.

A canvass of members made during the year at the suggestion of the President, developed the fact that many of them are paying much more attention to the matter of educating the public, than was the case in former years, and that quite a number have developed methods of literature distribution which seem to be exceedingly effective.

The Work Only Begun.—In presenting these facts, which are very gratifying as indicating that the work of the past has been of some avail, the Publication Committee feels it proper to emphasize the belief that it has really only begun to develop its field. On all sides lie promising avenues of research and investigation; every day presents new opportunities for the gathering authentic data in support of our cause.

Our opponents are at work every day in the year, and their chief weapon is publicity with which they seek to prepare the public mind long before they force an issue in a state or community. Too often our side does not get before the public until a campaign has opened and it is too late.

The cardinal principle which has guided the Committee at all times, has been to present the whole truth, without reserve or disguise, to as large a proportion of the public as it is possible to reach. The truth is on our side, as has been evinced many times and by many circumstances. Our continuance or extinction as an industry, depends ultimately upon getting the truth before the public. The importance, therefore, of the educational branch of our work can scarcely be overstated.

It is sometimes necessary to expend a great deal of time in the correction of the misinformation which is so frequently spread broadcast by our enemies. One instance may be cited as an ex-

ample. Soon after the European conflict opened, the statement, made in a variety of ways, that the warring nations were turning to prohibition as a necessity in their life and death struggle, was put forward in such a manner as to obtain the widest publicity.

The effect of this can readily be imagined. If the public could be persuaded that prohibition was a necessity in time of war, it would logically follow that it would be inclined to regard it as desirable in time of peace. Through members of our staff, through correspondence, through the translation of foreign reports, magazines, and in other ways, the Publication Committee was able to present evidence of the essential falsity of the statement to which reference has been made.

Presenting the Truth.—It was shown that while heavy taxes had been imposed upon the stronger alcoholic liquors, and while many other measures, having for their purpose the raising of additional revenues or the preserving of supplies of grain had been adopted, together in some instances, with regulations concerning the retailing of beverages, the warring nations were so far from prohibition that the beverages supposedly under the ban, actually constituted part of the rations of the soldiers at the front. Germany, it was shown, had organized a separate department for the transportation and distribution of beer to the troops. France gave regular daily allowances of wine to her fighting men. Great Britain set aside a certain amount of rum for each of her soldiers, which could be exchanged for beer when the facilities of transportation and supply permitted. Austria, likewise, after attempting to discard their use, because of the inconvenience of transportation and distribution, had found it necessary to make an allowance of wine or beer as part of the regular ration of her armies.

Even Russia, it was shown, had not "gone prohibition," as had been so loudly proclaimed. The government, in giving up its spirit monopoly, and forbidding the manufacture and sale of strong liquors, had laid no restrictions upon the use of beers and light wines. The recent measure in the Duma, which continues the ban upon vodka and similar liquors, contains an express exemption in favor of beverages having not more than 12 per cent. of alcohol. The only prohibition in Russia is by municipalities or local communes. The fiction of "Prohibition Europe" has practically disappeared from the public view.

Gratifying Tendencies.—The presentation of the actual situation in this respect was valuable because it not only gave refutation to a widely disseminated falsehood, but also because it afforded an opportunity for the thoughtful-minded to consider the question in a thoroughly constructive manner. One of the most gratifying circumstances which the Committee thinks proper to record, is the increasing disposition of the most important publications—magazines, newspapers and other journals—to discuss the question fairly and to indulge in a constructive rather than destructive criticism.

Nor is the interest in the question confined merely to journalism. It is a pleasure to note that many requests for information or specific publications, have come to the Association's office from universities, libraries, scientific, economic and political organizations, legislators and other public officials, and prominent persons in the ranks of business or the professions. There is, indeed, much reason to believe that there is being built up, more or less rapidly, a great body of public opinion, which first of all, is informing itself as to all phases of our question, and can be relied upon to maintain firmly its position with regard to the whole matter.

Social and Economic Surveys.—In addition to keeping in touch with the European situation, the Committee has authorized an unusual amount of research work. Surveys have been made of several industries, and studies of the conditions—social and economic—in a number of the prohibition States, notably Maine, Kansas and North Dakota. It may be remarked that these studies all confirm the belief founded on other evidence, as to the futility of prohibition as a remedy for the evils resulting from over-indulgence in strong drink. Some studies were also made of the conditions in some of the southern prohibition States, which also gave confirmation to this conviction. The paucity of official data upon events and circumstances which are regarded as important in other jurisdictions, makes a complete review of the situation in the prohibition States of the South, impossible, except at an unwarrantable expenditure of time and money. The loose financing, the heavy tax burdens, the growth of crime, the inadequate systems of education and the insufficient means taken to safeguard health in these districts, are well known; but the extent of other ills which they suffer, though serious, as is apparent at a glance, can only be guessed at, because of the lack of authentic official statements.

Motion Pictures.—Certain developments in the moving-picture field during the year are worthy of comment. Several of the

animated weeklies have presented views of the way in which prohibition works—or rather does not work—in a number of the States which have adopted that system. Figuring on the basis of the attendance at theatres using these services, it is estimated that perhaps 50,000,000 persons had the futility of prohibition revealed to them in perhaps the most striking and graphic manner possible. The strength of the argument against prohibition is recognized in such productions as the stupendous spectacle "Intolerance," and the revival in picture form of Hoyt's amusing but telling satire "A Temperance Town." On its own account the Committee has had assembled a series of motion pictures taken in prohibition States, and illustrating vividly the evasions and violations of law in such regions, which under the title of "The American Sahara," has been exhibited with marked success in places where campaigns have occurred and elsewhere. The motion picture "The Story of a Glass of Beer," has been much in demand by public exhibitions and by a number of the higher educational institutions.

Cooperation Necessary.—The Publication Committee wishes to impress upon the membership the importance of the fullest co-operation on the part of all State and local associations, and of individual members. A number of State associations are well organized for educational effort, with a trained publicity man in charge of such matters. The situation in such districts is almost invariably much more satisfactory than in those where such departments have not been instituted. Some very notable achievements have resulted from publicity campaigns by several of the associations, and in all cases the work is closely harmonized and the most efficient kind of cooperation secured by and between the United States Brewers' Association and the local organization.

The Committee, therefore, feels it proper to urge upon all associations, that have not already done so, the efficient organization of publicity work in the manner indicated. The dissemination of the truth—and nothing, of course, but the truth, is welcome for our purpose—can be accomplished much more efficiently, much more extensively, and intensively as well, in such a way, than in any other.

Library Features.—During the year a number of volumes have been added to the Library, which is better equipped than ever to answer the demands of students and investigators, both from within and from without our ranks. It has been a pleasure to furnish facilities, and present data from which a number of important investigations have been made during the year. The Library collection embraces not only the authorities whose merit has been proven, but also all of the latest data and printed matter of importance upon the subject.

The Broadside.—The Broadside, which made its first appearance in February, and which has been issued at intervals throughout the year, seems to have met with the favor of the membership. Its principal aim is to present such matter as heretofore has been shown in the form of separate pamphlets—thus affording our members a comprehensive glance of the situation from time to time. Various suggestions looking to the broadening of the scope of the Broadside are under consideration.

The Committee desires to acknowledge most gratefully, the comments and valuable suggestions received from the officers and many of the members during the year.

Respectfully submitted,

C. W. FEIGENSPAN, *Chairman*.
AUGUST LINDEMANN,
HENRY A. RUETER,
HUGO A. KOEHLER,
W. J. F. PIEL,
HUGH F. FOX, *Secretary*.

Report of the Labor Committee.

The Labor Bureau, under the direction of the Labor Committee, during the twelve months elapsing since the Fifty-fifth Annual Convention, has rendered assistance to members and non-members in the following cities:

St. Louis, Mo.; La Crosse, Wis.; Washington, D. C.; Boston, Springfield and Worcester, Mass.; Detroit, Mich.; Providence, R. I.; Fort Wayne, Ind.; Duluth, Minn.; Newark, N. J.; New York and Albany, N. Y.

Assistance, in connection with State matters, was also rendered in Vermont, California and Rhode Island.

With but one exception the work in all these places required the presence of our Labor Adjuster, Mr. E. A. Moffett, whose duties in the field consisted for the most part in representing local employers in contract negotiations; for the remainder they had to do with casual disputes. Employers in several of the cities enumerated have had occasion to command the services of the Bureau not once, but several times.

All of those whom we have assisted seem to have been well pleased with the aid given them; several have so expressed themselves formally.

The many contracts executed—approximately two hundred in all—show an increase of wages, and in addition a considerable number provide for a reduction of hours. The ratio of wage increase is about the same as heretofore.

There is a feature of this question of wages which we desire to call briefly to your attention. The professional prohibitionist would minimize to the point of extinction whatever credit accrues to the industry as one in which wages are high. He makes the assertion that wages are high only in the apparent sense; that, in other words, they represent but a very small proportion of the net profits. The figures he cites (we are not informed of their source) fix the proportion going to labor as from 15 per cent. to 20 per cent.

An assertion so utterly false should not be permitted longer to prejudice the uninformed. But no statement from employing brewers, however complete and conservative, would avail. Hence, your committee makes the recommendation that it be empowered to engage an expert accountant and statistician to make such investigation during the coming twelve months as may in its judgment be necessary to a scientific ascertainment of such data as shall state with reasonable accuracy the proportion of net profits accruing to labor. With the facts thus impartially and competently obtained ready to hand, another prohibitionist charge against the industry will have been exposed in its true character.

Strikes During the Year.—But few strikes are to be reported, and that which occurred last year at Washington, D. C., and was so long and bitterly contested, has been settled, through the intervention of your committee. The strike at Alexandria, Va., then in its second year, ended automatically with the taking effect of prohibition in that State. Strikes remaining unsettled are those at Wilmington, Del., and Golden, Colo.; both of which have been on for many months.

Strikes in Violation of Contract Continue.—We regret to have to add that the peace and good will of the industry has been disturbed by the occurrence of several strikes called in violation of contract, with the larger proportion of these taking place in the busy season. That their number has not been larger is due, in greater part, to employers who, rather than face the alternative of a serious interruption of their business, have acquiesced in the demands of the moment, having had to deal with men secure in the confidence that no greater punishment would follow their dereliction than a mere official order to return to work. Even when ordered to return, it frequently happens that ingenious excuses are advanced in behalf of such strikers. The employer is charged with having done this or that, as though he, and not the men, had refused arbitration, notwithstanding that in ordering the strikers to return to work their wrongdoing has been acknowledged.

That an employer is occasionally remiss in his dealings with his men is not to be denied. But this is beside the point. Either the arbitration clause of our labor contracts should be respected or not. Hitherto it has been the habit of the industry to speak of a strike as serious according to its dimensional aspects, but this definition is not altogether correct. The elements of space or duration are not the only elements that make a strike a serious one. A strike is never so serious as when called during the life of a contract which provides within itself, as do ours, the means of adjusting intelligently and amicably any and all disputes between the parties to it.

In no instance within our knowledge has a union offending in this grievous manner been subjected to the discipline it merited. This is the more astounding in view of the professions made with such apparent sincerity by the general officers of the Brewery Workmen. Five years have passed since these gentlemen declared over their several signatures, in a circular address to the constituent unions, that any union striking in violation of its agreement with its employers would be subjected to stern discipline and its offending members expelled. For your more complete information we reproduce this circular in its entirety, as follows:

To the Local Unions, Joint Local Executive Boards and all Members of the Organization:

Comrades:—The General Executive Board, in session from Sept. 11th to Sept. 15th inclusive, was confronted with the problem of a number of unauthorized strikes, which, even when successful, were in most instances violations of agreement, and have as such been reported to the United States Brewers' Association. The International Organization, as such, is a party to all existing agreements, and the employers have a right to expect from the International Organization a faithful adherence to all contracts, and in turn the International

Organization must ask from the Joint Local Executive Boards, wherever such are in existence, from the local unions and from every member of the organization, that no contract violations take place on our part.

We believe that if minor differences arise on account of interpretation of agreements, same should be submitted to arbitration, as provided for in the agreement. If members are discharged unjustly, same can also find redress by arbitration, and if a member is guilty of neglect of duty or other infringements of rules, he does not deserve and cannot expect the support of the organization.

These unauthorized strikes which have taken place in the last year have become so serious a question that the employers are asking the question, "Have you control over your membership or not, and if you have not, what is the use of making contracts with you?" The International Organization now is placed in the position to defend its right as a contracting party and *must* in future insist upon it that every contract is respected, and to that end passed the following resolution:

Inasmuch as a number of shop strikes have taken place in various localities, either without the consent of the Local Union where there is no Joint Local Executive Board in existence or without the consent of the Joint Local Executive Board where there is such a Board in existence, and without the consent of the International Executive Board where there is no Joint Local Executive Board in existence, such as have occurred in Milwaukee, Fall River, Pittsfield, Worcester, Syracuse, Davenport, Rock Island and Butte, and a great number of other places, therefore a circular letter shall be addressed to all Local Unions, notifying the members that in future the International Executive Board, which is a party to all agreements in existence, will not only fill the places of such members who participate in unauthorized strikes, but will also insist upon the local unions that such members forfeit their membership for violation of agreement, and of the International Constitution, Article III, Section 4, and Article X, Section 12.

We believe that the employers are in most instances responsible for this unlawful and unsanctioned action of our members and Local Unions and are provoking the same by violations of existing agreements and sometimes intolerable treatment of individuals, but we must not forget that a wrong on our part will not right the wrong of the employers. We must stand clear and clean before the world that we have always carried out our contracts.

We therefore urge and insist on all members, Local Unions and Joint Local Executive Boards that before any strike takes place in future that the International Executive Board be advised of the nature of the grievance and that the Local Union and the Joint Local Executive Board exhaust all means at their command to adjust their differences according to their contract and the International Constitution and not permit a

Trusting that this serious matter will find the attention of violation of either.

all Local Unions and members, and trusting that every one cooperates with the International Organization in order to prevent such actions in future, we remain,

Faternally yours,

(Signed)

International Secretaries:

ADAM HUEBNER,
LOUIS KEMPER,
JOS. PROBSTLE.

International Executive Board:

A. J. KUGLER,
International Organizer.
EMIL MURI,
JNO. D. CORCORAN,
A. COLNOT,
PH. BASLER,
CHAS. STALF,
JOHN HOLLERBACH.

ED. F. WARD,
JOHN SULLIVAN,
PETER SCHAEFER,
CHAS. NICKOLAUS,
JOS. OBERGFELL,
JOS. FESSNER,
OTTOMAR EDLER,

Cincinnati, Ohio, Sept. 20, 1911.

That part of this official circular in which the allegation is made, that in most instances the employer is to blame, primarily, is to be taken *cum grano salis*. Certainly it is not within the knowledge of your committee that any employer has refused within recent years to accept arbitration. Such action on the part of any of our members would meet with immediate action on the part of your committee.

We submit in all patience that it is time that the source of this circular should transmute promise into fulfillment.

There remains another matter in relation to our labor contracts which demands due consideration. We refer to the propensity of brewery workmen's unions to restrict the employer's freedom under their joint contract whenever its exclusive interests inspire it to do so. In such cases the local union assumes the right to issue orders which, if not directly violative of contract provisions, are invasive and restrictive of the rights of the employer as implied in the contract it has made with him.

A most flagrant case of this kind was brought to our attention some months ago. A local union in a Massachusetts city, a number of whose keg-beer drivers had been laid off in the usual rotative manner, notified the employing brewer that its members (those employed as inside men), would no longer roll out packages to teams from outside bottling shops, and that his goods should thereafter be delivered to these shops, on the actual premises and empty packages returned by his own drivers. The fact, which the union's committee acknowledged, that the drivers from these outside shops were themselves members of the Brewery Workmen availed nothing. The committee argued that some, if not all, of these drivers were members, not of the local embracing keg-beer drivers (and inside men), but of one covering bottle-beer drivers; and that being the case, they could not, even if paid the rate for keg-beer drivers, be permitted to do work that "belongs to the plants' own drivers." The employer's suggestion that this technicality, so inordinately stressed by the union, could be disposed of by transferring these drivers to the keg-beer drivers' union passed unheeded. The controversy ended with the union's fiat that, all other considerations aside, all deliveries made by the brewery must be made by its own drivers; and in this arbitrary demand the general officers formally joined. This, of course, imposed a hardship upon the brewer, and no less upon the outside bottlers, themselves employers of members of the same general union.

We are reluctant to believe, however, that the union in such cases appreciates the full import of its act. Apparently it loses sight of the fact that when a contract has been executed neither party thereto is required, properly, to do more than to fulfill its specific obligations thereunder; and that beyond these either is at liberty to conduct its own affairs as it may deem best; save that it should not, and, if wise, will not, do aught contrary to a decent regard for that good will and amity of which their joint contract is the concrete expression.

The St. Louis and Chicago Conciliation and Arbitration Plan.—We are pleased to inform you that our predictions as declared in previous reports relative to the Conciliation and Arbitration system in St. Louis and in Chicago have been amply fulfilled. Testimony to that effect has been received from both points. Mr. C. Norman Jones, speaking for St. Louis, writes as follows:

I can continue to endorse the Conciliation Board as a decided improvement in the relationship between employer and employee. Open to any complaint, whether based on the labor contract or not, it is of great assistance in avoiding hasty action of opinion.

Very few cases are carried to arbitration, as the findings of the Board, while not binding, are generally accepted as a basis of settlement. I consider it a benefit to both Union and Employer.

How well the idea has worked out in Chicago is indicated in the following statement from Mr. Austin J. Doyle:

The local Constitution plan contained in our contracts with the Labor Unions has worked admirably during the past twelve months, every complaint having been satisfactorily adjusted without having recourse to the regular Arbitration Board.

The rational manner in which the employers and workmen in these two great brewing centers settle their differences, contrasted with the partisan methods elsewhere resorted to, is as the shadow of a great rock in a weary land. The fine results, the general satisfaction achieved through this medium of accommodation are big with promise for the future good of employer and employee in our industry. With its practicability so impressively demonstrated, the time moves ever nearer when this same method of adjusting routine differences will be the only one obtaining in the industry. To the end that that glad day may be hastened your committee recommends that each brewer in the larger cities do his full part to provide for the embodiment of the plan in forthcoming contracts. Information as to its details can be had from current St. Louis and Chicago contracts, and through communication with the brewers in the respective cities. And your committee will also be glad to make suggestions.

In our report of two years ago we stated that we had proposed to the general officers of the Brewery Workmen that our organi-

zation and theirs consider the advisability of forming a joint conference board for the purpose, primarily, of formalizing our relations more broadly. Our object was, concretely, to have us both thrust our legs under a common table and to discuss constructively, not only the many questions arising from time to time in the course of our relations as employers and employed, but also, and of no less importance, those problems that have been forced upon us by our common enemy. We stated also that the International Union of Steam and Operating Engineers, learning of our proposal but indirectly, had gone on record enthusiastically as desiring to participate in such arrangement provided the Brewery Workmen should agree to do so; also, that the Brotherhood of Stationary Firemen had declared, unqualifiedly, in favor of such arrangement.

The Convention of the Brewery Workmen held that year (1914) ordered that our proposal be gone into exhaustively by the general officers and that they should report in detail to the following convention, which was to have been held this year. Since this convention has been postponed, we are not in a position to state advisedly the ultimate disposition of our proposal as regards this particular trade-union.

Workmen's Compensation Laws.—Our industry having been among the first to recognize the inherent justice of the principle of compensation for industrial accidents, your committee takes pleasure in informing you of the continued growth of this legislation. Such laws are now in force in thirty-two States, with reasonable prospect of their becoming general throughout the country within the next year or two. And the federal law, covering civilians in government service, has been greatly broadened in scope.

New York Brewers' Mutual Insurance Plan.—The Brewers' Mutual Indemnity Insurance Company of New York, the organization of which was noted in the Labor Committee's report at New Orleans, has now been operating more than two years. Conducted by trained insurance men, the affairs have been so shaped as to relieve the brewers of care and worry, incident to industrial accidents, and to give seven thousand employees financial and moral assistance during period of disability.

From the employees' standpoint, the formation of the insurance company by the brewers has been ideal, and has been attended by unusual success. In previous periods of misfortune, the employees had to deal of necessity with agents of stock insurance companies, and, consequently, were not given the solicitous care and treatment their cases warranted. This fact should not be used against the stock insurance companies, because, dealing, as they do, with thousands of employees in as many different industrial activities, it would be unreasonable to expect them to give all their favors to brewery employees. As a result, before the men, in the majority of cases, received compensation for their injuries, suits at law had to be started, with the resultant delay and privation.

With the new mutual company, as soon as the accident occurs, the injured man is rushed to the best doctor or hospital in the city, and nothing is left undone in an effort to restore the man to his position in as good physical condition as before the accident. According to the law, the employer is responsible for only sixty days' medical attention. The brewers disregard this provision absolutely and continue medical treatment, at no expense to the injured man, as long as it is necessary.

When an accident occurs, the insurance company is notified and immediately in turn it sends notice to the injured man of his rights and what he may expect. As compensation does not start until the fifteenth day of disability, he is notified to come to the office on the twenty-first day and receive his money. If unable to do so, a friend from the insurance company is sent to him and payment made.

If a case appears to be serious, money is advanced by the brewers to the injured man before it is due. Widows and orphans are all cared for in the same manner, and after treating with the insurance companies, in thousands of cases, employees have not registered one reasonable complaint. There is no question regarding the employees' satisfaction, and they would resist, with all their powers, any change in the present arrangement.

As for the brewers, aside from the great pleasure and satisfaction they derive from looking after their employees humanely is the financial consideration.

By the formation of their own company, the brewers of New York, using practically the same rates as stock insurance companies and giving greater coverage, received thousands of dollars in dividends and created a surplus of Two Hundred Thousand Dollars in two years. Though but in its third year, the Brewers' Mutual Indemnity Insurance Company, of New York, all concerned declare it an unqualified success.

While upon this general subject of compensation for industrial accidents, we desire to remind you that the exposure of the fallacy of alleging the use of alcoholic liquors as a causative factor of prime importance in such accidents, has not to date been seriously questioned. The facts as then educed, from so broad a field of inquiry, by competent and impartial investigators—and so widely disseminated in the course of the Association's educational activities—indicated that as a factor in the causation of such accidents alcohol was of negligible importance. The continued silence of those who had asserted to the contrary is of more than passing significance.

We conclude our report by urging you to make the greatest possible use of your labor bureau. Our advice and the services of the adjuster are always at your disposal. When trouble looms ahead do not wait until the last minute—certainly do not wait until trouble has come and has been made worse by inexperienced hands—but get into touch with us with the least possible delay. While we may not fulfill your every expectation, we shall do our utmost to serve you.

Respectfully submitted,

LOUIS B. SCHRAM, *Chairman.*
GEORGE F. GUND,
CHARLES PFAFF,
C. W. FEIGENSPAN,
C. NORMAN JONES,
HUGH F. FOX, *Secretary.*

Report of Crop Improvement Committee.

The barley crop this year is materially short of that of 1915, chiefly as a result of very unfavorable weather conditions existing in the spring wheat territory. During July and early August excessive temperatures when the crop was in bloom and was filling, not only materially diminished the yield, but also tended to produce a lighter grain, so that the crop is short when measured by bushels, and is also deficient in quality.

In order to secure a comprehensive and intelligent survey of the barley districts, arrangements were made with B. W. Snow, crop expert for the Bartlett Frazier Company, George A. Wells, Secretary of the Western Grain Dealers' Association, and also crop expert for the Price Current Grain Reporter, and with Peter Goodman, crop estimator for Clement Curtis Company, who each made four reports covering seeding conditions, conditions in July, conditions at harvest and the finals after harvest, total yields, etc., in counties producing 100,000 bushels per year and upwards. The Committee obtained average samples from one hundred and twenty different counties and germination tests have been made with varying results.

We had never before learned at first hand barley conditions in the important barley States, Wisconsin, Minnesota, Iowa, North Dakota and South Dakota. While we have to report a decrease in volume, we believe that if a season like 1916 had occurred five years ago, the result would have been much worse.

Threshing Returns.—Mr. Snow's threshing returns show a yield of 22.6 bushels per acre, which upon his acreage figures makes a total crop of 176 millions compared with a government estimate last year of 237 millions.

Wisconsin shows a fair quality for the crop, ranging possibly fully up to the average, which is to be expected when it is considered that nearly ninety per cent. is now seeded with Oderbrucker pedigree barley. Wisconsin color generally has been bright.

In Minnesota the reports as a rule show that the quality of the crop is poor, statements of good quality being decidedly the exception, and the weight of the grain light. Minnesota barley is badly stained in most sections, although in a few counties like Jackson, Polk and Watonwan, the color is reported nearly satisfactory.

In Iowa the general quality of the grain is reported good, with the weight about an average and the color fair to good.

In North Dakota the quality of the crop is universally reported as poor, the weight decidedly below average, and the color as a rule poor. In this State a large amount of the grain was discolored by rain at and after harvest.

In spite of our efforts, there is very little sheaf capping or stacking as yet, although the sentiment is gradually gaining in that regard. Those farmers who have alfalfa covers are being encouraged to use them on their barley shocks.

The California crop is reported of satisfactory quality and color. Mr. Snow's estimate by States is as follows:

	Acres	Per Acre	Bushels
New York.....	84,000	23	1,932,000
Pennsylvania	8,000	26	208,000
Texas	6,000	21	126,000

Arkansas	1,000	15	15,000
Tennessee	4,000	22	88,000
West Virginia.....	1,000	22	22,000
Kentucky	3,000	19	57,000
Ohio	32,000	24	768,000
Michigan	83,000	26	2,158,000
Indiana	9,000	24	216,000
Illinois	51,000	31	1,581,000
Wisconsin	670,000	30	20,100,000
Minnesota	1,483,000	21	31,143,000
Iowa	367,000	29	10,353,000
Missouri	6,000	20	120,000
Kansas	300,000	17	5,100,000
Nebraska	114,000	26	2,964,000
North Dakota	1,650,000	15	24,750,000
South Dakota	821,000	23	18,883,000
California	1,279,000	25	31,975,000
Oregon	119,000	36	4,284,000
Washington	183,000	41	7,503,000
Oklahoma	7,000	12	84,000
Montana	75,000	28	2,100,000
Other	434,000	22	9,548,000
Total	7,780,000	22.6	176,078,000

Barley Improvement.—As to the permanent improvement of barley in the middle northwest, it is hard to make definite statements. Mr. Garland, who is Professor Moore's right-hand man at Madison, says: "It is extremely difficult to give you any figures in regard to the increase in yields due to the use of pedigree barley. There are so many features to be taken into consideration that the average for one year is offset by weather or climatic conditions. For instance, the U. S. Government gives the average yields for barley in Wisconsin in 1913 as 25 bushels per acre, whereas their figures on the average yield per acre for 1915 show 35 bushels. Possibly next year the average yield, according to the same statistics, may drop down five bushels.

"Last year had an exceptionally good growing season, and consequently the yield was higher. To say that this increase is due to the use of pedigree barley would be ridiculous.

"According to the reports of the members of our Experiment Association, they continue to obtain higher yields with pedigree barley than they do with common seed. Now very few farmers, as you know, grow anything but the pedigree barley."

Two hundred and sixty-six samples reported in 1915 gave an average yield of pedigree barley at 37.56, while the U. S. average was 32 bushels.

However, the fight for pure bred grains seems to be well worth while because it is generally conceded now that they are best for larger yields and of better quality, have stronger straw, less disease, ripen more uniformly and are worth more in the seed market and for malting.

The experiment stations are continually improving barley and breeding samples of grain are being sent out from time to time for distribution among the farmers in several States.

The experiment station instead of doing all of the work on the college farm, is in constant touch and communication with the farmers and know that the pedigree strains are popular.

Professor Bull, Secretary of the Minnesota Crop Improvement Association in charge of the dissemination of seed grains from the university, says that while all grains have been correspondingly low this year, he is confident that there is an increased interest in better seeds all along the line.

Extension Courses and Institutes.—We have requested the leaders of Extension Short Courses and Farmers Institutes in all of the barley States to arrange for crop improvement programs on somewhat the following lines: First to ask everybody who attends these schools and meetings to bring a sample of barley and a sample of oats which he intends to plant next spring for comparison. A lesson is to be given upon the samples brought covering the following topics which are to be answered in writing by each person:

- Name of variety?
- How long grown by farmer?
- Where he got it originally?
- Mixtures with other varieties?
- How seed bed was prepared?
- When grain was seeded?
- How soil was treated?
- What was on the field the year before?
- What's to be on the same field next year?
- Whether grain lodged?
- Date of harvest?
- Whether grain was stacked, etc.

The use of a farming mill showing why it is necessary to fan out trash, immature seeds and weed seeds to get the grain a uniform size and weight in order to give each kernel a fair start and have it all mature at the same time. This is especially important in barley. Instruction and demonstration inducing each farmer to conduct an experiment for himself of testing seed oats and seed barley for vitality in blotting papers. And in order that they may see the importance of this to tabulate the result in percentage.

A demonstration of various ways to treat seed grain for smut with formaldehyde either with machines, by dipping or sprinkling.

In this connection a campaign is now under way to secure a leader in every neighborhood where there is no county agent to arouse concerted action in treating seed barley for smut and to interest the newspapers, bankers, grain dealers, millers, commercial clubs and superintendents of schools, in distributing printed pledges through the children of the county schools to their parents and neighbors giving directions on one side of the slip for eradicating the smut, and on the other, an agreement to treat their seed barley, oats and wheat with formaldehyde. These slips are, to be gathered, tabulated and printed.

This work has already assumed large proportions in counties where agents are at work. We are making a special effort to introduce this plan into counties where barley is smutted and the samples which we are receiving from every part of the barley territory, gives us this information.

Uniform Grades of Barley.—At the instigation of the wide-awake committee of the Brewmasters Association several meetings have been held to arrive at some conclusion as to a uniform standard of barley. A tentative grading system was submitted by the Brewmasters Committee and made a basis for a questionnaire which was sent to those interested in barley in every part of the United States.

The answers to these questions were gathered by the chairman of this committee and submitted to Dr. J. W. T. Duvel, Office of Grain Standardization, Washington, as information upon which to base new barley grades.

Dr. Duvel says that the matter of barley standards will be taken up in its turn, probably after wheat and oats are standardized and expresses himself as very much pleased that the barley trade has given him all of this first-hand information upon which to base the standards.

During the year, what was known at first as the Grain Grades Act was passed under the title of U. S. Grain Standards Act. It provides for supervision of grading by the Federal Government, and not for Federal inspection as some demanded. It is what might be called a compromise measure. It provides for the supervision of all grain moving in interstate or foreign commerce. It has no authority over intra-state shipments.

After standards have been established, grain which is sold by grade, must be inspected by an inspector licensed under the act, before it can be shipped in interstate or foreign commerce.

This part of Section 4, when considered alone, has led to considerable confusion and misunderstanding because of a proviso admitting of the shipment of grain sold by sample or by type, as is now the case in barley, or under any name, description or designation which is not false or misleading, but which must not include in whole or in part, the terms of any of the official standards. It will not permit the sale of any grain under a trade name which as a part of that trade or trade mark, would have a misleading effect. It must not be described as No. 2 barley or No. 3 wheat unless it has been so inspected by an inspector licensed under this act.

The government does not pay the inspectors. The compensation of these men must come from sources outside the Federal Government. These inspectors must necessarily come under the requirements of Civil Service and examination for supervisors and assistant supervisors has been already announced by the Civil Service Commission.

From the register of eligibles established as a result of this examination, it is hoped that suitable persons may be secured to put the supervision of corn into operation by December 1st.

No supervision will be exercised on barley or other grains until the standards are properly established with due notice.

The Uniform Grades Committee of the Grain Dealers' National Association recommended that a regularly constituted and representative committee should be created and charged with the duty of receiving recommendations from the different markets, associations, etc., concerning possible changes in the grades, rules and the administration of same for the purpose of considering and presenting them to the department to the end that hasty and

ill-matured recommendations may not be submitted as recommendations from the trade; that such committee should be broadly representative and composed of at least five members. For instance, one chosen by the Grain Dealers' National, one by the Council of Grain Exchanges, one by the Millers' National Federation, one by the elevator men. It might be pertinent here to remark that this association should request that the barley interests be also represented.

Respectfully submitted,

CHARLES WIEDEMANN, *Chairman.*
CARL J. HOSTER,
GUSTAVE PABST,
AUGUST FITGER,
THOMAS ALTON,
HUGH F. FOX, *Secretary.*

Report of the Condolence Committee.

The hand of Death has been busy among the members and friends of the United States Brewers' Association since the last Convention, and many of those who had occupied places of prominence in our councils and had endeared themselves to their associates by their personal qualities, are now among the missing. It is the melancholy duty of your Committee to report the losses of the period as follows:

FORMER PRESIDENT

Rudolph Brand

FORMER TRUSTEE AND MEMBER OF THE LABOR COMMITTEE

George F. Gund

HONORARY MEMBER

Ernest G. W. Woerz

ACTIVE MEMBERS

Michael Albl	Adolph J. Zang
Joseph Dawson	H. C. Bloedel
Joseph Haefner	Thos. J. Flanagan
Arthur Harris	Frank B. Haberle
Matthias Haffen	Anton Huth
Louis Cutscher	Eugene Hack
Herman H. Linser	Peter Lieber
Edwin G. S. Miller	Leonard Michel, Jr.
Benjamin Moyses	Henry A. Muessel
John McGlinn	Adolph Mayer
Herman Neugass	J. H. McGraw
Robert J. Richards	Mathew Nunan
Carl A. Strangmann	Bernhard Stroh
John M. Schantz	Jacob B. Schorr
Robert R. Spencer	Edward Schmidt
Charles Uihlein	Joseph Straubmuller

George F. Volz

ASSOCIATE MEMBERS

C. C. Puffer,

Dr. Francis Wyatt,
Henry V. Huse.

RUDOLPH BRAND, former president, died while on a visit to San Diego, Cal., March 25. Since his retirement from active business in January he had been traveling in California for his health. Mr. Brand was born in Odernheim, Hessen, Germany, in 1851, and while a boy was apprenticed to a brewer at Guntersblum-on-the-Rhine. In 1868 he came to America and located at Chicago, where he entered the employ of his uncle, the late Michael Brand, at the Busch & Brand Brewery. The firm also operated a brewery at Blue Island, Ill., which, in 1874, was purchased by Rudolph Brand who brewed there on his own account until 1878. He then sold out, and returning to Chicago, became a partner in his uncle's business, which, after the death of Mr. Busch in 1872, had been known as the Michael Brand Brewing Company. This plant was sold in 1889 to the United States Brewing Company, of Chicago. For twenty-two years he was at the head of this company and on his retirement as president, treasurer and general manager in January was made chairman of the board. Mr. Brand was for many years one of the foremost figures in the trade. He early took an active interest in the United States Brewers' Association. From 1895 to 1899 he was a vice-president of the organization, and, in the latter year, was elected to its presidency. During his tenure of office Mr. Brand devoted a great deal of his time endeavoring to procure a repeal of the extra tax on beer, and it was largely through his personal efforts that this was accomplished. He also took a lively interest in the associations of Chicago, Cook County and Illinois brewers, holding various offices in each. He

was city treasurer of Chicago from 1881-'83 and a member of the school board from 1884-'87. Mr. Brand was president, treasurer and director of the United States Security Company, and one of the founders of the industrial city of Chicago Heights. He was a member of the Masonic Fraternity, the Germania Club and other fraternal and other organizations. He was married in 1875 to Miss Clara Uhlich, who with a daughter, Mrs. Carl M. Gottfried, and two sons, survives.

GEORGE F. GUND, president and treasurer of the Gund Brewing Company, Cleveland, O., died March 11th, at the Lakeside Hospital in that city after a brief illness, age 60 years. He was a brother of Henry Gund of the John Gund Brewing Company, of La Crosse, Wis., and of John Gund, of the Lexington Brewing Company, of Lexington, Ky. Mr. Gund was born in La Crosse, April 5, 1855, where he attended the public schools, afterwards going to Northwestern University at Watertown, Wis. He started originally in the banking business, serving through the various positions in the Batavian Bank at La Crosse, until he became an officer; then he left to become secretary and treasurer of the John Gund Brewing Company. He was at that time city councilman at La Crosse, for three years, from the age of 22 to 25, and served on the Governor's guard. In the spring of 1890, he moved to Seattle, Washington, and purchased a half interest in the Clausen-Sweeney Brewing Company, which he retained until 1893 when he consolidated the Albert Braun, Clausen-Sweeney and Bayview Brewing Companies into the Seattle Brewing & Malting, of which he was president until 1897. He was also identified with many of the prominent Seattle corporations of this period, being a director of the Puget Sound National Bank, the National Bank of Commerce, as well as the Rambler-Caribou Mining Company, and the Gund Gold Mining Company, of which he was president. In April, 1897, he went to Cleveland and purchased the Jacob Hall Brewing Company, that has become one of the largest non-shipping breweries in the country. He gave generously of his time to the United States Brewers' Association, the Ohio Brewers' Association, the Cleveland Brewers' Board of Trade and the Cleveland Bottlers' Company, in all of which organizations he either had been trustee or president numerous times. Besides fulfilling the duties of both president and treasurer of the Gund Brewing Company, he was a director in the Broadway Savings & Trust Co., the Woodland Avenue Savings & Trust Co., the Cleveland Life Insurance Company, the Realty and Rental Company, the Cleveland Realization Company, and other companies, he was a thirty-second degree Mason, a member of the Cleveland Chamber of Commerce, the Cleveland Athletic Club, and the Shaker Heights Club.

The surviving members of Mr. Gund's immediate family are his widow, his son, George, of Seattle, and his daughter, Miss Agnes Gund.

ERNEST G. W. WOERZ, vice-president, treasurer and a founder of the Beadleston & Woerz Brewing Co., of New York, died on May 9th. He was born on June 6, 1834, at Miehlhausen, Wurttemberg. In 1848 he came to America, where he learned the brewing business. After having worked twelve years in David G. Yuengling's Brewery in Pottsville, Pa., he became brewmaster for Beadleston & Price in New York City, and was made a member of the firm in 1868, when it took its present name, at his instigation in 1882, the firm which had limited itself previously to the production of ale only, began the brewing of lager beer, which resulted in a large increase in the business. Mr. Woerz continued in active control of the business up to the time of his illness. He was a member of the Arion and Liederkrantz, the German Society and of the Larchmont and Seabright Yacht Clubs. Two sons, Mr. Frederick W. and Mr. Charles Woerz, and a daughter, Mrs. Caroline Steele Woerz, survive him.

THOMAS J. FLANAGAN, president of the Springfield Breweries Company, Springfield, Mass., died at his home in that city, October 24, 1915, after a long illness. Mr. Flanagan was born in Ireland in 1847 and came to this country at the age of two years. At nine years of age he went to work in a mill in Chicopee as a spinner. Later he became a carpenter and did contracting and building in Holyoke. After operating a hotel in that city for several years Mr. Flanagan purchased the Hampden Brewery Company in Williamansett. The Hampden Company was taken over by the Springfield Breweries Company about 17 years ago, and Mr. Flanagan was made vice-president and manager of the whole corporation. In January, 1915, he was elected president and general manager.

FRANK B. HABERLE, president of the Haberle Crystal Spring Brewing Company, Syracuse, died September 8, 1915, after a long illness. He was a native of Syracuse, having been born there September 2, 1855. He received his early education in the public schools, later going to Germany, where he attended college. In

1870 entered the brewing business which had been started by his father. Mr. Haberle's father died in 1881 and the son organized a stock company under the name of the Haberle Brewing Company, which in 1892 was consolidated with the Crystal Spring Company.

HERMAN NEUGASS, president of the New Orleans Brewing Company, New Orleans, La., died in that city Wednesday afternoon, November 10, 1915. He was born at Frankfort-on-the-Main, Germany, in 1843. He came to America about forty years ago. At the time of his death Mr. Neugass was also president of the New Orleans Stock Exchange.

JACOB B. SCHORR, president of the Schorr-Kolkschneider Brewing Company, of St. Louis, Mo., died February 3, 1915. He was born in Lounestadt, Bavaria, and came to America when a youth of sixteen. At the age of eighteen he held the position of brewmaster with the Green Tree Brewery at St. Louis. In 1901 he and his associates started the company of which he was president at the time of his death.

CARL A. STRANGEMANN, president of the German-American Brewing Company, Buffalo, N. Y., died October 2, 1915. He was born in Westphalia in 1860 and came to America in 1875. He was engaged in brewing in Alexandria, Va., and Cleveland, Ohio, before he became connected with the Buffalo concern.

JOSEPH STRAUBMUELLER, founder of the Philadelphia brewery of Jos. Straubmuller & Son, died on October 11th. He was born in Gross-Eislingen, Wurttemberg, sixty-seven years ago. When he was twenty years old he came to the United States, settling in Philadelphia and erecting his brewery in 1876.

CHARLES UHLEIN, a brother of Henry Uihlein, president of the Jos. Schlitz Brewing Company, of Milwaukee, died in that city Saturday, December 13, 1915, at the age of 67 years. He was born in Germany, came to America in 1871, and was connected with the Joseph Schlitz Brewing Company, of which concern he was founder of the bottling department, until 1895, when he retired on account of ill health.

GEORGE F. VOLZ, president of the National Brewing Company, San Francisco, died on March 6th. He was born in Illinois, sixty-six years ago, and settled in San Francisco in 1876.

ADOLPH J. ZANG, president of the Ph. Zang Brewing Company, Denver, Colo., died September 28th. He was vice-president of the German-American Trust Company, of Denver, and president of the Vindicator Gold Mining Company, besides being a large owner of Denver real estate.

CHARLES CHENERI PUFFER, of the Pfadler Company, died at his home, Elm Place, near Avon, a suburb of Rochester, N. Y., on December 2, 1915. He was born June 15, 1841, at Coleraine, Mass., where his father, Dr. Cheneri Puffer, was a prominent physician. His mother, Lucy Alden Puffer, was a direct descendant of John Alden, of Mayflower fame.

DR. FRANCIS WYATT, expert in chemistry and one of the founders of the National Brewers' Academy, New York, died February 20. His birthplace was Portsmouth, England, from which city he came to this country twenty-nine years ago. He was a member of the American Chemical Society, the Society of Chemical Industry, the Association for the Advancement of Science, the British Institute of Brewing, the American Institute of Brewing Technology, the Lambs' Club of Manhattan, the University Club of Philadelphia, and the Algonquin Club of Boston.

HENRY V. HUSE, for many years secretary of the Boston Brewers' Association, died at Waverly, Mass., September 21. He was a direct descendant of Abel Huse of Newbury, who came to this country from England in 1635. He was born in Lowell, March 12, 1858. In August, 1896, he assumed the secretaryship of the Boston Brewers' Association.

Respectfully submitted,

N. W. Kendall, Chairman, Yale Brg. Co., New Haven, Conn.
 Fred Feil, Feil Brewing Co., Philadelphia, Pa.
 P. S. Simon, Jamestown Brg. Co., Jamestown, N. Y.
 A. T. Gast, Independent Brg. Co., St. Louis, Mo.
 R. L. Autrey, Houston Ice & Brg. Co., Houston, Texas.
 C. A. Miller, Miller Brewing Co., Milwaukee, Wis.
 R. A. Keenan, Sheridan Brg. Co., Sheridan, Wyo.
 J. C. Carry, Nat'l Capital Brg. Co., Washington, D. C.
 C. F. Ginther, Ziegele Brg. Co., Buffalo, N. Y.
 J. C. Hartmann, Hartmann & Fehrenbach, Wilmington, Del.
 E. J. Birk, Birk Bros. Brg. Co., Chicago, Ill.
 John J. Huebner, Huebner-Toledo Brg. Co., Toledo, Ohio.
 Louis A. Centlivre, Centlivre Brg. Co., Fort Wayne, Ind.

The report was adopted by a rising vote.

Secretary Fox having made several announcements relating to the educational and social side of the convention,

entertainments, invitations, lectures, etc., President Pabst adjourned the opening session of the first day.

An executive session was held in the afternoon. The ladies were taken on an automobile ride through the city, which was followed by a tea party at the Statler Hotel, and in the evening all attended an entertainment in the ball-room of the Hollenden, where also an illustrated lecture entitled "Real Industrial Efficiency from the Physiological Standpoint" was delivered by Doctor Darlington, of the American Iron and Steel Institute. He was followed by a moving-picture exhibit and talk by Bert Ball on the barley industry. This moving picture had been made during the year, with the assistance of the government officials, barley experts and the Crop Improvement Committee of the Grain Exchanges.

Throughout the entire convention a series of pictures entitled "Alcohol and the War" were displayed on a stereomotorgraph in the lobby of the Hollenden, showing the use of beer and light wines by soldiers engaged in the present war. These illustrations created considerable interest among the hotel guests.

SECOND DAY.

The second day's proceedings opened with an executive session which lasted some considerable time during the course of which the reports of the Nominating and Resolutions Committees were made and adopted as follows;

The United States Brewers' Association desires to express its appreciation in the warmest possible terms of the hospitality extended to our members and visitors by the Cleveland Brewers' Exchange. The cordiality and thoughtfulness manifested in the plans for our entertainment have made a lasting impression, and we are particularly appreciative of the efforts of the Ladies' Committee selected by the Cleveland Exchange to make the visit of the ladies, who accompanied the Convention delegates, an enjoyable one.

We desire also to express to His Honor, Mayor Davis of Cleveland, our sincere thanks for the cordial and thoughtful address of welcome given at the opening of the Convention, and a similar expression of gratitude to Mr. Charles A. Otis of the Cleveland Chamber of Commerce for his word of greeting on behalf of that body. To the citizens of Cleveland in general, and to the officials of the city, the Convention desires to return its thanks for the universally kindly and courteous treatment accorded to the delegates on all occasions.

Resolved, that this expression be spread upon the minutes of the Convention, and that the Secretary be directed to convey by letter to the Cleveland Brewers' Exchange, to the Hon. Harry L. Davis, Mayor of Cleveland, to Mr. Charles A. Otis of the Cleveland Chamber of Commerce, and particularly to the Ladies Reception Committee of Cleveland, the thanks of this Convention.

Nominations.

The Nominating Committee submitted the following nominations:—

Board of Trustees.—Edward Ruhl, Boston, Mass.; H. J. Rydall, Pittsburgh, Pa.; Ernest Fecker, Jr., Danville, Ill.; Edward G. Schlieder, New Orleans, La.; Rudolph J. Schaefer, New York, N. Y.; William Hamm, St. Paul, Minn. (and, to fill the unexpired term of Julius Stroh who has resigned) R. L. Autrey, Houston, Texas.

STANDING COMMITTEES.

Advisory Committee.—James R. Nicholson, Chairman, Boston, Mass.; Gustav W. Lembeck, Jersey City, N. J.; William Hoffmann, New York, N. Y.; Louis B. Schram, Brooklyn, N. Y.; N. W. Kendall, New Haven, Conn.

Vigilance Committee.—Walter A. Carl, Chairman, Boston, Mass.; Spencer H. Over, Providence, R. I.; R. L. Autrey, Houston,

Texas; S. B. Foster, Rochester, N. Y.; Joseph A. Weibel, New Haven, Conn.

Labor Committee.—Louis B. Schram, Chairman, Brooklyn, N. Y.; William Hamm, Jr., St. Paul, Minn.; Charles Pfaff, Boston, Mass.; C. W. Feigenspan, Newark, N. J.; C. Norman Jones, St. Louis, Mo.

Publication Committee.—C. W. Feigenspan, Chairman, Newark, N. J.; August Lindemann, Milwaukee, Wis.; Henry A. Rueter, Boston, Mass.; Hugo A. Koehler, St. Louis, Mo.; W. J. F. Piel, Brooklyn, N. Y.

Membership Committee.—Peter Theurer, Chairman, Chicago, Ill.; B. F. von Scholley, Boston, Mass.; Wm. T. Hansell, Pittsburgh, Pa.; R. V. Kuser, Trenton, N. J.; Wm. H. Rehm, Chicago, Ill.

Crop Improvement Committee.—Charles Wiedemann, Chairman, Newport, Ky.; Carl J. Hoster, Columbus, Ohio; Gustave Pabst, Milwaukee, Wis.; August Fitger, Duluth, Minn.; Thomas Alton, San Francisco, Cal.

Committee on Transportation and Rates.—Hugo A. Koehler, Chairman, St. Louis, Mo.; William Hamm, St. Louis, Minn.; J. Geo. Jung, Cincinnati, O.; William Uihlein, Milwaukee, Wis.; G. M. Daussman, Evansville, Ind.

The Convention adjourned *sine die* at about one o'clock.

The newly elected Board of Trustees met at 2.30 on the afternoon after adjournment, formulating plans to carry out the work resolved upon by the convention.

Bitter Billingsgate.

Men who otherwise are gentlemen, when they associate with and accept the doctrine of the Anti-Saloon Leaguers, seem to lose both refinement and kindness. The prejudice and hatred with which this unreasoning organization endows its followers apparently robs them of both wisdom and fairness. No person is permitted to hold an opinion contrary to theirs, no matter how well founded in philosophy, without being charged with being a paid tool of criminals and having directed against him such abuse as might be expected from a bar-room bum. They talk about temperance when it is apparent that they cannot even think temperately. The public will sooner or later become thoroughly disgusted with a tribe of men and women who refuse to permit other men and women to use their own philosophy in the solution of problems and who propose to establish a despotic rule of coercion both for thought and action.—("Champion of Fair Play.")

WORST OF ALL, AND LEAST TO SUCCEED. "As a result of more than fifty years' very intimate, practical knowledge and diligent study of the drink question, having spent more time, effort and money, I believe, in proportion to my means, in furthering the Temperance Reform than any other man living, just as I am completing the eightieth year of my mortal life, I have no hesitation whatever in declaring publicly, over my own signature, that, in my mature judgment, of all the methods that have been devised and tried for getting rid of the curse of strong drink, Prohibition is the very worst, and the least likely to succeed."—(Henry Wood Booth, Birmingham, Mich.)

THE "VICE" OF COFFEE AND TEA DRINKING. "In 1916 a considerable number of women supported the prohibition of alcoholic fluids. In 1674 a woman's petition was presented to the English Parliament praying the legislators to put an end to the 'vice' of coffee drinking. The ladies complained that the coffee had 'made men as unfruitful as the desert, whence that unhappy berry is said to be brought, that the offspring of our mighty ancestors would dwindle into a succession of apes and pigmies, and on a domestic message a husband would stop by the way to drink a couple of cups of coffee.' In this connection it may be noted that John Wesley started a teetotal society to discourage the use of tea!"—"National Guardian," London, England.)

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, Room 1313, People's
Life Building, Randolph and 5th Avenue,

CHICAGO, November 28th, 1916.

Thank goodness, it is all over! But the struggle, stress and turmoil of the campaign has at least carried with it its reward: The Antis have been routed—foot and dragoons—and Chicago will not be pestered by them for some time to come. The city remains "wet," as will the State of Illinois, as the lower house of its Legislature is also "wet," although the Senate appears to be "dry."

The effective work accomplished by the Manufacturers' and Dealers' Association of America is told in a circular letter which says, in part: "We are pleased to tell you that this Association has gone direct to voters with more than 400,000 pieces of educational literature in the last six months. They were sent through the mail to commercial, trade and business associations, trades unions, societies of all kinds, men and women's business and social clubs, occupants of every office building, editor and business manager of every daily, weekly, trade paper and magazine in Illinois, individual members of every suffrage organizations, all ministers and churches. By hand in sealed envelopes to offices, stores of all kinds, railway depots, restaurants, owners and individual workmen in factories (during noon hour), apartments, dwellings, residences and in automobiles standing on street. We also had a follow-up system for Illinois Congressmen and Senators, State Representatives and Senators, Aldermen, city and State officials. We also supplied hotels regularly with 'good stuff' sealed in envelopes with 'For Our Guests' printed on envelopes. These were placed in key boxes of guests. We also supplied saloons with convincing arguments in sealed envelopes with 'Taxpayer—Very Important' printed on envelopes. These were given to patrons with the request to put in their pockets and to read when they had time. We have distributed over 50,000 of those 'Sure Shot' blotters. Our Publicity Department is working 24 hours per day and 365 days in the year. A steady grind."

An effective weapon also wielded by the Association is a little sticker, which reads:

We Prefer To Buy
All of Our Supplies
From Members of the
Manufacturers' and Dealers'
Association of America
Are You a Member?

The Association has challenged Wm. J. Bryan to debate Prohibition with Charles A. Windle. At this writing Bryan has not yet taken up the gauntlet.

The poor showing made in the election returns has cost

the Prohibitionists in Chicago over \$44,000, and, as their national committee states, throughout the country they collected a campaign fund of nearly \$500,000—so that every vote that was cast for their freak ticket cost much more than one dollar!

Alderman Pretzel's proposed ordinance, mothered and fathered, but mostly mothered, by club women and alleged "ladies," to prohibit dancing in restaurants where liquor is sold, has been laid at rest by the Chicago City Council, 22 members voting for it and 40 against. By the same vote the Council rejected a proposition to direct the Mayor to revoke the licenses of certain saloons which are a thorn in the side of the male and female faddists.

Some sound doctrine we recently heard from the bench in this city when Judge Kavanaugh, in one of the "liquor" damage cases about to be tried before him, acknowledged Judge Baker's decision as being correct that the business of liquor selling is as legitimate under the laws of Illinois as any other business and that, therefore, liquor dealers and all others engaged in the trade are entitled to the same fair and unprejudiced treatment as men engaged in any other pursuit.

Chicagoans, who are accustomed to welcome the New Year with celebrations in cafés and hotels, will have to crowd all their fun into just one hour this year. Mayor Thompson has announced that the police would permit no tilting of the lid that has allowed the 1 o'clock closing law to be evaded in former years. The last day of the year coming on Sunday, cafés selling liquor here will be closed until midnight, under the State laws. At midnight they may open, but at 1 o'clock they will have to close to conform to the city ordinance.

Two deaths of men well-known in the trade occurred here during the month: Carl Emil Ernst, for many years vice-president of the Independent Brewing Association, who departed this life at the age of seventy-three years, and William Mueller, cashier of the Manhattan Brewing Co., who was connected with that corporation for the last twenty-three years.

EVERY ONE MUST DECIDE IT FOR HIMSELF. "The question of abstinence or non-abstinence is one which can be settled only by the individual conscience."—(Archdeacon Farrar.)

PRODUCTIVE EFFICIENCY NOT IMPAIRED BY ALCOHOL. "It is urged by the Prohibitionist that even the moderate use of alcoholic beverages reduces the standard of productive efficiency. If this argument by any process of reasoning could have any weight whatsoever, it could affect the individual and isolated cases only. Production, however, is social, and not individual, and the sum total of our productive efficiency, instead of being destroyed by 'booze,' has reached such a high standard that the question of production has been more than abundantly solved, and in the solution of the problem of efficiency in social production, has arisen the world problem of consumption now perplexing the statesmanship of every civilized country in the world."—(K. Cooney, in the "Liberal Leader.")

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., November 15th, 1916.

The efforts made by the representatives of the trade in Parliament to curb the arbitrary actions of the Central Control Board in restricting the sale of alcoholic beverages, have been in vain. Colonel Gretton's resolution to place the Board under the control of Parliament has been rejected in the House of Commons by a vote of 97 against 85, a bare majority of 12 votes. But this was only due to the fact that the vote was taken late at night, near 11 o'clock, when many members had left, believing the debate would be continued on the day following. The members who ably advocated the passing of the resolution were: Mr. Ashley, Mr. Brooks, Sir Stuart Coats, Mr. Cory, Colonel Gibbs, Mr. James Mason, Major Newman, Sir J. D. Rees, Sir John Rutherford, Captain Starkey and Mr. George Terrell. Their arguments were to the point, and whatever the opponents of the measure could say, they failed to show that the Control Board had any defensible reason for imposing unnecessary restriction upon areas covering nearly all England and Scotland and all of Wales. The Prohibition question was dragged into the debate by the irrepressible Leif Jones, who proposed an amendment in favor of Prohibition, but his remarks fell flat and his amendment was ruled out by the Speaker as being not germane to the question before the House. Still Mr. Jones harped upon his hobby after his defeat, and he was only silenced when it was pointed out to him that in the United States Prohibition was a dismal failure, as although a large area of the North American Republic was under so-called "dry" laws, the sale of beer was constantly increasing again, the increase during August last having been 25 per cent. and in some parts of the country even 50 per cent.

The failure of the Carlisle monopoly experiment, made for the alleged purpose of reducing drunkenness by the most drastical measure possible, is demonstrated by the fact that in the three first quarters of 1916 the convictions for drunkenness in Carlisle were 760, or 107 more than during the corresponding period of 1915.

The Brewers' Society, on the motion of E. A. Lovibond, has passed the following resolution:

"Resolved, that in no case shall any beverage containing less than 2 per cent. of proof spirit, even though it may be wrongly described in the Central Control Board's orders as 'light beer,' be sold except under some name which clearly distinguishes it from genuine beer."

Another resolution, passed and ordered to be communicated to all associations affiliated with the Society, reads as follows:

"That it is undesirable any brewer should accept a certificate under Sec. 5 of the Output of Beer (Restriction) Act in respect of supply of beer previously made by another brewer without first making full inquiry of such other brewer; and that in the event of an application being received by any brewer to supply the tied tenant of another brewer, full inquiry should be made of such other brewer before the application is entertained."

This action was taken because the Secretary of Customs and Excise has ordained that transfers of brewing rights from one brewer to another will no longer be permitted. The Society's twelfth annual meeting will be held at the Hotel Windsor, Westminster, on November 20th.

The export of malt continues, to the detriment of the brewers, although the government prohibited it in March, 1915, when it had increased enormously. And when it did not stop and the brewers began to object they were told

that maltsters were permitted, "in fairness," to dispose of lager beer malt on hand, a surplus which they could not possibly sell at home. The maltsters are now again producing large quantities of malt which they will be unable to dispose of in this country and a benevolent government will undoubtedly permit them once more to export the surplus. The whole thing is an abominable farce!

In regard to the employment of women in malt houses, the Home Secretary has made a general order according to which women may be employed only where the workmen have enlisted in the army and other men cannot be procured to carry on the work; they may even work on Sundays to prevent the grain from being spoiled, but no woman must be compelled to work more than 60 hours per week, nor more than 5 hours continuously on Sundays without an interval of at least half an hour.

In the "Daily Express" a London brewer recently said to a reporter interviewing him: "The increase in the price of beer has hit the pint more than the half-pint. Prior to the war beer was 2½d. a pint and 1½d. half-pint. To-day the maximum price is 3½d. a pint and 2d. a half-pint. Many districts last week raised the price of the pint to 4d., and in the next week or two it may be 4½d. or 5d., with the probability of the measure being withdrawn altogether. The Output of Beer (Restriction) Act, which is in no way connected with the Liquor Control Board, provides for a total output of 26,000,000 standard barrels of beer in the year from April 1st last to March 31st next. If this amount is exceeded penalties are provided for amounting to £100 for the offence and £2 for each barrel. It is stated that on the returns to September 30th the amount of overbrewing represents £500,000 in fines. Luckily, brewers are allowed until December 31st in order to bring the total output to an average of half-a-million standard barrels a week for the nine months. Whether the withdrawal of the pint measure can be done voluntarily is open to question, and it may be that, if an unanimous request came from the brewers, the Liquor Control Board would make the measure illegal during the war. A number of brewers have closed their bottling establishments in order to reduce their output, and in some cases the popular screw-stoppered pint bottle of beer has been discontinued. The position in the beer trade is serious, and it demands an immediate decision for the whole of the United Kingdom."

During the third quarter of 1916 the net profits of twenty large breweries have decreased from £2,583,917 in 1915 to £2,460,408, a total decrease of £123,509, or 4.8 per cent.

An embargo has been placed on the importation of foreign beer for the two-fold purpose of providing greater shipping tonnage for foods, and to relieve congestion at the ports. The Gamle Carlsberg Company, Carlsberg, near Copenhagen, continue the importation of their beers under special license.

BY CABLE.

LONDON, November 16th. King George signed to-day the drastic regulations that will place the nation's food supply under one-man control. The food situation has strengthened the hands of the powerful prohibition faction, and a bitter fight has begun to make Great Britain "dry" for the the House of Commons last night that they would introduce the House of Commons last night that they would introduce shortly a motion to prohibit the manufacture of all intoxicating liquor. The notice declared that prohibition was necessary in view of the grave situation respecting the shortage of sugar, corn and other cereals.

"The Daily Chronicle" this morning pointed out that a vast amount of the necessities of life were being absorbed into the production of liquor. It criticized the "powerful group in Parliament allied with the liquor interests."

A petition recently was submitted to the government by a thousand of the most distinguished persons in the empire, asking that all liquor licenses be suspended for the duration of the war.

Taking the people as a whole the new system of food control will be welcomed. Housewives, who are mainly affected, take the view that the scheme will at least prevent further material rises in the price of food. It is officially admitted that prices have risen 78 per cent. since the war began.

Brewing News from the European Continent.

George E. Eager, since 1905 United States Consul at Bremen, Prussia, who is now here on a short leave of absence, says: "The production of beer in Germany has been limited by the government to less than forty per cent. of the normal. A half litre (about a pint), which used to cost ten pfennig (about three cents), now comes to thirty pfennig and you are scarcely able to get any Pilsener at all, even at its current price of sixty pfennig. And, besides, the beer is considerable thinner than it used to be."

Our Nuremberg correspondent, Bernhard Bing, writes that "the quantity of hops harvested this fall will be short of the previous estimate, as many planters have not picked any hops on pole on account of the prevailing unprofitable prices. The yield of greenlings is extremely short, as heavy rains have injured a large part of our crop as to color and quality. There is consequently a very good demand for all greenlings, which command relatively high prices. We actually pay on our market per 50 kilos, first costs, Extra Choice grades, 85 to 95 marks; Choice, 65 to 75 marks, and Medium to Common, 40 to 50 marks."

The condition of the brewing industry in Austria is growing from bad to worse. From the grain commandeered by the government, the Austrian breweries cannot obtain more than 23 per cent. of their normal requirement of barley, and the result has been that the brewers who still operate their plants are using an abnormal amount of brewing sugars to replace the lacking malt. With the maltsters an agreement has been made that the price of malt shall not exceed 73 crowns per 100 kilos. The barley crop has been rather poor this year. Labor is almost unobtainable and the few men who are not serving in the army are receiving unusually high wages. Women are working in all departments of breweries. Pitch is exceedingly rare and its cost has increased to 20 times its amount before the war. Cork and lubricants are no longer sold anywhere. The price of beer had to be raised twice this year and it now costs 8 crowns more per hectoliter than in 1914, and in Vienna where half a liter of beer cost 5 cents before the war, it now costs about 20 cents. In Pilsen all breweries have closed down because they cannot obtain the materials with which to manufacture real Pilsener beer.

The brewers of France are enjoying a period of prosperity, as they produce more and better beer than when their country was invaded. German beer has disappeared from all restaurants and cafés and but very little beer is being imported from England, Holland, or any other foreign country. Nor will many more brewing machines be imported from abroad, a syndicate for the manufacture of machinery and apparatus having been organized recently, many brewers pledging themselves to patronize the factories now being erected by the syndicate. As the government

needs all the money it can get, new taxes upon beer and almost all other necessities of life are in view, the French Parliament discussing various bills by which it is expected to increase the revenues of the government. The taxes of brewers and retailers will probably be raised 20 and 30 per cent. of what they are now.

The names of Henri VandameBoucque and of Fernand Vasseur have been added to the long list of defenders of their country in the Golden Book of the French Brewing Industry. M. Vandame-Boucque, son of a brewery proprietor at Lille, serving the the 43rd Infantry, was killed in action, while M. Vasseur, sergeant in the 9th Battalion of Chasseurs, and son of a brewer at Fruges, has been decorated by the government for having distinguished himself on the firing line.

The government of the Netherlands has established seven local depots in various parts of that country where brewers may obtain barley and malt, all grain having been commandeered. From January to August 103,810 hectoliters of beer were exported from Holland, as compared with 62,180 hectoliters during the same period of 1914.

"Facts" has a letter from Petrograd, Russia, saying: "It is now the settled policy of the Russian government to encourage the wine and brewing industries. The purpose of this is to induce the masses of the people, who have been accustomed to the use of vodka, to use the light alcoholic drinks. The government is now taking steps to encourage the wine industry in the Caucasus. Breweries that manufacture a light grade of beer are being encouraged."

"The government is convinced that the prohibition of high alcoholic drinks cannot be made altogether effective. Experience has shown that the ukase prohibiting the sale of vodka has been followed by illicit distilling on a large scale. More than 3,000 illicit distilleries have been seized in Russia since the prohibition ukase was issued."

"By providing a legitimate means for securing distilled liquor in limited quantities, on the order of the Swedish system, and by encouraging the use of wine and beer the government hopes to ultimately wipe out the traffic in the high alcoholic beverages."

"Although the manufacture and sale of vodka is prohibited in Russia, the manufacture and sale of wine and beer has never been prohibited throughout the empire. Every municipality is permitted to decide for itself whether or not the sale of wine and beer shall be prohibited."

"This system of local option, as it is termed in the United States, has proven beneficial. The majority of the municipalities permit the sale of wine and beer, and the result has been a decrease in drunkenness."

"The Russian government will never return to the old vodka monopoly. That is settled. Under the old system the government manufactured and sold vodka and reaped all of the revenue."

BRAZIL INCREASING ITS MALT IMPORTS. In 1914 the value of the malt imported into Brazil was \$338,464, of which \$44,495 worth came from the United States. Last year the value of the imports of malt had increased to \$632,028, \$556,612 of which came from the United States.

WORLD'S BARLEY PRODUCTION. The International Agricultural Institute estimates that the production of barley in Canada, the United States, England, Italy, Switzerland, Spain, Japan and Tunis is 204,250,000 cwts., representing an increase of 0.6 per cent. as compared with the average production in the period of 1909-1913.

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Anheuser-Busch Brewing Association, St. Louis, are about to establish a storage depot in Omaha, Neb., the cost of which is estimated to be about \$50,000.

—Arlington Brewing Co., Rosslyn, Va., forced out of business by Prohibition, are converting their brewery into an ice-making and storage plant.

—Fred. Bauernschmidt, Baltimore, Md., is building an addition, the estimate calling for an expenditure of about \$18,000.

—Bavarian Brewing Co., Wilmington, Del., are enlarging their plant and installing new machinery.

—Peter Breidt City Brewery Co., Elizabeth, N. J., are erecting an addition for which they have ordered 150 tons of steel from the American Bridge Company.

—M. Burkhardt Brewing Co., Akron, Ohio, are building a garage which is to cost about \$13,000. Their new bottling works will cost \$146,000.

—Calumet Brewing Co., Chilton, Wis., erect an addition to their plant, the new structure to be 23x43 feet, of red brick.

—Chester Brewing Co., Chester, Pa., erect an extensive brick and concrete addition.

—Cleveland & Sandusky Brewing Co., Cleveland, Ohio, erect a \$9,000 storage building at 2600 Carroll Avenue, Cleveland.

—Columbian Brewing Co., Columbia, Pa., have ordered a 3-Arm Improved Colby Racker from A. Magnus Sons Co., Chicago.

—Peter Daelger Brewing Co., New York, have made improvements in their plant by the installation of two ammonia coils, each 26 pipes high by 40 feet long, furnished by the Vilter Mfg. Co., Milwaukee.

—El Paso Brewing Association, El Paso, Texas, have made improvements in their plant by the installation of a 260 horse-power safety water tube boiler, furnished by the Vilter Mfg. Co., Milwaukee.

—Emmerling Brewing Co., Johnstown, Pa., have had a 3-Arm Improved Colby Simplex Racker installed by A. Magnus Sons Co., Chicago.

—Fortune Bros. Brewing Co., Chicago, had another Ruff Simplex Pasteurizer and a 34-spout "H. & K." Bottle Filler installed by A. Magnus Sons Co., Chicago.

—Garden City Brewery, Chicago, had a Ruff Simplex Pasteurizer, Magnus "Cleansoak" Bottle Soaker, Arrow Inverted Type "C" Bottle Washer, and a 34-spout "H. & K." Bottle Filler installed by A. Magnus Sons Co., Chicago.

—Grand Rapids Brewing Co., Grand Rapids, Mich., had a complete bottling outfit installed by A. Magnus Sons Co., Chicago, consisting of: 1 No. C. 25-4 Magnus "Cleansoak" Pocket Bottle Soaker, 1 Magnus Outside Bottle Brusher and Rinser, 2 Arrow Inverted Type "C" Bottle Washing Machines, 2 "H. & K." 34-spout Bottle Fillers, 1 No. 30 Ruff Simplex Pasteurizer, 2 Automatic Star Feeding Devices, 1 Complete Conveying System.

—Jacob Hornung, Philadelphia, erects an addition to his brewery from plans drawn by architects Peuckert & Wunder.

—Houston Ice & Brewing Co., Houston, Tex., have purchased another Improved Colby Racker Arm from A. Magnus Sons Co., Chicago.

—Independent Breweries Co., St. Louis, are making track connections with the manufacturers' railway at Broadway and Dorcas street, St. Louis.

—Frank Jones Brewing Co., Ltd., Portsmouth, N. H., are about to greatly enlarge their plant.

—Gottfried Krueger Brewing Co., Newark, N. J., are remodeling and enlarging their plant and bottling works at a cost of about \$44,000.

—Gerhard Lang Brewery, Buffalo, N. Y., have had three New Improved Colby Racker Arms installed by A. Magnus Sons Co., Chicago.

—Isaac Leisy Brewing Co., Cleveland, Ohio, have had a 4-Arm Improved Colby Racker installed by A. Magnus Sons Co., Chicago.

—Wm. J. Lemp Brewing Co., St. Louis, have made improvements in their plant by installing 16 coils Bleeder type Ammonia Condensers, furnished by the Vilter Mfg. Co., Milwaukee.

—National Brewing Co., Chicago, are having the following bottling machinery installed by A. Magnus Sons Co., Chicago: 1 Magnus 4-Compartment Bottle Soaker, 1 Combined Automatic Outside Bottle Brusher and Rinser, 1 Arrow Inverted Type "C" Bottle Washing Machine, 1 No. 10 Ruff Simplex Pasteurizer, 1 34-spout H. & K. Automatic Bottle Filler.

—Pittsburgh Brewing Co., Pittsburgh, have made improvements in their Keystone Brewery by installing 6 coils atmospheric type ammonia condensers, each coil 24 pipes high by 20 inches 6½ feet long over all, furnished by the Vilter Mfg. Co., Milwaukee.

—Popel & Giller Brewing Co., Warsaw, Ill., had a Ruff Simplex Pasteurizer installed by A. Magnus Sons Co., Chicago.

—E. Porter Brewing Co., Joliet, Ill., have ordered a No. 10 Ruff Simplex Pasteurizer and 34-spout "H. & K." Automatic Bottle Filler from A. Magnus Sons Co., Chicago.

—Reisch Brewing Co., Inc., Springfield, Ill., have ordered 1 4-Compartment Magnus Pocket Bottle Soaker, 1 Arrow Type "C" Bottle Washer, 1 Combined Automatic Outside Bottle Brusher and Rinser, 1 No. 15 Ruff Simplex Pasteurizer, 1 34-spout "H. & K." Bottle Filler from A. Magnus Sons Co., Chicago.

—Ruff Brewing Co., Quincy, Ill., are making extensive improvements in their plant. The old sulphur well, which has been the source of much complaint, will be closed up. A six foot brick sewer has been built, the barn torn down and the creek filled up. New bottling machinery is being installed and a water cooling tower, thirty feet high, will be erected. They have also ordered a 3-Compartment Magnus Pocket Bottle Soaker and Outside Brusher from A. Magnus Sons Co., Chicago. The company also installed 2 coil double pipe type ammonia condensers, each coil 14 pipes high by 20 feet 6½ inches long, furnished by the Vilter Mfg. Co., Milwaukee.

—Jacob Schmidt Brewing Co., St. Paul, Minn., are establishing a distribution depot at Oneida, Minn.

—Standard Brewery, Chicago, enlarge their bottling works at a cost of about \$6,000.

—Standard Brewing Co., New Castle, Pa., have made improvements in their plant by installing 8 coils atmospheric

type ammonia condensers, each coil 24 pipes high by 20 feet 6½ inches long over all, furnished by the Vilter Mfg. Co., Milwaukee.

—Star Brewing Co., Lomira, Wis., establish a distributing depot at Juneau, Wis.

—United Breweries Co., Chicago, had the following bottling machinery installed in their Monarch plant by A. Magnus Sons Co., Chicago, Ill.: 1 Magnus "Cleansoak" Bottle Soaker, 1 Magnus Outside Bottle Brusher and Rinser, 2 Arrow Inverted Type "C" Bottle Washers, 1 Ruff Simplex Pasteurizer, 1 34-spout "H. & K." Bottle Filler.

—Weidemann Brewery Co., Orange, Conn., erect a new garage for their fleet of auto-trucks.

—West Bend Malting Co., West Bend, Wis., are rapidly completing the part of their plant destroyed by fire several months ago and machinery is now being installed.

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, November 21st, 1916.

California went "wet," defeating amendment No. 1, which was the total Prohibition amendment by 100,000, and defeating amendment No. 2, which was almost Prohibition, by 48,000. The day after election will long be remembered by every one connected with the liquor business, as on that day it was reported that California had gone "dry." The afternoon papers got out a number of extras, all carrying this depressing news, and it was not until Thursday morning that the rank and file of the trade were assured that California had been saved. California has not yet entirely surmounted the menace of Prohibition, however, as the new Legislature in going to try to "regulate" the liquor business with a more or less drastic bill. The Legislature is largely composed of "dry" legislators.

The liquor men do not feel jubilant over their victory, as they won by a less majority than two years ago and the southern part of the State went "dry" this time. It was expected that Los Angeles County would return a majority for the "wets," but instead it returned a big majority for the "dry." San Diego County, too, was a disappointment. J. Henry Zitt, of the San Diego Brewing Co., had charge of the campaign there and did splendid work, but he was unable to keep back the Prohibition wave that engulfed the county.

San Francisco saved the State. Everywhere you hear good old San Francisco did it—and it did, as it defeated amendment No. 1 by 85,748 votes, and amendment No. 2 by 76,852. But can it do it again—that is the question that is on every one's lips, as the Prohibitionists have already announced that they will try again 2 years from now.

The only new feature of the campaign in San Francisco was the women's organization. The women were organized 10 days before election by Mrs. Todd Carson, under the name of the Women of the Allied Interests. Oakland had such an organization since the first of the year. Eleven hundred women joined the organization and demonstrated that the women would stand shoulder to shoulder with the men in the fight against Prohibition. Nearly 1,000 women pledged themselves to call up 10 women each whom they knew were going to vote "wet" and keep at them until they knew that they had voted. This helped greatly in polling the vote. Seventy women worked all day under the directions of Mrs. Carson getting the women who wished to vote "wet" employed down-town to the polls. They tried as much as possible to see that the working women voted during the business day so as to leave the polls free during the morn-

ing and evening hours for the men. The organization was aided in its work by 48 autos, which were donated for the day by men not connected with the liquor business, but who wanted to see California stay "wet" and prosperous. The leading spirits in the organization were wives of brewers. Mrs. A. E. Kroenke was the first vice-president of the organization (Mrs. Carson acted as president), and Mrs. H. F. Windeler, Mrs. W. Windeler and Mrs. W. A. Remensperger were chairmen of important committees. Mrs. O. H. Huber, whose husband is a collector for the National Brewing Company, was chairwoman of the membership committee.

Louis Hemrich, of the Rainer Brewing Co., returned to San Francisco shortly after the election from Seattle, where he went to take charge of the fight for the brewer's bill in Washington. They put up a good fight but the bill was defeated, and no wonder; every boot-legger and blind-pigger and dishonest policeman and grafting politician was working against the bill, as it would put an end to their rotten graft.

Mr. Hemrich is in favor of the saloon with certain regulations. In Washington he was responsible for the cutting down of the number of saloons and regulating them until Washington was known as the State with the ideal saloon. In Seattle, for instance, along with drastic closing laws they would not permit a saloon on a corner, all the saloons there were down-town and in the middle of the blocks and there was no complaint against them, but Prohibitionists wiped them out of existence and to-day have a strangle hold on the State. As Mr. Hemrich put it: when you reduce the number of saloons you reduce the "wet" forces and make it easier for the Prohibitionists.

On January 1st Mr. Hemrich will go to Honolulu to select a site for a brewery there to take care of their large Hawaiian Island business. The equipment will be moved from Washington breweries, which are now lying idle.

The California brewers will hold their State convention either the 4th or 11th of December. Thomas Alton, president of the organization, is now resting after the strenuous work before election days.

Oregon passed the "bone dry" amendment which bars the shipment of liquors into Oregon. The law will not become effective until the State provides the necessary legislative machinery for its operation. The Legislature meets in January, and it is expected that the law will become effective shortly after that.

Harry Fraser, hop grower of Sacramento valley, has called a meeting of hop growers at Sacramento to consider ways and means of bettering the hop grower's condition. One of the surprises of the election was the fact that the hop-growing districts voted "wet," while the grape districts, like Fresno, voted "dry." C. C. Donovan, a hop dealer of Santa Rosa, is advocating, through the press, deviding the saloons into two classes, one selling only light wines and beers, and the other only whiskey and highly alcoholic drinks.

"WHAT IS PROHIBITION? Ask us something hard, Teacher. Prohibition is a synonym for Sour Stomach, Heartburn, Dyspepsia, Gout, Bunions, Toothache, Neurasthenia and Insanity."—"Prohibition Polly."

FOOLS' KEY TO PARADISE. "Men sought to enter Paradise by the fool's key, and abused to that end what was meant for their exhilaration when used in moderation and with care. To rise above that temptation by self-control is to achieve a moral gain of the highest value."—(Prof. Robert E. Thompson, Principal Philadelphia High School.)

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

Officers have been elected by brewery companies as follows:

Anchor Brewing Co., Brackenridge, Pa.: President, John C. Wellinger; vice-president and treasurer, Charles P. Wellinger; secretary, Frederick Wellinger; superintendent and brewmaster, Gustave W. Hauch.

Bakersfield Brewing Co., Bakersfield, Cal.: Vice-president, John Baumgartner; treasurer and brewmaster, William Baumgartner; secretary and general manager, Joseph Baumgartner.

Bartels Brewing Co., Edwardsville, Pa.: President, James R. Nicholson; vice-president and general manager, F. L. Schott; secretary, Herbert S. Sage; treasurer, Chas. E. Shinaman; attorney, Jerome L. Cheney; brewmaster, Peter Jentzer; additional directors, Horace White, J. Frank Durst, E. I. White, John McGahren, Herbert S. Sage, Jerome L. Cheney; Judges of Election, Michael C. Russell, Jr., and George W. Carr.

Bergner & Engel Brewing Co., Philadelphia: President, Gustavus K. Bergner; vice-president, Gustavus B. Fletcher; secretary and treasurer, George W. B. Fletcher. The brewmaster is C. J. Walther.

Louis Bergdoll Brewing Co., Philadelphia: President, Edward C. Schmidheiser; secretary and treasurer, Harry Rieger; general manager, Charles Barth; additional directors, Charles F. Schoening, Mrs. Louise Alter, Albert C. Woerwag, Henry P. Sauers and Albert Hall. The brewmaster is Peter Keller.

Buckeye Brewing Co., Toledo, Ohio: President, John T. Coghlin; vice-president, James E. Rundell; secretary-treasurer and general manager, Herbert R. Wilson; assistant secretary-treasurer, Otto W. Cummerow; additional directors, George E. Pomeroy, W. L. Coghlin, J. M. Gibbons and James M. De Lone. The brewmaster is Paul Scheuplein.

Cold Spring Brewing Co., Lawrence, Mass.: President, August Stiegler; vice-president, Herman Yunggebauer; treasurer and general manager, Louis K. Siegel; secretary, Walter A. Singer; additional directors, David Bailey, Henry Schonland, Jr., Herbert W. Horne, Gustav Plisch, Henry J. Koellen, Charles E. Trumbull and Hugo Moeser. The brewmaster is John Rathgeb. The annual report shows good business for the past year. The charter has been changed from a West Virginia to a Massachusetts corporation.

Columbia Brewing Co., Detroit, Mich.: Brewmaster, George Walker, formerly brewmaster for the Koppitz-Melchers Brewing Co., Detroit.

Eagle Brewing Co., Utica, N. Y.: President and general manager, William F. Welch; vice-president, William Quinn; secretary-treasurer, W. V. Quinn; superintendent and brewmaster, H. J. Luebbert; additional directors, Mrs. M. A. Quinn and Miss A. C. Myers.

East Grand Forks Brewing Co., East Grand Forks, Minnesota: President, M. White; vice-president, M. A. McInerney; secretary and treasurer, J. N. O'Keefe; general manager, J. H. McInerney; brewmaster, Anton Rottweiler.

Edmonton Brewing & Malting Co., Ltd., Edmonton, Alberta, Canada: President, D. R. Ker, Victoria, B. C.; vice-president, T. W. Lines, London, England; secretary, J. G.

Walford; managing directors, W. H. Sheppard, W. E. Lines. The brewmaster is Archer Folkers.

Fred Feil Brewing Co., Philadelphia: President, L. Feil; treasurer and general manager, William F. Feil; secretary, Otto C. Feil; brewmaster, William Wurster.

Flower City Brewing Co., Rochester, N. Y.: President, Frederick Kuefer; vice-president, John C. Enders; treasurer, Edwin A. Medcalf; secretary, William F. Enders; superintendent and brewmaster, William F. Otto; additional director, Mrs. Barbara Enders.

Independent Brewing Co., Pittsburgh: President, W. P. Hansell; vice-president, C. H. Friend and J. P. Mulvihill, v. p. and sales manager; treasurer, J. H. Friday; secretary, H. C. Baxmeier; additional directors, John A. Beck, Orlando Miller, Justus Mulert, George J. Schmitt and S. Zoch. From the company's annual report it appears that its net profit in 1915-1916 amounted to \$612,240.02, that \$315,000 was paid in dividends on preferred stock, and that the surplus was \$1,780,694.21.

Kennedy & Murphy Brewing & Malting Co., Troy, N. Y.: President, John J. McCormick; vice-president and treasurer, Kyran F. Walsh; brewmaster, C. S. Babcock.

Krantz Brewing Co., Findlay, O.: President, George Altmeyer; vice-president, W. S. Altmeyer; treasurer and general manager, William J. Altmeyer; secretary, Peter G. Altmeyer; additional director, N. E. Altmeyer. The brewmaster is Ernst Hafenbrack.

Marion Brewing & Bottling Co., Marion, Ohio: President, Samuel Kraner; vice-president, John H. Hanley; treasurer, J. C. Harvey; secretary and general manager, John A. Abel; additional directors, J. G. Fairbanks, George B. Scofield and William Morgenthaler. The brewmaster is Hans G. Mueller.

Louis Obert Brewing Co., St. Louis: President, Louis Obert, Jr.; vice-president superintendent and brewmaster, Wm. A. Obert; secretary-treasurer, Chas. L. Obert.

Peoria Malting Co., Peoria, Ill.: Manager for the company's Pekin plant, Louis King, formerly with the F. A. Valk Malting Co., Pekin, Ill.

Phoenix Brewing Co., Ltd., Phoenix, British Columbia, Can.: President, Theodore Biner; vice-president and general manager, Dan Biner; secretary and treasurer, Albert F. Biner; brewmaster, W. H. Biner; additional directors, Gus Biner and George Biner.

Pittsburgh Brewing Co., Pittsburgh: President, C. H. Ridall; secretary, W. P. Heckman; treasurer, Edward H. Straub; vice-president, E. J. Vilsack; additional directors, A. A. Fraunheim, A. H. Sunshine, Edward Gwinner, Alois Winter, L. P. Monahan; brewmasters, Gus. A. Fritz, Iron City Brewery; D. K. Straub, Straub Brewery; Jos. Gauggel, Wainwright Brewery; Fred C. Klussman, Baeuerlein Brewery; Martin Nusskern, Eberhard & Ober Brewery; Bernard Gutbrod, Phoenix Brewery; Philip Hoffman, Keystone Brewery; K. Zimmerman, Winter Brewery; Carl Vollmer, McKeesport Brewery; Harry Beisinger, Jeannette Brewery; Herman Sachse, Latrobe; Frank Koehle, Mt. Pleasant; J. B. Mitereder, Connellsville, and John Hasenkopf, Uniontown. Superintendents: E. J. Vilsack, Iron City Brewery; Charles F. Ober, E. & O., Troy Hill; R. A. Miller, Wainwright; John Seiferth, Keystone and Winter; C. W. Blumer,

Phoenix; M. J. Kennedy, Mt. Pleasant, Jeannette and Latrobe; Alex McBeth, Uniontown; Agent, J. H. Bracken, Johnstown, Pa. Dividends aggregating \$533,757 were paid to stockholders in 1916, the net earnings amounting to \$1,783,815, as compared with \$1,141,252 in 1915. The number of barrels sold in 1916 was 668,428, against 525,488 in 1915.

Portsmouth Brewing Co., Portsmouth, N. H.: President, treasurer and general manager, William F. Harrington; vice-president and clerk of the corporation, George W. Pollard; additional directors, Patrick F. Gallagher, Lawrence J. Harrington and J. H. McClinchy. The brewmaster is Oskar G. Aichel.

Robert Portner Brewing Co., Alexandria, Va. (changing charter to Robert Portner Corporation, to permit other business): President, Alvin O. Portner; vice-president, Paul V. Portner; secretary-treasurer, George H. Beuchert; additional directors, Oscar C. Portner and William P. Meredith.

Rieger & Gretz Brewing Co., Philadelphia: President, William Gretz; treasurer and brewmaster, Charles W. Gretz; secretary, William Gretz, Jr.; additional directors, Leonard Rieger, Jr., and M. Rieger.

George Ringler & Co., New York: President, George Ehret, Jr.; vice-president, J. Edward Jetter; treasurer, George F. Trommer; secretary, Christian E. Jetter.

Schwenk-Barth Brewing Co., Yankton, S. D.: President, F. W. Schwenk; vice-president, W. F. Pierson; secretary and treasurer, E. O. Walgren; additional directors, W. J. Fantle, W. S. Stockwell, H. E. Brisbine and Peter B. Dirks. The brewmaster is H. Ph. Haar.

Sweetwater Brewing Co., Green River, Wyoming: President, Sam J. Sorensen; vice-president, John H. Crosson; secretary-treasurer and general manager, Hugo Gaensslen; additional directors, A. C. Stephensen and E. A. Gaensslen. The brewmaster is James Thomsen.

Victor Brewing Co., Jeannette, Pa.: President and general manager, F. A. Maddas; vice-president, J. F. Lutz; secretary-treasurer, R. A. Cicone; brewmaster, Daniel Sutter.

Ziegele Brewing Co., Buffalo, N. Y.: President and general manager, George C. Ginther; secretary and treasurer, C. F. Ginther; brewmaster, Fritz Silber.

BRITISH-AMERICAN BREWERIES. The directors of the New England Breweries Co., Ltd., have announced an interim dividend of 1½ per cent. on the ordinary shares.

AS BEN FRANKLIN PUT IT. "The only animals created to drink water are those who from their conformation are able to lap it on the surface of the earth; whereas, all those who can convey their hands to their mouths were destined to enjoy the juice of the grape."—(Benjamin Franklin.)

THE ANNUAL CONVENTION OF THE NEW YORK STATE BREWERS' ASSOCIATION will be held in the Brewers' Board of Trade Building in the City of New York on Wednesday, December 6th, 1916, at 2 o'clock P. M. This meeting will be of the utmost importance, not only to the members of the Association, but to the entire brewing industry of this State. The personal attendance of every member who can possibly be present is eminently desirable, as the issues which confront the industry are grave in character and call for thorough deliberation and united action. Every member of the State Association should take part in the proceedings of this Convention, not only as a matter of personal concern but in the interest of the industry at large. Cards of admission will be issued on application therefor to Secretary Chas. J. Werner.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

NEW BREWERY

ILLINOIS—Chicago The North American Brewing Company. Succeeds Tabor Brewing Co.

FIRM CHANGES.

MINNESOTA—Mankato Mankato Loan & Trust Co., as Receiver of Engesser Brewing Co., succeeds Engesser Brewing Co.

" —Owatonna Wm. C. Zamboni, Executor of Estate of Peter Ganser, succeeds Peter Ganser.

PENNSYLVANIA—Patton Arthur C. Simler, as Receiver of Patton Brewing Co., succeeds Patton Brewing Co.

BREWERIES CLOSED

MINNESOTA—Brainerd The Brainerd Brewing Co.

" —Pine City Amalie Buselmeier.

MISSOURI—Kansas City Stulz Brothers.

NEW YORK—Troy D. J. Whelan Estate (Jas. A. Whelan, Atty.).

WISCONSIN—Shullsburg Shullsburg Brewery.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1916 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, alphabetically arranged, with postal addresses, corrected to January 15, 1916, also in all other American countries where breweries exist.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries and firm changes recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

PUNISHING THE WRONG FELLOW. "Prohibition emanates from the enactment of law. Temperance springs from the proper exercise of good character. Prohibition punishes me for your wrong."—(The Chicago "Booster.")

THE LAGER BEER BREWERS BOARD OF TRADE OF NEW YORK AND VICINITY, at its annual meeting held November 8th, elected the following officers and trustees: Officers for the ensuing year: President, Adolph G. Hupfel, Jr.; vice-president, William Horrmann; treasurer, Fred. W. Woerz. Trustees for five years: G. R. Potts, of Newark, N. J.; Gustave W. Lembeck, of Jersey City, N. J.; Adolph G. Hupfel, Jr. Trustee to fill a vacancy for two years: William Horrmann, of Staten Island, N. Y.

THE NATIONAL ASSOCIATION OF COMMERCE AND LABOR, at its convention held in Cleveland, Ohio, November 22nd, 1916, elected the following officers: President, Charles J. Lilienthal, Chicago; Chairman Ex. Committee, Theodore Vilter, Milwaukee; Vice-president, Frank Pentlarge, New York; Secretary, Edward Hanish, Chicago; Finance Committee, Carl Berger, Cincinnati, Ohio; G. L. Savage, New York; August Magnus, Chicago; Executive Board, Richard Bruns, Chicago; Dr. Alford Fischer, Milwaukee; Philip Rose, New York; J. A. Roney, Newark, N. J.; Herman Wolf, Philadelphia; Chr. Schott, Cincinnati, O.; Otto Horix, Cleveland, O.; Fred Wehmiller, St. Louis; Ralph Goudy, Boston; Frederick Zollman, St. Paul, Minn.; Peter M. Guenther, Buffalo, N. Y.; Geo. A. Deatel, Baltimore, Md.; N. G. Williams, Rochester, N. Y.; W. E. Kusen, Pittsburgh; Machinery Mfg., Henry Scarbrough, Milwaukee; Bottle Manufacturers, Allen Laird, Terre Haute, Ind.; Maltsters, Oscar J. Ruh, Chicago; Corn Millers, Charles A. Steinwachs, Detroit, Mich.; Hop Dealers, Theodore Rosenwald, New York.

Personal Mention.

GUSTAVUS W. BERGNER, president of the Bergner & Engel Brewing Co., Philadelphia, and his wife have announced the marriage of their daughter Joan, to Berton Bew, whose father is president of the Ventr City National Bank, Atlantic City, N. J. The wedding was celebrated October 2nd.

MRS. EDWARD M. BURGHARD, daughter of George Ehret, New York, and wife of his legal adviser, will give a supper and dance at the Ritz Carlton, December 8th, in honor of her daughter-in-law to be, Miss Vivienne Kranich, who is engaged to Edward G. Burghard.

CLARA BUSCH, second daughter of August A. Busch, president of the Anheuser-Busch Brewing Association, St. Louis, was married November 1st to Percy Orthwein, son of Mr. and Mrs. William D. Orthwein. The ceremony was performed at Grant's Farm, the home of the bride's parents. About four-hundred guests attended the reception which followed the ceremony. The bride is twenty years old and the bridegroom twenty-six. He is a graduate of Yale and studied art in Munich.

CHARLES BUTZ, brewmaster of the John Hauck Brewing Co., Cincinnati, Ohio, has purchased a handsome residence on Lenox Place, Avondale, worth over \$15,000.

HERMAN CRON, superintendent and brewmaster for Goerner & Co., Johnstown, Pa., is about to become a benedict, the parents of Miss Annie Davis, Brooklyn, N. Y., having announced the engagement of their daughter to Mr. Cron.

LOUIS M. EBLING, vice-president of the Ebling Brewing Co., New York, last month enjoyed a very successful hunting trip through Sullivan County, N. Y., in company with a number of friends.

GEORGE EHRET, JR., New York, was the recipient of thousands of hearty congratulations on Friday, November 3rd, when he celebrated the forty-first anniversary of his birth.

CHRISTIAN W. FEIGENSPAN, president of Christian Feigenspan, Inc., Newark, N. J., in conjunction with another well-known Newark philanthropist, has offered to pay to the Board of Trustees of the German Hospital of that city, the cost of construction of three new buildings to be used exclusively for the treatment of children. There will be twenty-four beds and the cost is estimated at \$15,000.

SIMON FISHEL, president of the Cleveland & Sandusky Brewing Co., Cleveland, Ohio, was presented with a solid silver tray, November 15th, by his colleagues and friends in the trade who gave a dinner in his honor at the Cleveland Athletic Club. Mr. Fishel has attained the seventy-second year of his health and he is attending to his duties at the company's office and plant as vigorously as ever.

CHRISTIAN GERHARDT, the well-known and successful manufacturer of brewers' brushes, New York, celebrated the sixtieth anniversary of his birth on Saturday, November 11th. He is at present Master of Teutonia Lodge No. 617, F. & A. M.

CHARLES W. LAPPE, brewmaster of the German-American Brewing Co., Buffalo, N. Y., is the lucky winner of an election bet, as a result of which on November 11th he led a parade in which several men of the company's office force, and Sam Rautenberg, manager of the bottling department, had to walk about ten miles, while Mr. Lappe, followed by a band of musicians, was riding.

H. L. LIEBMANN, vice-president of Obermeyer & Liebmann, Brooklyn, N. Y., who had been touring the Pacific Coast, has returned from his pleasing and instructive journey of "America first."

CARL A. MICHEL, president and general manager of the C. & J. Michel Brewing Co., La Crosse, Wis., has married

Miss Nina Maria Faustmann, of Ripon, Wis., the wedding having taken place October 4th.

JOHN MARTIN OTTO, known throughout the trade as the inventor of one of the most approved beer-coolers, for which he was awarded a gold medal at the World's 1776-1876 Fair in Philadelphia, and his wife, Agnes Wilhelmina, née Roehr, celebrated the fiftieth anniversary of their wedding, which took place in Brooklyn, N. Y., November 11th, 1866.

LOUISE GERTRUDE PIEL, daughter of the late Michael Piel, one of the founders of Piel Brothers, Inc., pioneer brewers in Brooklyn, N. Y., was married, November 11th, to Erwin Lange, American vice-consul at Brussa, Turkey, the ceremony being performed by the Rev. Julius Hofmann, of Baltimore, at the residence of the bride's mother, Mrs. Michael Piel, 245 West 72nd Street, New York. After their honeymoon trip the happy couple returned to New York and engaged passage to Turkey, to sail to-morrow.

HENRY RUFF has retired from the office of president of the Ruff Brewing Co., Quincy, Ill., having sold his interest in the company to its general manager and secretary, William J. Ruff. Mr. Ruff, who is now seventy-seven years old, and his wife have gone to California to rest from the cares and burdens of a busy life.

MEYER SILVERGLADE, president and general manager of the Crown Brewing Co., Cincinnati, Ohio, was entertained at a banquet by the employes of the company, November 17th, prior to his leaving for Florida, where he is spending the winter months.

FELIX SPITZNER, brewmaster and superintendent of the Central Brewing Co., New York, on Saturday, November 25th, celebrated the sixteenth anniversary of his being connected with the Central Brewing Co.

AUGUST STIEGLER, the retiring treasurer of the Cold Spring Brewing Co., Lawrence, Mass., has been with the company since it was founded, twenty-two years ago, the first four years as treasurer and for eighteen years as treasurer and manager. Under Mr. Stiegler's management the plant has grown to a large and prosperous business concern. Mr. Stiegler has been elected president of the company, but he will take up no other active position, believing that in the few remaining years of his life he is entitled to a rest.

CHARLES TSCHANETT, of the Peter Doelger Brewing Co., Inc., New York, and his wife announce the marriage of their daughter, Theresia Magdalena, to Henry Siebrand Niewenhaus, of New York. The ceremony was performed November 20th, at the Church of the Immaculate Conception, 150th Street, New York, by Father Bader, of the Redemptionist Congregation, a large number of relatives and friends of both families being present, who also partook of the wedding breakfast given by the bride's parents.

ROBERT A. UHLEIN, secretary and treasurer of the Jos. Schlitz Brewing Co., Milwaukee, was on a hunting trip with a number of friends in British Columbia last month. The party succeeded in bagging three caribou, several wild sheep and goats and one grizzly bear.

HON. CHARLES J. VOPICKA, United States minister to Rumania, Bulgaria and Serbia and the only man in Uncle Sam's diplomatic service who enjoys the distinction of being minister at the same time to two countries at war with one another, was fifty-nine years old November 3rd. Mr. Vopicka was born in Bohemia, and came to the United States in 1880, locating in Chicago, where he soon became connected with large banking and real estate interests and later was elected

president of the Atlas Brewing Company. He had been for many years prominent in Chicago politics. Mr. Vopicka's headquarters as minister to the Balkans were in Bucharest and the summer home in the seaboard town of Constanza. At this critical time Mr. Vopicka is luckily on leave of absence to America with his family.

ADAM CARL WAGNER, treasurer and manager of the New England Brewing Co., Hartford, Conn., has announced his marriage to Miss Anna V. Wall.

MRS. WILLIAM F. WELCH, wife of the president of the Gulf Brewing Co., Utica, N. Y., and her two daughters, Mary and Catherine, narrowly escaped serious injury November 13th, when their touring car was struck by a switching engine of the Ontario & Western railroad, damaging the auto and slightly injuring the chauffeur. The ladies were not hurt.

American Society of Brewing Technology.



The second meeting of the Chicago Section of The American Society of Brewing Technology for the season 1916-1917, was held Thursday evening, November 16th, at the Hotel Kaiserhof, Chicago. The paper of the evening was on "Sterilization of Beer by Filtration," read by Edward Zahm, President of the Zahm Manufacturing Co. In this paper and in the subsequent discussion of the paper Mr. Zahm submitted many interesting data, both with Reference to the principles involved and apparatus used.

In the question-box, the question submitted was "What advantages are to be obtained through the employment of Burtonizing Salts in the various forms offered to the brewer?" This question brought forth a number of replies, which were all read at the meeting. As the hour was late, discussion of this subject was held over until the next meeting which will take place in January.

SOCIETY ISLANDS' FIRST BREWERY. F. Vernaudo and J. Stergios, manufacturers of ice and of soft drinks in Papeete, are erecting the Society Islands' first brewery. The material used in the construction of the building is largely American, and the machinery and equipment for a modern plant are of American manufacture. Interested in the enterprise with Messrs. Vernaudo and Stergios are Alexander Stergios (a brother of J. Stergios), a naturalized American citizen living in Los Angeles, Cal., and A. C. Pollner, of Allegheny, Pa. The latter is here supervising the erection of the plant and will remain as manager.—(Consul Thomas B. L. Layton, Tahiti.)

ANGLO-SAXON LOVE OF LIBERTY. "It is the boast of the Anglo-Saxon race that from the earliest days they have had implanted in their breasts a love of personal liberty. It is true that in collective life some of that personal liberty must be given up to the general good. But the Anglo-Saxon has ever been jealous of every encroachment upon his personal liberty and yields even a modicum at the behest of collective life grudgingly. Laws that encroach, if they are to be respected, must be necessary and obviously effective for the purpose enacted. Whenever the law-making power has been prostituted by extremists, statutes thus enacted have never been enforceable, particularly when they circumscribed the dearly prized right of personal liberty."—(Hon. W. W. Osborne, Savannah, Ga.)

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. President Wm. F. Carthaus, of the Master Brewers' Association of the United States, announces the following appointments made by him for the fiscal year 1916—1917:

Corresponding and Recording Secretary, and Editor of the Monthly "Communications"—Carl A. Nowak, 2027 Railway Exchange, St. Louis, Mo.

Technical Committee—Adolph Walther, Green Tree Brewery, St. Louis, Mo., Chairman; A. P. Otto Moeller, National Brewery, St. Louis, Mo.; John N. Birsner, Star Brewery, Belleville, Ill.; Aug. H. Ritter, Hyde Park Brewery, St. Louis, Mo.; Geo. J. Friedrich, Western Brewery, Belleville, Ill.; C. A. Nowak, Secretary.

Advisory Committee—Wm. Hipp, C. Schmidt & Sons Brewing Co., Philadelphia, Pa., Chairman; Oscar G. Aichel, Portsmouth Brewing Co., Portsmouth, N. H.; Henry Hoerl, Val. Blatz Brewing Co., Milwaukee, Wis.; J. P. Rettenmayer, Acme Brewing Co., San Francisco, Cal.; Wm. F. Carthaus, Wm. J. Lemp Brewing Co., St. Louis, Mo.

Barley and Hop Committee—Fritz Bock, Pabst Brewing Co., Milwaukee, Wis., Chairman; Louis W. Silberschmidt, Gund Brewing Co., La Crosse, Wis.; Hans B. Bauer, Wm. Rahr Sons' Co., Manitowoc, Wis.; Wm. Breuer, Berghoff Brewing Association, Fort Wayne, Ind.; Julius Kerber, Cream City Brewing Co., Milwaukee, Wis.

Finance Committee—Ernst Uhlmann, Hinckel Brewery Co., Albany, N. Y., Chairman; Carl Fuchs, Berkshire Brewing Ass'n, Pittsfield, Mass.; Wm. F. Otto, Flower City Brewing Co., Rochester, N. Y.

Committee on Arbitration—Henry Reininger, Consumers Brewing Co., New Orleans, La., Chairman; Oswald Kulewatz, West Side Brewery, Detroit, Mich.; F. C. Klusmann, Bauerlein Brewery, Allegheny, Pa.

District Meetings.

ALBANY. The Albany District has received and approved the convention report of its Delegate, Henry Sturm, and tendered him a vote of thanks. It was resolved to place the District on record as favoring that all communications shall be in the English language. To colleague George Fritsching, who has lost his position, a withdrawal card has been granted.

BOSTON. The 104th regular meeting of the Boston Section was held on Saturday, November 4th, at the A. J. Houghton Co., Boston, with a very good attendance. President Jas. K. Carroll occupied the chair. The Committee on Membership reported good progress and applications were received from John W. Russert, assistant brewer at the A. J. Houghton Co., and Frank Duld, assistant brewer of the Old Colony Breweries, Ltd., Fall River, Mass. Both these gentlemen were unanimously elected as members of the District. Ernest L. Rueter, of Boston, and Emil Schlichting, president of the National Brewers' Academy, New York City, were unanimously elected Honorary Members of the Boston District. Mr. Schlichting, who was present as a guest, accepted the honor in a few well chosen words. Chairman Carroll, who was the delegate to the Convention of the New York District in Buffalo, submitted a very interesting detailed report of the most important happenings and conclusions of the Convention. The report was approved and unanimously accepted with the thanks of the officers and members. The Technical Committee presented for general discussion the subject of the use of aluminium in general brewing practice; this question became the most interesting topic of the evening in which everybody present participated stating his experience and views. Mr. Schlichting

was kind enough to act as a referee and, in summing up all the various point, stated that aluminium, provided it was of high purity and free from metallic sodium, was no doubt a very valuable and suitable metal for many utensils and apparatus in the brewery. He called attention to the remarkable, advantageous qualities of this metal, such as its permanence in the air, its easy malleability, its low specific gravity, its resistance towards dilute acids as well as its harmlessness from the physiological standpoint. He pointed out that aluminium could be very well employed for the construction of fermenting vats, yeast tubs, storage casks, as well as filtering frames. After the business of the evening was concluded, the members were cordially invited by Mr. Russert to partake of a fine luncheon, and everybody enjoyed a very pleasant time of social relaxation.

R. F. NICOLL, Secretary.

DETROIT. The Detroit District has re-elected its officers: President, Conrad Koppitz; vice-president, John Zynda; treasurer, Otto Rosenbusch; corresponding secretary, Alois J. Reis, c. o. John Zynde & Bro., Detroit, Mich.; financial secretary, Herman A. Rosenbusch. To the colleagues in Buffalo, N. Y., a vote of thanks was tendered for their splendid hospitality enjoyed by the District's delegates and members who attended the Buffalo convention. The deliberations of the Convention were discussed and were considered as a step in advance. Local affairs, especially the impending election, were discussed, whereupon the meeting adjourned to follow the invitation of colleague Zynda, at whose home a delightful luncheon was served, young Mrs. Zynda proving to be an excellent hostess.

MILWAUKEE. The Milwaukee District has granted a withdrawal card to colleague Frank Wismeth, formerly brewmaster in Marshfield, Wis., and Stevens Point, Wis. Otto Roesch, of the Jung Brewing Co., and Herbert Uihlein, of the Joseph Schlitz Brewing Co., both of Milwaukee, have been admitted to membership.

NEW ORLEANS. The New Orleans District has received, discussed and approved the report of its Delegate to the Buffalo convention, Henry Reininger, and tendered him a unanimous vote of thanks.

NEW YORK. With President Robert Weigel in the chair, the District New York held its regular monthly meeting on Saturday, November 11th. In honor to the memory of our deceased honorary member Chas. C. Clausen, and associate member Edward Reher, the chairman requested those present to arise from their seats. A copy of the letter dated November 4th, addressed to all of the Secretaries by our National Secretary, was read and the points therein, all of which were interesting and for the well being of our Association, were thoroughly discussed. It was the sense of this meeting that the District New York do its share of the work outlined and which is expected of all the Districts. A committee, consisting of the colleagues Gress, Balz, Koenig and Papai, were appointed to report at the next meeting, where and when this winter's ball and banquet can be held.

JOHN KOENIG, JR., Secretary.

PHILADELPHIA. The members of the Philadelphia District, after having accepted the report of their representatives at the Buffalo convention, adopted resolutions heartily endorsing the administration of the National Association; also thanking the colleagues in Buffalo for their hospitality and fine entertainment of the Philadelphia colleagues who attended the convention.

ST. LOUIS. The St. Louis District has re-elected its officers: John N. Birsner, president; Adolph Schmedtje, vice-

president; Frank J. Thobes, treasurer; Louis J. Laugel, secretary. The Board of Directors are: Aug. H. Ritter, Henry B. Wellenkoetter and George J. Friedrich. The report of the District's Delegate to the convention in Buffalo, colleague A. P. Otto Moeller, has been approved by the members.

—By order of Referee Coles of the St. Louis Bankruptcy Court, the plant of the Mutual Brewing Co., St. Louis, was closed November 14th.

—It is reported that the E. Becker Brewing Co., Lancaster, Ohio, is to give up brewing and to turn its plant into one for the making of artificial ice.

—The Common Council of Wyandotte, Mich., has purchased the property of the Eureka Brewing & Ice Co., defunct since 1910, to be used as a filtration plant for the Wyandotte municipal water works.

—Officials of the Peter Doelger Brewing Co., Inc., New York, entertained in an interesting manner a large party of newspapermen, their wives and friends and conducted them on a tour of inspection of their fine brewing plant, November 18th.

—The officials of the Fehr Brewing Co., Louisville, Ky., on November 16th, hospitably entertained the exhibitors and visitors at the convention of the Kentucky Ice Manufacturers' Association, held in Louisville last month.

—Charles R. Husk, auditor for the New Orleans, La., branch of the Anheuser-Busch Brewing Association, St. Louis, was knocked down by a street car in New Orleans October 18th and died at the Charity Hospital a few hours later.

—About \$300 was taken from a safe in the office of the Wm. J. Lemp Brewing Co. at 234 North Fifth Street, East St. Louis, Ill., by burglars who were not noticed by a watchdog kept in the office, doggie being fast asleep while the cracksmen were cracking.

—Rainier beer was prominently represented at the National Pure Food show held last month at the Civic Auditorium at San Francisco. A booth was devoted to the display of Rainier beer and the gold medal banner they won at the Panama-Pacific Exposition.

—Detectives for the Rubsam & Horrmann Brewing Co., Staten Island, N. Y., have succeeded in capturing one Charles Pechanda, who had embezzled \$965.15 from the company. They found him engaged as a strike-breaker on a trolley line and he is now in jail.

WORKMEN KNOW BETTER. "The manufacturers who are demanding that their employees become total abstainers are sadly mistaken if they believe for a moment that the movement for fairer and juster relations between employer and employee can be checked by raising the "temperance" issue. The workers know that their plans for social betterment will be long delayed, if not made impossible of achievement, if the people can be convinced that liquor is the cause of all social ills. They know that giving up drinking will not bring about shorter hours, higher wages, or any of the other reforms for which they are striving. And they will resent the attempt to divert public attention from the need for social reforms by the pretense that excessive drinking is responsible for the condition of labor."—(Whidden Graham.)

Obituary.

JOHN BAUERMEISTER, vice-president of the Washington Brewing Co., Columbus, Ohio, died at his home in that city on Tuesday, November 7th, having been a sufferer from arterial sclerosis for the last two years. He was born in Germany sixty-one years ago. In his early years in Columbus he followed the blacksmith's trade but has been connected with the brewing company since its organization. He is survived by his wife, two sons, Harry and John Henry Bauermeister, and one grandchild.

CHARLES EMIL ERNST, vice-president and treasurer of the Independent Brewing Association, Chicago, died in that city, November 11th, at the age of seventy-three years. He was born at Neuweiler, Baden, and came to the United States in 1858. His successful activity in the brewing industry dated from organizing with his two brothers the firm of Ernst Brothers, who, from 1885 to 1900, operated the plant of the Ernst Brothers Brewing Co. on Larrabee Street, which went out of business when the Ernst Brothers and their partners founded the Independent Brewing Association to the interests of which the deceased devoted himself until severe illness compelled him to cease working. He leaves one son and four daughters, one of whom is the wife of Fred W. Boldenweck, superintendent and brewmaster of the Independent Brewing Association.

JOSEPH W. KOCH, secretary-treasurer and general manager of the Germania Brewing Co., Johnstown, Pa., died there November 10th, aged fifty-eight years. He was a native of Pittsburgh. His widow and three children survive him.

PETER LEYENDECKER, formerly connected with one of the Chicago breweries, died at his home on the Mount Tom Road in New Rochelle, N. Y., November 16th, aged seventy-nine years. He was born in Germany and came to the United States in 1881. Mr. Leyendecker was the father of Frank X. and Joseph C. Leyendecker, artists.

WALTER MOISE, one of the most popular shareholders in the Willow Springs Brewing Co., Omaha, Neb., died October 6th in Chicago, where he had been undergoing medical treatment for several months.

D. CANDIDO PASCUAL, general manager of the Oriental Brewery & Ice Co., Manila, Philippine Islands, died there suddenly September 2nd.

CLINTON D. PELLETIER, manager of the Rochester plant of the Kansas City Breweries Co., Kansas City, Mo., died there of meningitis, November 4th. He had been ill three weeks. His survivors are his widow and two small children, Helen, 2 years old, and Clinton D., Jr., 5 years.

LUCIUS C. POLK, formerly president of the Chesapeake Brewing Co., Baltimore, Md., died in that city October 6th, after having been ill for some time.

EDWARD REHER, secretary of the United States Malt Company, died at his home in New York on Sunday, November 5th, from a complication of lung and kidney troubles, after an illness of less than three weeks, in the twenty-ninth year of his age. He was born in New York City, September 13th, 1888. Known as "Eddie" among the trade, the deceased was very popular, especially with the younger element, on account of his indomitable good humor and cheerfulness. To see him at the last Brewmasters' Convention in Buffalo, just as lively as ever, nobody would ever have thought that he should have to leave his relatives and numerous friends so soon. The deceased leaves a grieving widow, Mrs. Elizabeth Reher, née Volk, with whom he had been living in a most happy wedlock for over four years.

LEONHARD SCHOPPE, treasurer, superintendent and brewmaster of the Millstadt Brewery Co., Millstadt, Ill., died

there October 20th, having been a sufferer from diabetes. He was born in St. Louis forty-two years ago and was brought up in the trade, being one of a large family of brewers. He leaves besides his widow the following children: Edward, Lena, Leonard and Erwin Schoppe, his mother, Mrs. Leonard Schoppe, and the following brothers and sister: Nick, William and Katie Schoppe.

EMIL J. STREIT, superintendent and brewmaster of the A. Schreiber Brewing Co., Buffalo, N. Y., died in that city October 7th from throat trouble. He was born in Germany April 3rd, 1869, and came to the United States in 1887. He entered the trade as an apprentice in a Toledo, Ohio, brewery and subsequently was brewmaster for the D. Lutz & Sons Brewing Co., Allegheny, Pa., his engagement with the A. Schreiber Brewing Co. dating from 1907. He is survived by his widow, one daughter and two sons.

EMIL A. WOLF, superintendent of the Davenport Brewing Co., Davenport, Iowa, died in that city September 15th, consequent upon injuries received in a street car accident. He was born in Davenport thirty-nine years ago and had been active in the brewing business since 1908.

Deaths in Foreign Countries.

C. W. Battiscombe, secretary of Flint & Co., Ltd., St. Dunstan's Brewery, Canterbury, England.

Henri Vandame-Boucquey, son of Emile Vandame, proprietor of brewery at Lille, France; killed in action.

Stephen Coates, agency manager of the License Insurance Corporation & Guarantee Fund, Ltd., Burton-on-Trent.

Captain Cecil A. Cox, killed in action. He had represented Bass, Ratcliff & Gretton, Ltd., in France and Belgium.

Captain John Cyril Crowley, 38, of A. C. S. & H. Crowley, The Brewery, Croydon, Surrey, England; killed in action.

Captain Percy Crowther, managing director of Welsh & Co., Hyde Abbey Brewery, Winchester, England, aged 42.

Albert Douay, proprietor of brewery at Fleury, Somme, France, age 64.

M. Fraysse, proprietor of brewery at Poissac-près-Tulle (Corrèze), France, killed in action before Verdun.

Captain H. W. Garton, son of C. H. Garton, of Garton, Sons & Co., Southampton Wharf, Battersea, London, England; killed in action.

Dr. Richard Hermann, Professor and Chief of Laboratory, Austrian Academy and Station for Brewing Industry in Vienna; died in prisoners of war camp in Siberia, aged 44.

John Mole Hibbard, managing director of the Bath Brewery, Ltd., Bath, England, aged 60.

William Hyde, chairman Messrs. Hydes' Queen's Brewery, Ltd., Manchester, England.

Victor Lecocy, founder of the brewery "La Basséne" at La Bassée, France.

Lieutenant E. P. Matthews, son of G. G. Matthews, of Matthews & Co., Wyke Brewery, Gillingham, Dorset, England, died of wounds received in action.

Lieutenant J. W. Power, son of J. Danvers Power, deputy-chairman of Wethered & Sons, Marlow, England; killed in action.

William Russell Willis, killed in action. He was the son of W. Hill Willis, a director of the St. Anne's Well Brewery Co., Ltd., Exeter, and was second brewer at the Bristol United Breweries, Ltd., Bristol, England.

PIE AND COFFEE WORSE THAN WHISKEY. "Pie makes more drunkards than all the liquor brewed. There's more harm in one cup and a quarter of coffee than in one whiskey-laden highball."—(W. Earle Flynn, Philadelphia.)

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

23,005.—An established commission merchant in Porto Rico desires to enter into commercial relations with American exporters of rice, flour, corn meal, grain, packing-house products, cereals, fruits, dried fish, beer, wines and unfermented grape juice.

23,014.—A manufacturers' agent in Switzerland desires to represent an American manufacturer of glucose.

23,039.—A firm in a foreign colonial possession is in the market for self-filling and corking machine for crown-cork bottles. Cash will be paid with order.

To Business Houses.—The Merchants' Association of New York says: "If you receive requests from foreign houses for quotations or samples of goods which you do not handle, The Merchants' Association is always glad to be of service by forwarding to you, or to your inquirer, lists of New York and other American firms which are prepared to quote for export on the goods in question.

"In furnishing these lists The Association aims, first of all, to compile them accurately and comprehensively, from the point of view of giving the best possible service to all parties concerned.

"Inasmuch as The Association has been doing this work for a considerable time, carefully classified lists covering several thousand different commodities are already in our files. This insures accurate, up-to-date service, together with prompt attention and a prompt report."

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

1,203,676. Automatic bottle-feed mechanism for labeling machines. Frank O. Woodland, assigned to Economic Machinery Company, Worcester, Mass.

1,203,806. Pasteurizing-machine. Henry F. Stock, Waukesha, Wis.

1,203,835. Filter. Edward Zahm, Buffalo, N. Y., assignor to Zahm Mfg. Co., Buffalo.

1,204,721. Apparatus for sterilizing liquids by means of ultra-violet rays. Max von Recklinghausen, assignor to the R. U. V. Company, Inc., New York.

1,204,869. Process of manufacturing unfermented beverages. Herman Heuser, Chicago.

1,205,086. Pressure-relief apparatus for use in fermentation processes. Michael Fertl, Schwabach, near Nuremberg, Germany.

1,205,666. Combined bung and faucet. Sidney Rosenfeld, Cleveland, Ohio.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for THE BREWERS' JOURNAL, by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15, South Street, Finsbury, London, Eng., and 10, Gray's Inn Place, W. C. London, England.

Specifications Published

1915

18,030. Guise. Machines for soaking bottles.

1916

101,253. A. A. Thornton (Barry-Wehmill Machinery Co.). Bottle-washing machines.

101,363. M. F. Chambers, and C. F. E. Skilton. Rousing and mixing apparatus for brewers' worts.

For copies of published specifications of Foreign Patents (25 cents each) address Messrs. Redfern & Co., 15 South street, Finsbury, London, England.

Correspondence.

*** Our readers will clearly understand that we do not hold ourselves responsible for the opinions of our correspondents, nor for the language in which they are expressed.

CORRESPONDENTS are respectfully requested to send their communications so as to arrive at our office one week in advance of the date of publication. This is the only means by which insertion can be insured in the next number of the JOURNAL.

New York, November 27, 1916.

Editor, THE BREWERS' JOURNAL.

Dear Sir:—The case of Hirsh & Schofield, Inc., against Aage Gusmer was tried during the latter part of October, 1916, in the Supreme Court of this State before Justice Francis B. Delehanty, who, on November 9, 1916, rendered a judgment holding that the plaintiff was entitled exclusively to sell the product known as "MAMMUT." An injunction has been issued permanently restraining Gusmer individually or any firm or corporation in whose name he does business from in any way selling, offering to sell or procuring to be sold "MAMMUT," or to advertise the same or in any manner interfering with the customers of Hirsh & Schofield, Inc. The injunction is very broad and comprehensive. The court specifically finds that Gusmer had no right whatever to sell "MAMMUT." That all his dealings with respect to that product inure entirely to the benefit of the plaintiff, and that Gusmer obtained no rights to it whatsoever, and that all of his dealings with regard to "MAMMUT" after he left the employ of the plaintiff were ILLEGAL AND IMPROPER, AND ARE ENJOINED.

The court found that Gusmer secretly conspired and connived with the manufacturers of "MAMMUT" to deprive Hirsh & Schofield of the benefit of their products made with him.

The court also ordered Gusmer to account to the plaintiff for all his transactions relating to the sale of "MAMMUT."

We shall have something equally important to announce shortly.

HIRSH & SCHOFIELD, Inc.,
50 Broad St., New York.

FIRES. Fire destroyed the plant of the Milwaukee Western Malt Co., Milwaukee, October 18th; loss, about \$500,000.

ALLEGED INFRINGEMENT OF PATENT. Suit was filed Monday, November 13th, in the United States District Court at Cincinnati by Boniface Hehle against the Hudepohl Brewing Co. and the Central Machinery Co., Cincinnati concerns, charging the infringement of patent rights. The suit was filed by attorneys Robert A. Taft and F. J. Oeltmann. Mr. Hehle alleges the defendants have used his process in violation of the patent laws and he asks that they be made apy triple damages for the loss he has sustained as a result of their infringement.

"ALCOHOLIC BEVERAGES for those who are run down and want to put on weight serve a useful purpose. They make food more agreeable, render the disposition more cheerful, serve as a substitute for food, which may be stored up, and aid in the absorption of most foods, especially fats and oils. . . . All alcoholics should be taken in moderation, of course, and, as in the case of food, take them only when you need them or when you work hard enough to use them up."—(Dr. Benjamin Franklin Roller, New York Physician and Publicist.)

PERVERTED MEANING. "Temperance does not properly mean abstinence. That is a perverted meaning, which has been deliberately fastened to the term for the purpose of causing confusion and identifying a wholesome movement for temperate living with an intemperate movement for compulsory abstinence. Temperance means temperate use or practice, and is based upon self-restraint, upon checking selfish and brutal passions and keeping one's self within the bounds of wholesome, moral, social living. Self-mastery is nothing more than temperance, that is, the control of evil impulses and consideration of the rights of others where they may conflict with one's own."—"The Booster.")

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.

Primrose

Ser. No. 98,328. Thomas O. Dixon, Townsend, Mont. Filed Sept. 30, 1916.

Particular description of goods.—Beer.

Claims use since July 14, 1915.

"COUNTRY CLUB"

Ser. No. 98,494. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed Oct. 7, 1916.

Particular description of goods.—Beer.

Claims use since March 1, 1898.



Ser. No. 98,495. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed Oct. 7, 1916.

Particular description of goods.—Beer.

Claims use since July 8, 1895.

The following Trade Marks have been definitely Registered:

113,900. Beer. North American Brewing Company, New York and Brooklyn, N. Y. Filed August 8, 1916. Serial No. 97,169. Published September 5, 1916. Registration granted, November 7, 1916.

113,908. Beverages made of malt, hops, and other ingredients. The Pilsener Brewing Company, Cleveland, Ohio. Filed August 10, 1916. Serial No. 97,255. Published September 5, 1916. Registration granted, November 7, 1916.

113,968. Beer. The Gund Brewing Company, Cleveland, Ohio. Filed May 22, 1916. Serial No. 95,331. Published September 12, 1916. Registration granted, November 14, 1916.

114,055. Beer. Burkhardt Brewing Company, Boston, Mass. Filed August 21, 1916. Serial No. 97,494. Published September 19, 1916. Registration granted, November 21, 1916.

114,056. Beer. Burkhardt Brewing Company, Boston, Mass. Filed August 24, 1916. Serial No. 97,595. Published September 19, 1916. Registration granted, November 21, 1916.

114,070. Beer containing less than two per cent. alcohol. The Monumental Brewing Company, Baltimore, Md. Filed August 23, 1916. Serial No. 97,586. Published September 19, 1916. Registration granted, November 21, 1916.

"I OPPOSE PROHIBITION because it is a vain attempt to make men temperate by law. It classes a harmless indulgence with vicious acts, and makes criminals of men engaged in a legitimate industry. It has its roots in the 'I-am-holier-than-thou' attitude of the professional reformers, who seek to force their narrow views upon the majority of the people. It falsely charges that liquor drinking is responsible for the bulk of the crime, poverty, disease and insanity with which the world is afflicted. It promotes hypocrisy, deceit, and contempt for law. It substitutes for the sale of liquors under strict regulation their illicit sale by 'bootleggers' and 'moonshiners.' It assumes the right of a small minority to regulate the personal tastes and habits of the great majority. It is an arbitrary and tyrannical interference with personal liberty and individual rights. It is anti-social and paternalistic, and its ideal of virtue is a race of weak-willed incompetents surrounded by prison walls." —("High License," in "Brooklyn Daily Eagle.")

Market Review.

OFFICE OF THE BREWERS' JOURNAL,
NEW YORK, November 29, 1916.

Barley. The U. S. Government crop estimates, published November 1, 1916, give this year's production of barley as 183,536,000 bushels as compared with 237,009,000 bushels in 1915; yield per acre: 1916, 23.7 bushels; price per bu., November 1, 1916, 83.2c; November 1, 1915, 50.1c; weight per bu. 45.2 pounds, against 47.4 pounds in 1915 and 46.6 pounds, the six-year average.

The local market is firm with highest quotations of the year. There is a good demand while the supply is quite low. Malting barley prices are nominal.

From BUFFALO we have this, dated November 25th: "Low-grade Barley is being held in this market at \$1.22; Choice, \$1.27@ \$1.29; Fancy up to \$1.34.

CHICAGO, November 25th: "The Barley market shows another decided advance in price values since a month ago. Spot offerings have been decidedly limited. There has been a considerable amount of trading in round lots to arrive, both of Middle West and Coast Barley. The situation at the moment is very strong, due no doubt in part to the inability of the country to get cars for shipment. Barley ranges, at the present time, from about \$1.06 to \$1.28; low-grade and thin Barley is quotable at \$1.06 to \$1.12; fair-to-good \$1.13 to \$1.21; good-to-choice \$1.22 to \$1.26, with fancy up to \$1.28."

Malt. The Malt market has been a little bit dull for the last few days on account of the absence of the brewers at the Convention. Prices remain pretty strong. New York prices are Standard Malt, \$1.43; Coast Malt, stilling at the same price, although it is a better article than Standard; Bottle Beer Malt, \$1.51. There is a very heavy demand for export. Exporters are still buying barley.

In BUFFALO, Standard Malt was quoted, November 25th, at \$1.38, Fancy at \$1.43.

Our CHICAGO advices, dated November 25th, quote Standard Malt at \$1.33@ \$1.35; Bottle Beer Malt, \$1.38@ \$1.41; Fancy, \$1.44@ \$1.47; brewers buying cautiously.

Corn Goods. Quoted: Grits, \$2.60; Meal, \$2.59; Corn Syrup, \$3.21; Corn Sugar, \$3.21.

In CHICAGO, Grits went at \$2.42@ \$2.44, November 25th; Meal, \$2.41@ \$2.42.

Rice. The Brewers' Rice market is firm. Prices have held strongly and the tendency is upward for both Foreign and Domestic Rice; on the former mainly because of the rapidly advancing rate of silver exchange in the Orient and increase in Trans-Pacific freights for future shipments; and on the latter because of the heavy speculative operations of the millers and dealers which has forced values to higher levels in spite of a very large crop. Available spot stocks are scarce. Imported Rice is quoted at \$3.50, Chicago, or \$3.75 New York, per 100 lbs.; and Domestic at \$3.30, Chicago or New York.

Hops. The hop market has been more active, but prices are somewhat lower than they were a month ago. Heavy purchases were made in California, mostly for home consumption, since there is an embargo on American hops to England. About 1,000 bales British Columbia hops were shipped there, and we understand more are to follow. Advices from England state that the official government reports are, that the crop was 307,000 cwts. against 254,000 cwts. last year, but prices have advanced 15 to 20 per cent. In Germany and Austria the hop market has been very active, advancing from 10 to 12c per lb.—according to our currency—caused principally by some banking institutions buying large quantities of hops speculatively. The hop business here is very unsatisfactory; recent elections having been unfavorable to the brewing trade, there is more or less depression, and we find that brewers are not inclined to increase their stock of hops at present. Inasmuch as the New York State crop is virtually all sold, and two-thirds of the California crop also having been disposed of, and hops now selling on the Coast at about cost of production, furthermore, imports from Germany and Austria being impossible for the time being, it looks as if present prices would be maintained, and there is more chance of an advance than a decline. We quote: 1916 Pacific coast hops, 14@17c; 1916 N. Y. State hops, 48@53c.; 1915 Pacifics, 10@13c.; 1914 States and Pacifics, 7@11c.

ASPHALT, among other uses, is available for rendering tanks watertight; also for coating iron pipes for conveying water or gas. It has more cement-like qualities than paraffin wax. However, it does not come up to brewers' pitch.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

General Vehicle Electric Trucks for Brewers.

We have just received a fine booklet, No. 600, published by the General Vehicle Company, Inc., Long Island City, New York, in which the various motor trucks made by that company are illustrated and described, the company saying that these machines are best adapted to transportation in the brewing industry.

Introducing its subject, the booklet says: "The brewery industry calls for executives of unusual ability and vision as well as specific training. Brewing is a science. The delivery of beer is a science. At least the best methods of transporting beer involve scientific principles.

"The increasing cost of production and the narrowing margin of profit on beer have compelled most brewers to find out exactly what their deliveries cost them. Delivery expense in some lines of trade is enormous. In the ice business 66½ cents out of each dollar is spent for delivery. The cost of the ice averages 15½ cents and the general expense 18 cents.

"In the brewing industry, delivery costs probably do not average over 5 per cent. of the gross selling price; but when we analyze all other costs, we see how emphatically delivery costs cut into net profits. If it costs \$4.65 to put a \$6.00 barrel of beer on the platform and 35 cents to deliver it, then the net profit is \$1.00. Cut the delivery cost to 25 cents and, at once, you increase your net profit 10 per cent. Think of it!

"Now whether you get \$6.00, \$8.00 or \$10.00 per barrel for your beer, you must be interested in a substantial increase in your net profits. It costs some brewers 65 cents to deliver a barrel of beer. It costs others 22 cents. The average is 25 cents to 30 cents for delivery with Electric trucks and 30 cents to 40 cents with horses and gasoline trucks.

"If one of our sales engineers were to call on you incognito and say, 'I can guarantee to increase your net profits 10 per cent. on your entire output of 250,000 barrels of beer,' you would certainly be interested. We have added as high as \$37,500 a year to the net profits of one brewer, over \$50,000 to those of another, and have cut the delivery costs of a score of brewers from \$10,000 to \$25,000 per year each. The General Vehicle Company is a good firm to consult with, don't you think?

"We have placed in successful operation practically 5 per cent. of all heavy duty motor trucks in U. S. brewery service. We know where our trucks will pay and where they will not. We believe there are isolated conditions under which horse delivery is still cheaper than delivery by either Electric or gasoline trucks. So when we ask permission to study your delivery problem, we have something worth while to offer you, whether you buy from us or not. As specialists in this field our suggestions have definite financial value to you.

"Glance through this book before you file it. Compare the various types of G. V. Electrics used by the shrewdest brewers in America. Then drop us a line asking for prices on certain types or operating costs on trucks you think best adapted to your delivery service. Glad to serve you in any way we can, this year or next. And we won't pester you with salesmen—we have a reputation for cooperating with brewers *their way*."

Among the trucks shown in the booklet are some of those used by the Anheuser-Busch Brewing Association, St. Louis; Jacob Ruppert, Inc., New York; Valentine Blatz Brewing Co., Milwaukee; Manhattan Brewing Co., Chicago; Peter Doelger Brewing Co., Inc., New York; P. Ballantine & Sons, Newark, N. J.; Haffenreffer & Co., Boston; F. & M. Schaeffer Brewing Co., New York; Christian Feigenspan, Inc., Newark; S. Liebmann's Sons Brewing Co., Brooklyn, N. Y.; Louis Bergdoll Brewing Co., Philadelphia; Welz & Zerweck, Inc., Brooklyn, N. Y.; F. A. Poth & Sons, Philadelphia; Massachusetts Breweries Co., Boston; Rainier Brewing Co., San Francisco; U. Franks Sons, Poughkeepsie, N. Y.; Central Brewing Co., New York; Peter Schoenhofen Brewing Co., Chicago; George J. Cook Co., Chicago; Clausen-Flanagan Brewery, New York; Pittsburgh Brewing Co., Pittsburgh; O'Keefe Brewery Co., Toronto, Can.; Ebling Brewing Co., New York; Pilsen Brewing Co., Chicago; Beadleston &

Woerz, New York; Gottlieb-Bauernschmidt-Strauss Brewing Co., Baltimore, Md.; Geo. Muehlebach Brewing Co., Kansas City, Mo.

Brewers' Sugar.

BREWERS' SUGAR REFINING CO., 1 Broadway, New York, announces in another column that she is prepared to sell a special product of brewers sugar, of superior quality, particularly adapted for temperance beers. She sends samples on request.

Many Installations of Vilter Machinery.

The Vilter Manufacturing Company, Milwaukee, report that during the last few weeks they have installed their refrigeration machines, systems and appliances in a large number of factories, institutions, private houses, etc., here as well as in foreign countries. Installations made in six American breweries are described elsewhere in these columns.

Truck Tire Chains.

The Herman Mfg. Co., 1420 Pennsylvania avenue, Washington, D. C., remind the trade that, as the snow season will be here in a few days, something should be done to prepare for an emergency.

Tie-ups of traffic can easily be prevented by using Herman's Patent Chains, which are described to ride crosswise the tire of trucks, through rings and effect an even wear on all of the links. They are made in all sizes. Write for price and discount.

"Corrective."

The Central Products Company is not a new trade announcement, but is a new advertiser in THE BREWERS' JOURNAL, as Corrective is an established product for increasing the yield and stability and keeping qualities of the beer and not for improving water.

They also announce that for the accommodation of the brewers any chemicals or drugs that may be desired, can be procured conveniently through them, regardless of size or quality, without jeopardizing the brewers interest by procuring same through local drug houses, which is very often the case.

Dixon's Boiler Graphite.

Benj. D. Trevor, general manager of the Consumers' Ice & Cold Storage Co., Key West, Fla., writes to the Joseph Dixon Crucible Company, Jersey City, N. J.: "We have used Dixon's Boiler Graphite No. 2 in our boilers for the last two years—a large part of which time our boiler feed water has been heavily impregnated with salt, lime and magnesia, which would cause very heavy scale deposit on boilers. The use of Dixon's Boiler Graphite has largely overcome our trouble in this respect, much more so than the use of any boiler compound we have previously used, and we cheerfully recommend Dixon's Boiler Graphite to any one having trouble with scale formation in boilers."

Modern Coal and Ashes Handling Machinery

The Link-Belt Company, Chicago, have issued two new booklets, describing the modern coal and ashes handling machinery recently installed by them in the power plants of several large manufacturing concerns. As the handling of grain, ice, coal, ashes, etc., is of great importance also to brewers, they might profit by writing for these booklets, numbered 288 and 296, respectively, and carefully perusing them.

Link-Belt machinery saves not only labor, but also fuel. In one of the plants described, over \$6,000 was saved per year on an additional investment of only about \$15,000!

The effect of the Link-Belt Silent Chain for the transmission of power is positive, and assures reliability and quiet operation, the element particularly contributing to this result being the patented Pin-bushed joint, described in the company's Bulletin No. 282.

"Never Skid."

"Prepare now for winter," says the Never-Skid Mfg. Co., 122 Liberty Street, New York, "and don't wait until the streets are covered with ice and snow, before getting "Never Skids" for your motor trucks." The company also say that their new type of "Never-Skid" practically eliminate vibration, does away with skidding and affords positive traction on slippery streets."

Zahm Manufacturing Company.

The Zahm Mfg. Co., manufacturers of Brewers' Specialties, Buffalo, N. Y., export that since October 1, 1916, they have closed dates with the following brewers:

Orange Brewing Co., Orange, N. J., 1-200 barrel outfit and also including 20th Century bottle soaker sterilizer; Hensler Brewing Co., Newark, N. J., 1-200 barrel outfit including 20th Century bottle soaker washer sterilizer; Fenway Brewing Co., Boston, 1-200 barrel outfit including 20th Century bottle soaker washer sterilizer; Standard Brewing Co., Cleveland, Ohio, 1-200 barrel outfit including 20th Century bottle soaker washer sterilizer; Iron City Brewing Co., Pittsburgh, 1-400 barrel outfit including 20th Century bottle soaker washer sterilizer; Tube City Brewing Co., McKeesport, Pa., 1-500 barrel outfit including 20th Century bottle soaker washer sterilizer; Niagara Falls Brewing Co., Niagara Falls, N. Y., 1-100 barrel outfit including 20th Century bottle soaker washer sterilizer.

New Advertisers in THE BREWERS' JOURNAL.

The names of wide-awake firms and manufacturers, who know a thing or two about the effects of advertising in a widely-circulating trade paper, are spread over the pages set aside for that purpose in THE BREWERS' JOURNAL. To-day we add to those with whom our subscribers have already become familiar, the following:

BREWERS' SUGAR REFINING CO., 1 Broadway, New York, N. Y.
Brewers Sugar.

HERMAN MANUFACTURING CO., 1420 Pennsylvania Ave., Washington, D. C.
Truck Tire Chains.

NEVER SKID MANUFACTURING CO., 122 Liberty St., New York, N. Y.
Non-Skid Device for Motor Trucks.

H. E. SALZBERG & CO., 30 Church St., New York, N. Y.
Dealers in Second Hand Machinery.

WHITE COMPANY, Cleveland, Ohio.
Motor Trucks.

"THE CAUSE TEMPERANCE IS NOT PROMOTED by any intemperate measures. It is intemperate conduct to assert that fermented liquors ought not to be drunk at all because, when taken in excess, they do harm. Wine and beer and spirits have their place in the world."—(Charles Dickens.)

JUST BECAUSE YOU LET THEM IMPOSE UPON YOU! "This is the Land of the Free and the Home of the Brave. The Land is so Free, and the Brave are so Brave, that ten long-haired male Reformers and ten short-haired female Reformers can get together and compel ten thousand other people to drink water or go thirsty. We are so Free that if the local agent of the Anti-Saloon League decides that we must not drink beer, we can't have it; and we are so Brave that we permit a handful of paid Anti-Saloon League lobbyists to dictate to our legislators and run the state because we are too cowardly to get up on our hind legs and demand our rights. If we ever insisted that the "Drys" drink nothing but beer, and refused to let them have water, there would be Hail Columbia a-popping in this land—and you know it. But it is perfectly right for the "Drys" to insist that we drink nothing else but water, and to see that we get no beer. Hooray for Freedom and Bravery!"—"Enlightenment.")

CLASSIFIED ADVERTISEMENTS.**Brewery for Sale.**

Brewery for sale or for rent in Central Pennsylvania, selling 3,000 barrels at good prices. Address:

M. P. T. 21, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York

For Sale.

Copper Kettle 4' 6" diameter by 34" deep, two 1" steam inlets, 1" exhaust outlet, 3" outlet in center. Open top, tinned inside. Address:
August Roos' Son,
429 East 91st Street, New York, N. Y.

Brewery for Sale.

Small Steam Beer Brewery, located in heart of small town thirty miles from San Francisco. Also have large agency lager trade. Address:
P. O. Box 151,
Mayfield, Cal.

Wanted Brewery Manager

for a new concern in the West, must be qualified and have \$3,000 to \$4,000 to buy a part interest of present manager. For particulars, address:
B. B. C., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Beer Filters; Loew Blitz Blank, Loew Improved, Theurer with press, Goldman Double Cell with press, Karl Kiefer with press; large Cyclone Filtermass Washer; all in excellent condition. Address:
N. H. Heyman,
438 East 59th Street, New York, N. Y.

For Sale.

A small brewery of 3,000 bbls. capacity, with ice machine, located at Hortonville, Wis., is for sale at a reasonable price. The territory is good. Would take in an experienced brewer with \$1,000 or more stock as manager. Address communications to

Jan 17] Peter Oik,
Hortonville, Wis.

Brewery for Sale.

A brewery in one of the best locations of Wisconsin is for sale. Its trade is flourishing and at present the investment yields a profit of 32 per cent. The proprietor desires to retire. Price: \$25,000. Terms: One-half cash, and the rest in easy payments. Address:
M. M. 36, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Wanted.

Second-hand machinery in good condition. One Filter Masse washer, 60 to 80 lbs. capacity. One bottle soaker and pasteurizer, 25 to 50 bbls. capacity. One racking beer cooler, brine or ammonia system, 30 bbls. capacity. Answer as to price and conditions of machinery to

Rex Brewing Co.,
Spangler, Pa.

Cafe for Sale.

The best paying licensed place, including the property on Centre Street in the heart of the City of Pottsville, Pa., for sale on account of ill health. The property is in excellent condition and the equipment of the finest. Can show the purchaser receipts which will, in two years, more than pay the purchase price.

Jan 17] Carl H. Wagner,
Attorney-at-Law,
113 N. Centre Street, Pottsville, Pa.

Position Wanted.

Practical and theoretical brewer and maltster with nearly thirty years' experience, thoroughly familiar with every modern innovation in American as well as German brewing systems. I handle all the known brewing materials of the day successfully. I guarantee full and perfect extract, producing goods of superior quality. Address:

A. B., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Situation Wanted.

An experienced brewmaster with good practical and theoretical ability and good references, and inclined to use caution in obtaining the best product, seeks engagement as brewmaster in a lager beer or ale and porter brewery; he also is disposed, if it is desired, to invest some capital or accept stock as a part of his salary. Address:

S. M. 15, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale—Cheap.

15 Large Storage Tanks, double headed, 2" Cypress, 8 ft. diameter, 15 ft. high, Est. Capacity 150 bbls. each; 12 Fermenting Tanks, single headed, 2" Cypress, 8 ft. diameter, 6 ft. high, Est. Capacity 60 bbls. each; 15 Chip Casks, 2" Oak, 200 bbls. Capacity. These tanks are new, having never been used. For further information write to

Apr 17] J. B. Lagomarsino,
Sheffield, Ala.

Brewmaster Wants to Make a Change.

Experienced brewmaster, for many years in the trade, and graduate of two brewers' academies, at present employed, for certain reasons must make a change within one or three months. Has thorough knowledge of American and German brewing methods. Prefers large brewery where several kinds of beer and ale are produced; position to be permanent. Address:

J. C. F., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Wanted.

Brewmaster for a small, up-to-date brewery, located in Southern territory. A young man preferred, who has had experience, and is competent, energetic, of good habits and executive ability, and who can make a first class bottle beer, as also Temperance Beverages or non-alcoholic Beverages.

State age, whether married or single, experience and capability, also salary expected to start with, also give past employment and reference. Address:
W. W., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Position Wanted.

I am 35 years of age, having a practical as well as a theoretical training in the brewing line, seeking a position as brewmaster or bottling house manager. Can give A1 references. Address:

C. H., 16, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewery for Sale or Rent.

Brewery in the anthracite coal region: has railroad siding and its own water. A good proposition for a good business man to push ahead. Present owners cannot operate because of other interests. Will be sold or rented reasonable. For particulars, address:

G. F., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Position Wanted.

Brewmaster, practical and theoretical, who has 30 years of practical experience in Germany as well as in this country, wishes position. Has excellent testimonials, graduated from the U. S. Brewers' Academy in New York (nota 1, very good) and from Lehmann's Brewing School in Worms, Germany. Can brew all kinds of lager beer, ale and porter of the finest taste, economically, and is familiar with the production of high-grade bottling and export and Temperance beer. Address:

Gambrinus 42, care of THE BREWERS' JOURNAL,
1 Hudson St., New York.

tf]

FOR SALE

- One (1) 75-bbl. 20th Century Soaker, 2 compartments.
- One (1) 50-bbl. Barry-Wehmler Soaker, 1 compartment.
- One (1) 200-bbl. Loew "Hydro-Pressure" Soaker, 4 compartments.
- One (1) 150-bbl. Loew "Perfection" Soaker, 3 compartments.
- One (1) 100-bbl. "Very Klean" Soaker & Washer.
- One (1) 50-bbl. Goldman Soaker.
- One (1) 175-bbl. Loew "Monitor" Pasteurizer.
- One (1) 150-bbl. Loew "Monitor" Pasteurizer.
- One (1) 50-bbl. Loew "New Era" Pasteurizer.
- One (1) 75-bbl. Loew "New Era" Pasteurizer.
- One (1) 50-bbl. Goldman Pasteurizer.

These Soakers and Pasteurizers have been replaced by larger machines by Loew Mfg. Co.

- One (1) 22-cell Loew "Improved" Filter.
- One (1) 16-cell Loew "Improved" Filter.
- One (1) 40-ton Case Ice Machine.
- One (1) 90-ton York Condenser.
- One (1) 50-H.P. Webster Heater.

The last three items to be sold as one unit and guaranteed in first-class condition.

AUGUST R. ROESCH

Brewers' and Bottlers' Machinery

930 N. 8th Street

PHILADELPHIA, PA

For QUICK Sale at BARGAIN Prices

We offer the following brewhouse machinery and equipment at bargain prices, everything guaranteed thoroughly overhauled and in the best of shape like new. Thirty days trial allowed to responsible parties. Let us have your inquiries. We can save you big money.

- 1 3-Arm Colby Simplex Racker. Latest style.
- 1 2-Arm White New Style Racker.
- 1 4-Arm White New Style Racker.
- 1 3-Arm White Old Style Racker.
- 2 20-Cell Theurer Beer Filters, with hydraulic presses. All newly retinned.
- 1 7-Cell Theurer Beer Filter, with hydraulic presses. All newly retinned.
- 3 20-Cell Loew Improved Beer Filters. Hand presses attached. All retinned.
- 1 10-Cell Loew Improved Beer Filter. Hand presses attached. All retinned.
- 1 Large Tandem Deckebach Cooler. Complete with all fittings. For fermenting cellar. Brine circulation. Capacity, 100 bbls. per hour.
- 1 No. 2 and 1 No. 3 Deckebach Racking Coolers. Complete with fittings. Brine circulation. Capacity, 30 and 50 bbls. per hour.
- 2 No. 2 Deckebach Racking Coolers. Ammonia circulation. Complete, all fittings. Capacity, 40 to 60 bbls. per hour.
- 1 6-Pipe Double Wittman Racking Cooler. Complete, all fittings. Brine system. Capacity, 40 to 60 bbls. per hour.
- 1 19 ft. long Baudelot Cooler. 36 2 1/4 O. D. copper water pipes. 12 iron ammonia pipes. Copper distributing pipe, with two brass spigots. Swinging patent copper beer troughs. Iron beer receiving pan.
- 5 High and Low Pressure Air Pumps and Compressors.
- 1 7x4 1/2x10 Vertical Foster Steam Pump, brass fitted.
- 1 7 1/2x5x10 Single Acting Knowles Boiler Feed Pump. Brass fitted.
- 1 10x6x12 Single Acting Knowles Boiler Feed Pump. Brass fitted.
- 1 10x6x24 Foster Deep Well Pump. Brass fitted.
- 1 6x4x6 Worthington Duplex Water Pump. Brass fitted.
- 1 No. 3 Simplex Knowles Water Pump. Brass fitted.
- 1 5 1/4x3 1/2x6 Duplex Knowles Brine Pump. Brass fitted.
- 1 10x10x12 Single Acting Knowles Tank, or water pump. Brass fitted.
- 1 8x8x14 Duplex Knowles Brine Pump. Brass fitted.
- 1 9x8x12 Single Acting Foster Hot Beer Pump. Brass fitted.
- 1 14x10 1/2x12 Foster Duplex Water Pump. Brass fitted.
- 1 9x10x12 Foster Single Acting, Pressure Regulating Air Racking Pump.
- 1 7x8x10 Foster Single Acting, Pressure Regulating Air Racking Pump.
- 2 5 Horse-Power Upright Steam Engines.
- 2 5 Horse-Power Horizontal Steam Engines.
- 3 Large Malt Mills, Kaestner & Hecht Iron frame. Stoll & Wunder wooden frames.
- 2 Schock 1/2 bbl. size Keg Scrubbing Outfits. Scrubber, soaking tank and rinsers.
- 2 Eureka Branding Machines. Gasoline and gas connections.
- 2 Power Crown Corkers. Self feed.
- 2 Foot Power Crown Corkers.
- 3 Taber Belt-Driven, Bronze Body Rotary Beer Racking Pumps. Fitted with automatic pressure regulators.
- 3 Taber Belt-Driven, Bronze Body Beer Circulating Pumps.
- Miscellaneous copper hot-water coils, attemperators, fermenting tanks, chip cask, and various other brewery equipment.

FRANK SCHAUB & SONS, Inc., 33-35 Clay St., Newark, N.J.

Hold Down The Alcohol

M-D

EIGHT methods of making **TEMPERANCE BEER** have come to our attention.

M-D

THREE were methods wherein a *too high* percentage of alcohol had later to be *reduced*.

The reducing processes are *costly* at best, and the more *reducing* is necessary the *greater* the cost. **AND OFTEN** it has to be *repeated* because of *further fermentation* in storage.

M-D

FIVE methods employed —**MALTO-DEXTRINE**— **BECAUSE** the very high percentage of **UNFERMENTABLE** matters composing our product make it a *great time and money saver*.

It holds down the alcohol and *keeps it down*.

It is absolutely pure— gives splendid body, rich, creamy foam and a delightful flavor.

M-D

THERE are imitations of Malto-Dextrine, but no substitutes.

NORTH KENSINGTON REFINERY
362 SECOND AVENUE : NEW YORK CITY

Reliable Dealers Everywhere Sell Malto-Dextrine

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

Established in 1876 by A. E. J. TOVEY, Honorary Member of the United States Brewers' Association.

Grand Prize, Paris Exposition, 1900.

Medal and Diploma, Antwerp Exposition, 1889.

Honorable Mention, Paris Exposition, 1878.

**Main Offices: IRVING BUILDING, No. 1 HUDSON STREET,
Corner of Chambers Street, New York; Rooms 20, 21 & 29.**

Cable Address: "Paraclete, New York."

Western Office: Room 1313, People's Life Building, Randolph and 5th Ave., CHICAGO, ILL.

EUROPEAN OFFICES: } GREAT BRITAIN AND IRELAND: Dale, Reynolds & Co., 46 Cannon St., LONDON.
} GERMANY: Saarbach's News Exchange, 1 Clara Street, MAYENCE.

SPECIAL CORRESPONDENTS IN ALL THE BREWING CENTRES THROUGHOUT THE WORLD.

NEW YORK—CHICAGO—LONDON

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The Brewing Industry in 1916.

We have passed through a year of disasters. The number of breweries has been greatly reduced throughout the world in 1916. In Europe the war has destroyed millions of dollars worth of brewery values, and in the United States the ignorance of the masses, misled by the false statements of desperate theologians and their appendix of jobless politicians and fanatical extremists, has resulted in promoting the idea of Prohibition to a hitherto unknown extent.

And yet, the production and consumption of beer, which had been reduced in 1915 by about 6,000,000 barrels, as compared with the preceding year, has again increased at its previous normal rate, and it is increasing still, the prosperity of the laboring people stimulating the brewers' output.

What does it all mean?

Undoubtedly, we are living in a period of abnormal conditions. Europe has gone mad and hysterical. Its holocaust of millions of men, sacrificed by a system of anachronism and retrogression, has made unreasonable beings of those who survived and the privations to which their rulers have reduced them, have resulted in universal despair and underconsumption of the necessities of life and comfort, as they have not known to such terrible extent in the history of man.

It was but natural that these conditions should have their mental and physical effect upon the American people. More than ever before they have listened to and believed the voices of their misleaders.

The year upon which we enter to-day must needs be a year of strenuous labor for the American brewing industry. No effort must be spared to weld into a solid organization producers and consumers, whose property and liberty are threatened by the malignant forces of mediaevalism. Our watchword must be that of our forefathers: "In Union there is strength!"

Truth, science, reason, justice, the love of humanity and freedom are on our side, and these form the sign in which we shall conquer.

Perseverance, indomitable courage and faith, the will to win and the audacity to attack, instead of defence, must be our war cry for 1917, and in the firm conviction that the entire trade will thus battle and uphold its banners, flaunting them defiantly in the dark and sinister faces of our despicable foes, THE BREWERS' JOURNAL bids all of you

A Happy New Year!

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Relation of the Apparent Gravity of a Fermenting Wort to its Alcohol Content.

By H. F. E. HULTON, A.I.C.

In the course of the ordinary routine work of a brewing laboratory it is a daily and hourly necessity to determine the "original gravity" of beers, a process involving the distillation of the beer, and the determination of the alcohol and residue gravities. On reference to a table connecting alcohol-gravity with "degrees of gravity lost," such as that prepared *in extenso* by G. C. Jones, F.I.C., and Julian L. Baker, F.I.C., the original gravity is then easily determined by adding the residue gravity to the "degrees lost." If the "apparent gravity" of the beer be also determined, that is to say, the gravity of the beer as it stands before distillation, it is possible to "check" the value obtained for the residue gravity, since a moment's reflection will show that this should equal the numerical sum of the values found for the apparent gravity and the alcohol. The "apparent gravity" is only lower than the residue gravity because of the minus gravity (water being taken as unity) of the alcohol present. As a matter of experience, it is, however, found that in the majority of cases this "check" addition of alcohol and apparent gravity results in a figure from .1 to .2 degrees in excess of the residue gravity as actually weighed, and it is usually considered desirable to obtain a slight plus check as evidence of accurate work.

It frequently happens in experimental laboratory work on fermentations of worts, either for the testing of yeasts or for many other purposes, that a wort is taken of *known* original gravity in which it is desired to follow the loss of fermentable matter, and the production of alcohol from time to time.

In such a case, of course, a distillation of the partially or completely fermented wort, and a determination of the alcohol gravity will give the desired figures, but this procedure has two disadvantages:—

(1) The time occupied in the filtration, distillation and weighing of the alcohol.

(2) The impossibility of further continuing the experiment on the portion of wort employed for the distillation.

In this last case, if the experiment permits of the employment of a sufficiently large volume, portions may be withdrawn at desired intervals, but if the amount available is small, the experiment must needs come to an end at the time the distillation is made.

The point that naturally occurs to one at this juncture is that, the original gravity being known, a determination of the apparent gravity alone should suffice to carry with it the evaluation of the alcohol, since there can be but one ratio of alcohol to residue gravity, which, in conjunction with the already known original gravity, will give the apparent gravity as found. It remains only therefore to make such use of the original gravity table connecting alcohol with degrees lost as will furnish the desired information. This is not quite so simple as might at first sight appear unless the calculation involved has already been made, and it is because of what the writer believes to be its comparative novelty that the present brief communication was undertaken.

It will, we think, appear most clearly if put in the following form:—

Let A = Apparent gravity.

R = Residue gravity.

a = Alcohol gravity.

d = Corresponding "degrees lost."

O = Original gravity.

All these values being expressed as excess or minus degrees above or below water = 1,000.

We know from the usual method of calculating original gravity that

$$R + d = O \quad \dots\dots\dots (1)$$

whereas the so-called "check" tells us that

$$R = A + a \quad \dots\dots\dots (2)$$

If now we substitute in (1) the value for R obtained from (2) we have

$$(A + a) + d = O \quad \dots\dots\dots (3)$$

or, put another way round,

$$O - A = a + d \quad \dots\dots\dots (4)$$

But we already know O, and can determine A without distillation or loss of any of our solution. If then a value is obtained for this difference (call it X degrees), it is evidently equal to the *sum* of a + d, neither of which need be directly determined.

Recourse must now be made to the original gravity table connecting alcohol and degrees lost for such an alcohol gravity, which, when added to its corresponding "degrees lost" number in the table, shall equal X. When this is found the "a" value will be the desired alcohol percentage in the wort examined, and when added in its turn to A will also furnish the residue gravity should it be desired to know it.

An example will perhaps make the reasoning clear:— A wort of original gravity 1050 is fermented for a certain time, and it is then desired to know the percentage of alcohol contained in it. The apparent gravity is found to be 1025.

Using equation (4):—

$$O - A = a + d.$$

$$50 - 25 = a + d.$$

$$25 = a + d.$$

It is therefore necessary to find values for a and d, which, when added together, equal 25.0.

In inspection of the table these are found to be:—

$$a = 4.67 \text{ requiring}$$

$$d = 20.34$$

$$\underline{\quad\quad\quad} \\ 25.01$$

The alcohol gravity of the fermentation is therefore:— $1000 - 4.67 = 995.33$, which on reference to tables shows an alcohol percentage by weight of 2.55, or 5.6 per cent. *proof spirit*.

Since $A + a = \text{residue gravity}$, these will be:— $25 + 4.67 = 1029.67$, a value which would have been obtained had the alcohol been boiled off a measured volume of the solution, and the residue made up to the original volume again. Still another use can be made of this

residue gravity so deduced, viz., to determine the amount of fermentable matter lost, for since the original gravity was 1050 and the (deduced) residue gravity is 1029.67, the percentage of the total solid matter in solution which has been fermented will be found from the expression:—

$100 \times (50 - 29.67)$
50
In this case 40.6 per cent. of the matter originally present.

It is then clear that from the simple determination of the apparent gravity involving no distillation there are obtainable by simple calculation (provided the original gravity is known)—

- (1) The specific gravity of the alcohol present.
- (2) The percentage of alcohol present.
- (3) The residue gravity.
- (4) The percentage fermentation loss.

The Cleansing of a Brewery.

From a paper read at a meeting of the London Section of the Institute of Brewing,

by S. WILDING COLE.

(Continued from page 50.)

In many vessels it will be found that the attenuators are nice and clean on the top and sides, but that the underside is thick scale, as it is much easier to clean the top, and the bottom does not show. This should be seen to and the scale removed.

In cleaning attenuators it depends on the type of fermenting vessel in use. For instance, in a copper tun, a weak solution of acid may be used with soda afterwards to neutralize, but this must on no account be used in a wooden vessel. In many vessels it will be found that the attenuator pipes are attached to the standards with clips. This is fatal, as it is impossible to clean behind the clips. All attenuator pipes should be soldered to the standards, and a smooth wiped surface left, which can be easily cleaned. The parachute tubes and yeast shutes are often very neglected. I have seen great lumps of mouldy yeast taken out of these pipes. Care should be taken that they shall be cleaned at the same time as the vessel.

The racking mains should be taken down after every racking, and brushed or steamed through, and periodically boiled in the hot caustic bath.

The walls of the fermenting and refrigerator rooms should claim the attention of every brewer. The refrigerator-room walls should be cleaned down every day, and, before starting refrigerating, should be sprayed with a solution of formaldehyde. The tun-room walls should be cleaned down regularly and sprayed with a solution of zinc sulphate. The walls of the yeast-room should be treated with formaldehyde the same as the refrigerator room every day, also the undersides of all yeast backs. The yeast backs, if made of slate, should be kept free from scale by the use of a detergent of the hypochlorite group. If these slate backs (and this applies to slate fermenting vessels) have been allowed to get so thick a coating of scale on them that a detergent will not remove the same, a blow-lamp should be used, but, if this drastic measure is adopted, it should be done by the makers of the vessels, as, if care is not taken, the slate may crack. Great care should always be taken to see that the joints in slate backs are kept in good repair and are flush with the inside of the vessel. One of the places where often little care is taken as regards cleanliness is cellar walls. These are often covered with splashing and mould growths. The spores from these growths are

carried in the air to other parts of the brewery, and may cause trouble.

The floors of tun rooms and cellars should be kept as dry as possible; in fact, the whole place should be kept dry, as without moisture bacteria and wild yeasts cannot grow, and although I know some people argue that if the place is kept damp the spores cannot blow about, in my opinion this is a mistaken idea, as splashings from the floors do dry on the walls of vessels, and then the spores are blown off from these parts. The floors should be washed down with a solution of copper sulphate regularly. This will keep the rooms nice and sweet.

The subject of the purification of air for brewery use is too large to go into now.

Care should be taken with the outside walls of the brewery, and on no account should dried grains be allowed to collect round the grain shutes. The shutes and walls should be washed down every day, and the ground outside sprinkled with copper sulphate.

Care should be taken to see that all plant used for filling, such as casks, racking machines, funnels, hoses, etc., are kept thoroughly clean, and this plant should be either filled with caustic or boiled in caustic once a week.

All filling should be steamed out by blowing a full blast of steam through them every day, and the hose left in a bath of detergent over the week-end. All wooden plant used in the tun room should be painted when new and dry with one of the carbon enamels. This, of course, applies to yeast boards made of wood, also the covers to fermenting vessels.

Other plant, such as yeast presses and filters, should be kept thoroughly clean by being cleaned out directly they are finished with. No plant in the brewery of any description should be left after it is finished with, as while the plant is wet it is easily cleaned, but if left, the beer or yeast dries, and at the same time collects air-borne bacteria and wild yeasts, and these soon set up putrefaction, which, when once dry, is very difficult to remove. Yeast cloths should be cleaned directly the press is opened, and the yeast removed; these cloths should always be boiled, as, if not, micro-organisms get into the cloth and are difficult to get out again.

Great care should be taken with all filter pulp. This should be sterilized always before use, and it is a good plan to add a little detergent to the dirty pulp when it is first put into the washer. With filter pulp plenty of water should be used, and on no account should the washer be overlooked, as this is bound to ball the pulp, and when once the pulp has become balled it is very difficult to clean, besides giving bad filtering results.

All grain, spent hop, and rubbish should always be removed from the brewery premises as soon as possible, and the floor where these have been lying should be treated with a solution of copper sulphate. No chaff-cutting should be done on a brewery premises, as very serious trouble may ensue from chaff dust getting into the brewery.

If any stables are adjacent to the brewery, an up-to-date chaff-cutting machine should be used with a dust-extracting apparatus, also when chaff-cutting is in progress care should be taken that all windows and doors are kept closed.

A good caustic bath may be made of wood, a good plan being to line the bottom with old iron false bottom plates, as this prevents the pipes while being placed in the bath from tearing up the bottom, as the caustic is found to make the wood soft.

In nearly all cask washers of the nozzle type the water enters first and steam afterwards, but as the nozzle has to be of a certain size, both from the reason of strength and

the capacity of water and steam flow, so this same nozzle nearly fills the bung bush and only leaves a narrow port round it to allow the water in the cask to escape, and it will generally be found that when the cask is taken off the nozzle after steaming, there is still water in it which has not escaped. Now this water collects round the bung-hole and does not allow the steam or water spray to have proper effect on the very part of the cask which requires most cleaning, viz., all round the inside of the bung-hole, as it is here that a hard incrustation of finings and hops collects, this part becoming dry before the cask is nearly empty.

With ordinary water pressure it is practically impossible to get a spray of hot water in the cask that has any or much force behind it, and it is the water that sprays the inside of the cask, not the steam. When steam is not mixed with water it will not issue from a small orifice any distance in the form of a jet, but simply fills the cask with steam for sterilizing the same. So in this new method more use is made of the water jet than of the steam.

The water is injected into the cask through a revolving nozzle of a new type. This nozzle is not driven round by the issuing water or steam, but by an internal turbine, thereby obtaining a more direct action. The water is forced into the cask at about 200 lbs. pressure, the nozzle diameter being kept as small as possible to allow for the rapid efflux of the water from the cask. In ordinary washing plants, the cork hole is left open for the escape of steam, and this is where the new system differs from any previous. A tapered hollow plug connected by flexible hose to an air compressor and receiver is introduced into the cork hole and just pushed in as far as it will go, and through this plug air at a pressure of about 4 lbs. is passed.

The method of procedure is as follows:—After the hops have been rinsed out of the cask, the cask is placed on the nozzle and the tapered air plug placed in the tap hole. The air and water cocks are now turned on and air is blown into the cask at about 4 lbs. pressure, the water issuing from the nozzle in a complete revolving sheet at about 200 lbs. pressure to the square inch. Now, if it were not for the air pressure inside the cask, the cask itself would rapidly fill with water and cover the nozzle, thereby preventing the jet from working, but the air pressure entirely prevents this and the water is forced out round the nozzle as quickly as it runs down the sides of the cask, and if the cask is left on as much as a quarter of an hour and taken off directly the water is turned off it will be found to be entirely empty of water. In this way the dirt in the cask and round the bung-hole is entirely removed.

ACTION OF ULTRA-VIOLET RAYS ON LAEVULOSE. According to Ranc, in "Biochemische Zeitschrift," the exposure of laevulose solutions to the ultra-violet rays results in the decomposition of the molecule of that sugar, with formation of formaldehyde and carbon monoxide. From the standpoint of plant physiology, this is in so far of interest as it may be regarded as the photosynthesis observed in plants by Berthelot and Von Baeyer and may be considered a kind of reversion phenomenon. It is also noteworthy that the amount of acid, measured by the electrical conductivity, increases very considerably during the irradiation, since it is certain that in the case of plants also the organic acids of photochemical origin play a part in the syntheses under consideration. Methyl alcohol and carbon dioxide were also formed but, in view of the highly complex character of the products, the main constituents—acids and aldehydes—could not be further separated. This is the first instance of a similar degradation of fructose without enzymes or chemical reagents.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

November 15th—December 15th.

The samples examined during this period numbered 899; they are classified as follows:

Barleys	9
Malts	212
Malt Adjuncts	40
Colorants	5
Hops	17
Grains	7
Waters	8
Worts	57
Yeasts	167
Ales and Beers.....	261
Temperance Beverages	43
Coal and Ashes.....	27
Miscellaneous	46

899

Barleys.

Of the 9 samples of Barley examined, 5 were of choice quality and considered excellent for malting purposes; 3 of these were from California and 2 from Wisconsin. The other Barleys were from Minnesota and South Dakota, consisting of a rather lean berry of very irregular size. Although they were marked for Standard Malt, their germinative capacity was below normal and they resulted in Malts with a low yield of extract.

Malts.

Among the Malt samples received during this period were an unusually large number of California Malts, which almost invariably showed a high yield of extract and an excellent modification of the endosperm.

A total of 211 Barley Malts were analyzed; the lowest moisture was 2.30%, and the highest 8.50%, with an average of 4.45%. Twenty-four (24) samples showed an excessive amount of moisture, which in several cases undoubtedly was absorbed during transit.

The lowest yield of extract was 67.3% air dry and 69.6% calculated on dry basis; the highest yield was obtained from a California Malt with an extract of 72.5% air dry corresponding to 76.1% on dry basis; the modification of the meal body was generally satisfactory, only 10 samples showing inclination to steeliness.

One sample of Wheat Malt showed a somewhat high amount of moisture, but its yield of extract was satisfactory, 76.2%.

Malt Adjuncts.

40 samples of Cereals and Cereal products were classified as follows:

Corn Grits	11
Corn Meal	11
Corn Flakes	2
Refined Grits	7
Brewing Sugars	3
Body Sugars	2
Syrups	1
Rye	1

One sample of Corn Grits and two of Corn Meal contained excessive amounts of oil. All other samples were considered satisfactory brewing materials.

The sample of Rye was satisfactory for the purpose intended.

Colorants.

5 samples of Sugar Color and Porterine were tested, all were satisfactory for their respective purposes.

Hops.

One sample of 1914 California Hops was found to be in a satisfactory condition, having been carefully stored.

The remaining 16 samples were all of 1916 Pacific crop; 2 were of inferior quality on account of poor picking and the presence of mould; 12 samples were satisfactory, while 2 samples were considered of choice quality.

Grains.

4 samples of Dried Grains were analyzed; 2 of these contained excessive amounts of moisture and 2 were of normal composition.

3 samples of Spent Grains were analyzed as to their content of Soluble Extract and Unconverted Starch. All were considered well exhausted, showing correct mashing operations and high yields.

Waters.

A total of 8 samples were received. All were subjected to a biological examination and 2 samples were also analyzed chemically.

Worts.

Of 57 samples received, 51 were Lager Beer Worts and 6 Ale Worts. 6 of these samples were also examined biologically in order to trace sources of infection.

Yeasts.

192 samples were examined, these were distributed as follows:

63 Ale Yeasts.

129 Lager Beer Yeasts.

Among the Ale Yeasts were 3 from the Pure Yeast Department. These were all in excellent condition in every particular. Five samples of brewery yeast were infected by various lactic ferments, while the remaining 55 samples were satisfactory.

8 samples of Lager Yeast were received from the Pure Yeast Department; all were healthy and well developed and entirely free from any trace of infection.

114 samples of brewery yeast were satisfactory, and only 7 showed any appreciable amount of infection.

Beers and Ales.

156 samples of Lager Beer were examined in the Chemical as well as Biological Laboratories; 10 samples were pasteurized; 3 samples of finished beer were appreciably infected by sarcina and long rods and showed only very limited stability.

56 of these samples were completely analyzed; the average original gravity was 12.4° B., and the alcohol content 3.81%.

Of 105 Ale samples, 9 were pasteurized; only 1 unpasteurized sample showed more than a trace of infection. 38 samples of Ale were subjected to a complete chemical analysis; the original gravity was found to average 13.7° B., while the average alcohol was 4.40%.

Temperance Beverages.

These Beverages consisted of 20 samples of Cider and 23 samples of Temperance Beers or Ales.

One sample of Cider contained 9.20% alcohol by volume; the remaining 19 samples showed an average of 1.35% alcohol by volume.

The Temperance Beers and Ales showed an average alcohol content of 0.48% by weight or 0.56% by volume.

Coals—Ashes.

The majority (18) of the 27 samples analyzed contained excessive amounts of ash, some showed as much as 29%. Only 9 samples were considered satisfactory fuels.

No ashes were received for analysis.

Miscellaneous.

The 45 samples submitted were classified as follows:

Filtermass	13
Lubricants	9
Soaking Solutions	7
Crown Seals	3
Cleanders	5
Pitch	2
Dried Yeasts	2
Boiler Compound	1
Disinfectant	1
Lupuline	1
Alcohol	1

Poor little Ferguson, he of Venango County, Pa., is disgusted with the poor showing the Prohibition party made at the recent Presidential election. Says he: "The Prohibition party is not now making any satisfactory progress. * * * We are not satisfied with the immediate past of the Prohibition party. It inspires no confidence for a future that will demand infinite sacrifice." Why should he despair, as long as "Bill" Bryan generously offers himself to be the next victim to be knocked out in 1920?

Henceforth the political party that is not willing to put a Prohibition plank in its platform and the candidate, from President down, who is not willing to stand squarely on that plank, is not worthy the support of patriotic American citizens. —P. A. Baker, general superintendent of the Anti-Saloon League.

The intemperate arrogance of this ridiculous impostor is intolerable. He knows well enough that no great political party will adopt a Prohibition platform, and yet he insults the 15,000,000 Americans who are going to vote in 1920 for President in spite of his denouncing them as unpatriotic!

LEBEDEFF'S MACERATED YEAST JUICE. Beijerinck and van Hest, in "Folia Microbiologica," have repeated Lebedeff's method with the low-fermentation yeast of the Orangeboom Brewery, and have modified that method until it furnished a maceration juice with a powerful fermentative action. To obtain this result, they allowed the fresh yeast to ferment at room temperature in presence of 10% of saccharose, squeezed the yeast, forced it through a fine hair sieve, and dried the fine granules on filter paper in a warm room. The dried product was again sifted, and the fine flour was used, because it contains a larger number of open cells, and the juice from the coarse granules is quite inactive. When the yeast prepared by autofermentation is subjected to dialysis, the resulting dialysate is quite inactive; and no zymase can be detected in agaragar when the yeast is placed on, or mixed with, that substance, the conclusion being that zymase is not diffusible, and can only be liberated by breaking the cells, whereupon it appears as a filterable suspension colloid. The importance of autofermentation resides in the liquefaction of the protoplasm of the damaged cells. It could not be observed that uninjured cells are opened by autofermentation. Catalase is also a typical endoenzyme, liberated only by the breaking down of the cells. It occurs in Lebedeff's juice, in exact proportion to the number of opened cells.

Sensitiveness of Beer towards Cold, and the Wallerstein Process.*

By P. PETIT.

The formation of "glutin haze" in top-fermentation beers and certain kinds of bottom-fermentation beers, when these are exposed to low temperatures, appears to be due to the separation of albuminoid particles with some hop resins adhering to them. The temperature at which this haze is liable to form varies within wide limits, from 50° or even 54°, down to 32° F. The formation of the haze is influenced by various factors, viz., the amount and nature of nitrogenous matters present, the acidity of the beer, the presence of traces of metals or of caramelization products of sugar contained in some coloring preparations, and possibly, as suggested by H. T. Brown, the manner in which the wort has been cooled. The haze usually disappears when the beer is again warmed, but often a slight opalescence remains.

It appears that the sensitiveness of beers towards cold can be practically overcome by chilling the beers before filtration, with the object of removing once and for all any substances liable to separate out at low temperatures. For a long time it was thought that a beer which had been chilled to 34° F., for example, and filtered, would not afterwards produce a gluten haze unless its temperature fell below 34° F. This is unfortunately not correct, for haze sometimes forms at temperatures 4 or 5° or even more above that to which the beer was chilled before filtration. This is particularly liable to occur when, in chilling, the beer passes rapidly through the chilling coils, or when the temperature within the coils varies, which is often the case. When the chilling is conducted slowly, for example, by means of a brine coil within the beer receptacle, and a very low temperature is maintained for several days, there is little likelihood of the beer afterwards developing gluten haze at temperatures much above that employed in chilling, but the head-forming power of the beer suffers in consequence of this treatment. The complete elimination of risk of gluten haze by chilling and filtration therefore appears incompatible with the retention of those constituents of the beer on which the formation of a good head depends.

Another process for rendering beers chill-proof, patented by Dr. Leo Wallerstein, consists in adding a peptonizing agent, which transforms the albuminoid matters insoluble at low temperatures into simple and more soluble substances. At the request of the author a number of French brewers have made tests with a sample of this patented product, and the results are given below.

A. Top-fermentation Beer.—Fermented in vats at 63—70° F., transferred to cask, treated with the Wallerstein agent (about ½ oz. per barrel), and left for three days at 59° F., and then treated as usual, i. e., passed through cooling coils (from which it emerged at 41° F.), carbonated and filtered. Another cask of beer from the same brew, which had been similarly treated except that no peptonizing agent had been added, formed a cloudiness when cooled to 37° F., and remained bright for only 11 days in bottles. The peptonized beer, on the other hand, showed no cloudiness even at 21° F., and it remained sound for 18—20 days in bottle. There was no difference in the head-forming power of the two beers, but the flavor of the peptonized one was more delicate than that of the other.

B. Brewery Employing Mixed Fermentations.—The beer was fermented in vats, with top-fermentation yeast, at a maximum temperature of 61° F., then transferred to cask, and one lot was treated with peptonizing agent (about ½

oz. per barrel). After the treated and untreated beers had been kept in cask for 15 days at 48° F., one part of each was fined, and the rest was filtered. Of the unpeptonized beer the fined portion became cloudy at 45° F., and the filtered portion at 41—43° F. The peptonized beer became cloudy only when cooled to 24° F.

C. Bottom-fermentation Beer.—The beer was kept for 6—7 weeks in the cold cellar. It became cloudy in winter, and rolling the barrels after racking produced opalescence and sometimes turbidity. As the result of adding Wallerstein's product at the rate of about ⅓ oz. per barrel, before bunging, the beer could be chilled to 25° F. without becoming cloudy, and no difference in flavor or foam formation could be observed. The period during which the beer remained sound seems to have been lengthened by the treatment, but this point is not certain.

D. Top-fermentation Beer Fermented in Cask.—The peptonizing agent (about ½ oz. per barrel) was added when the removal of yeast was completed, and after some hours the beer was fined with isinglass. In consequence of adding the peptonizing agent the beer could be cooled 4° F. lower than untreated beer, without becoming cloudy. By lengthening the period between addition of the peptonizing agent and fining, better results were obtained, but it was impossible to render the beer capable of withstanding temperatures below about 45° F. The cloudiness produced, however, was much less pronounced than that observed in untreated beer, and it disappeared again very rapidly and completely when the beer was warmed.

E. Top-fermentation Beer Fermented in Cask.—The Wallerstein product was added when removal of the yeast was complete, and, by addition of syrup, the time at which clarification took place was somewhat delayed. The benefit of the treatment was insignificant; in fact, in some cases, the beer became more cloudy than untreated beer at the same temperature, though the cloudiness disappeared more rapidly and completely on warming.

From these tests the author concludes that the Wallerstein product renders beer chill-proof, provided it is given sufficient time to act, and the time required depends on the temperature. At 59° F., three days are sufficient; at 48° F., 12 or 15 days are required; and at 36—37° F., 30—40 days. When downward fining is employed, with fermentation in cask, the beneficial effect is reduced because the period of action is too short, and the addition of isinglass arrests the working of the peptonizing agent. With upward fining the agent has such a short time to act, and the isinglass eliminates it so soon, that the effect is still less, but even under these unfavorable conditions the treatment enables any cloudiness produced in the beer by chilling to be more rapidly and completely removed by warming.

The peptonizing agent thus renders unnecessary the elimination of gluten by chilling, and it acts much more effectively than the latter process with bottom-fermentation, and with top-fermentation when the beer remains for some days in cask in a moderately warm place before being filtered. Before sending out the beer it is fined.

The Wallerstein product is a white powder with an odor of hops. It forms an emulsion rather than a solution in water, and does not communicate any special flavor to the solution. Its action appears to depend mainly, if not entirely, on the presence of a proteolytic enzyme.

ANTI-SALOON LEAGUE A CANKER. "The Anti-Saloon League is to the church and politics what a scab is to the labor of the country—a canker worm."—"The Beacon."

* "Brasserie et Malterie."

Mashing Experiments.

In his experiments, the author used distilled water, distilled water with an addition of 30 g. of ground gypsum per hectolitre distilled water with 30 g. of common table salt per hectolitre; and lastly a regular hydrant water with decided amounts of bicarbonates. The artificially added salts were so chosen that the amount of the respective salt would not be greater than such as are usually found in a natural water. The mashing experiments were made at 60, 65, 70, and 80° C., and in the worts obtained the percentages of extract, maltose, albumen, albumose (by means of the zinc-sulphate precipitation) and phosphoric acid were determined. All three salts increased the time of conversion, the common table salt to the greatest extent. The maltose content of the salt worts was partly higher and partly lower than that of the pure water worts. The total albumen content of the gypsum wort was in all instances higher than that of the other salt waters. The greatest albumose-content was in every case obtained with the mashing temperature of 60° C. The least albumose was found in the wort made with pure water. It was noticed that increased mashing temperature produced decreased phosphoric acid content, and that the highest percentage of this was obtained in the wort from the table-salt water. The bicarbonate of lime in the hydrant water reduced the yield considerably. On the other hand, it produced a deeper color in the wort while the gypsum had the opposite effect. The apparent degree of attenuation was decreased at least 3% by the table salt and the gypsum as compared with the pure water, while the bicarbonate of lime increased it more than 1 per cent. It has therefore been shown that slight changes are effected by the various salts that are found in brewing waters.—("Brewer and Wine Merchant and Brewers' Guardian.")

AMMONIA LEAKS IN BRINE TANK. An ammonia leak in the brine tank is always a very expensive item. There is the loss of ammonia; the brine is frequently so saturated with ammonia that it must be thrown away; the tank must be stripped of ice, causing a considerable delay in the plant output; all such items make deep inroads into the year's profit of the plant. As a general thing the above losses can hardly be avoided, but can be held to a minimum by the prompt and judicious action on the part of the engineer. The following method is suggested in the event of a serious ammonia leak in the brine tank. When the leak is discovered (if it is a serious leak it can be detected by a roaring sound in the tank) the engineer should at once observe his back pressure gauge. Should the gauge pointer be near the zero mark, shut down the machine and make the necessary changes and start pumping air into the tank coils. As soon as the gauge indicates a pressure five to ten pounds, close the expansion valves. Should the gauge at first sight indicate a pressure ten or more pounds, close the expansion valves and let the machine run until the pressure drops below the ten pound mark. Tap the gauge gently from time to time to make sure it is not sticking, also have a man stationed on the tank near the leak, to make sure the blowing and roaring sound does not stop. Keep an air pressure on the tank coils until the brine is removed from the tank, and is brought below the leak in stripping the tank of the ice. In other words, keep the brine from getting into the coils, for should much brine get into the system there will be trouble and expense too numerous to mention.—("Journal of the Operative Brewers' Guild.")

THE LIPOIDS OF MALT. It has been repeatedly observed that strong alcohol extracts fatty substances from malt, and Luers has attempted to investigate the nature of these bodies by extracting about 60 lbs. of light malt finely ground with about nine gallons of alcohol. The extensive experimental work may be summarized as follows: If malt is extracted with 80 per cent. alcohol, the following substances are dissolved: (1) the protein bynin, (2) considerable quantities of invert sugar and cane sugar, (3) empyreumatic and aromatic substances, (4) fats containing a high content of free fatty acids, (5) a lipid which according to its phosphorous and nitrogen contents belongs to the group of diaminophosphatides (nitrogen : phosphorous = 2 : 0.94). It is especially distinguished by a high sucrose content (1.02 per cent.). This phosphatide proved to be a secondary product, as is shown by comparison with the lipid obtained by extracting the same malt with benzene. No clear insight as to the changes of phosphatides during malting could be obtained. Apparently they have little significance although they possibly take part in the formation of aroma. In this connection the relations and behavior of phosphatides to carbohydrates were studied. It was found that phosphatides when dissolved in organic solvents are able to adsorb considerable quantities of sugar, provided the latter is insoluble in the solvent (benzene). This adsorption of cane sugar follows a regular curve, conditioned by the colloidal nature of phosphatide solutions with organic solvents. An examination of the fat of barley and malt proved that the fatty acids consisted of stearic and palmitic together with some oleic and linoleic acids; in the unsaponifiable matter sitosterin, parasitosterin and a hydrocarbon, probably octadecane, were identified.—(London "Brewing Trade Review.")

THE SUBSIDENCE OF YEAST. Any marked increase in the normal quantity of sedimentary yeast present in fermenting or dropping vessels after beer has been racked off ought certainly to be accepted as a warning of coming trouble, for, under circumstances of correct working, the bulk of reproduced yeast rises naturally to the surface of fermenting fluid as temperature progresses towards the maximum of 68 to 70° F. The exact cause of an increase in the amount of bottom yeast has perhaps puzzled a good many; it is not, however, very difficult to explain. Yeast cells are buoyant only when expanded and diffused through wort from which gas vesicles are being constantly liberated, the most buoyant form of all corresponding to young, healthy cells formed at the period of preliminary barming. Weakness of store yeast and lack of suitable nutrients in worts undergoing fermentation constitute the two chief causes of an excess of sedimentary ferment, but there is another rather more obscure cause which is not perhaps generally recognized. We refer to cases in which the preliminary stage of fermentation is very energetic, and a large amount of gas is lost. Under these circumstances it is not unlikely that as the fermentation approaches the stage of yeast formation attenuation slows down considerably, and, owing to a correspondingly limited gas escape, newly-formed cells are not carried to the surface, but remain in suspension in the fluid, to subside eventually to the bottom of the vessel as the beer commences to lose heat. Readjustment of the malt blend or mashing process is the true remedy, but as a temporary measure to avoid thick racking and the possibility of "yeast bitten" beer, the employment of pure can crystal syrup at pitching time invariably checks the downward tendency of yeast and leads to improvement in the quality of beer racked.—(London "Brewers' Journal.")

A MARINE YEAST. Coupin has discovered between the valves of a living Portuguese oyster, a yeast ("Torula marine n. sp.") which grew to a round white colony of gelatin. This yeast will grow in sea water, containing peptone, to a white powder, does not form any film, and quickly subsides. It reproduces by germination, no spores being formed. It also grows in fresh water solutions, though less freely than in sea water. It sets up moderate fermentation in solutions of dextrose, levulose, galactose, saccharose, lactose and maltose, very weak fermentation in glycerol and mannitol, and none at all in solutions of starch, glycogen, dextrin or inulin. It grows with special freedom on carrots and potatoes.—("Comptes rendus.")

DETECTION OF PICRIC ACID IN BEER. By J. Castels, in "Journ. Pharm. Chim." The test described is based on the fact that bromine water converts picric acid, in aqueous solutions, into a bromodinitrophenol, which gives certain color reactions with ammonia and with potassium cyanide; 100-200cc beer are concentrated to about $\frac{1}{5}$ of the original weight, and the residue is twice extracted with 4-5 parts of 95 per cent. alcohol. The combined alcoholic extracts are concentrated to about 20cc, and the residue is mixed with 40cc water and boiled to expel the alcohol. After acidifying with hydrochloric acid 5-6cc of the liquid are treated with 5-6 drops of saturated bromine water, and heated just to boiling, rapidly cooled, and extracted with about an equal volume of ether. Half of the ethereal extract is evaporated to complete dryness in a porcelain dish, and the residue is exposed to ammonia gas, when a red coloration will be produced if bromodinitrophenol is present; the color vanishes in presence of a large excess of ammonia. If the remainder of the ethereal extract is allowed to evaporate on filter-paper, the latter, when dry, will show a carmine-red coloration when exposed to ammonia gas (not in excess), if bromodinitrophenol is present; or a drop of weak potassium cyanide solution allowed to evaporate on the paper will produce a red ring.

COMPRESSED AIR AS A LABOR SAVER. With labor saving forced upon us as it is at the present time, any hint which will help towards economy in this direction is worth consideration, and few things will prove more generally useful in the brewery than a small air compressor. In the bottling stores compressed air is now very generally found, but the type of machine employed there is not quite suitable for other work about the brewery. Much labor, and heavy work it is, too, is expended upon rousing the beer in the fermenting vessels. Now this can be entirely eliminated by the introduction of the air rouser which acts quite automatically; all that is required is to turn on a tap and shut it off again when sufficient rousing has taken place. Apart from the saving in labor, the enormous improvement in the yeast and fermentations more than justifies the installation of this system, but naturally the air should pass through an efficient air purifier before use. A long and unpleasant job is the removal of scale from the coils in the hot liquor backs, and for this a small pneumatic hammer actuated by compressed air effectually and expeditiously removes the calcareous deposit, and that without doing any injury to the coils, as inevitably occurs with the sharp-edged ordinary chipping tool. Again, the rapidity with which a boiler can be scaled with a blow pipe to which gas and compressed air are supplied is astonishing, while for brazing and other purposes in the engineer's shop it is as invaluable as it is in the malthouse for steep aeration. These are a few of its possible uses, but will suffice to show what a valuable labor saver it is. (London "Brewers' Journal.")

ERNOLITH. By Baudrexel in "Wochenschrift für Brauerei." This writer describes a process, introduced by Blücher and Krause, for making a substance resembling ebonite from yeast and formaldehyde, with or without the addition of other substances. Dried yeast, in powder, is treated with an equal weight of formalin, the mixture being evaporated, ground and pressed into mounds, under a pressure of 200-300 atmospheres, at a temperature of 90° C. Blood albumin, or other coagulable substances, may be added to the yeast, in the proportion of about 10%.

CONCENTRATION OF SUBSTRATUM AND ENZYME HAS NO RELATION TO OPTIMUM TEMPERATURE. The opinion formed, from theoretical considerations, that the optimum temperature of an enzyme is independent of the concentration of the substratum and of the enzyme itself, is confirmed by the experiments of A. Compton, in "Annales de l'Institut Pasteur," on the fission of salicin with salicinase—prepared from sweet almonds—under varying conditions of concentration. The results showed that the optimum temperature remains constant at 34° C. It was also found that the optimum temperature of an enzyme varies considerably—as much as 8.5° C.—not only in preparations of different origin, but also in those obtained from one and the same material.

INFLUENCE OF SALTS ON THE LIQUEFACTION OF STARCH. Viswanath, Row and Ayyangar, according to "Dept. Agric., India," have studied the relative influence of various compounds at one-tenth normal concentration on the rate of liquefaction of rice starch at 70° C. One gram of starch in 50 c.c. of the liquid under investigation was shaken continuously for one hour at 70° C., then cooled, treated with 15 c.c. of malt extract, and kept for two hours at 30° C. The liquid was then made up to 100 c.c. and filtered with kaolin, and 50 c.c. of the filtrate was hydrolysed with hydrochloric acid and the dextrose formed was determined and calculated back to starch. The results showed that 44.91 per cent. of the starch was liquefied by distilled water alone, and the following percentages in presence of the substances indicated at one-tenth normal concentration:—KOH 67.51%; Na₂CO₃ 26.62%; CaCO₃ (suspension) 25.04%; HCL 23.00%; Na₂SO₄ 22.06%; MgSO₄ 20.40%; NaCl 19.00%; MgCl₂ 17.14%; CaCl₂ 13.50%.

EFFECT OF DILUTE HYDROXIDES ON MALTOSE. In investigating the action of hydroxyl ions on maltose solutions, L. Kolb, in "Biochemische Zeitschrift," arrived at the following conclusions. The stronger the base of the hydroxide, the more rapidly and completely is the maltose decomposed, the solubility of the hydroxides in water being relatively important. Maltose solution can be rendered completely inert by the addition of a sufficiently large amount of hydroxide, the hydroxyl ions being consumed, so that decomposition is stopped, as soon as no more free HO ions are left. The decomposition of the maltose proceeds in the same characteristic manner, no matter what is the temperature of the reaction, though warmth is an accelerator. The decomposition is always accompanied by a brown coloration, the intensity of which depends on the degree of the action; but the coloring substances are readily removed by animal charcoal. The first stage of the decomposition is to change the maltose into dextrose, and proceeds rapidly, with the greatest loss of rotatory power. The dextrose is changed into an inactive mixture of levulose, dextrose and glucose, this stage proceeding so slowly that the end point, i. e., inactivity, takes a long time to reach. In addition to the above-mentioned sugars, there are formed lactic acid, carbon dioxide, and other (in part high-molecular) acids, which, however, were not investigated.

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

R. K. The sample of beer which you sent us is entirely satisfactory in its chemical composition; its original gravity was about 12.6° B.

The beer, however, possesses a most unpleasant odor and taste, which in our opinion is not due to the materials employed, but originates in the cellar and is derived from wild yeast infection.

A systematic investigation should be made without delay in order to locate the source of this infection.

P. M. The two samples of Malt were certainly not made from the same barley.

The one you have marked "M" is of choice quality, yielding over 70% extract and containing 95% perfectly mellow kernels. The sample marked "K" is made from a very lean barley and yields less than 68% of extract; its moisture is also excessive. This Malt must be considered decidedly inferior in brewing value and general quality.

L. S. M. Your sample of barley is in a very unsatisfactory condition, and if you bought it as "cleansed" you have a perfect right to make a claim upon the sellers or reject the lot. You must, of course, be quite certain that your sample was entirely representative of the bulk.

The sample contains nearly 6% of broken kernels and foreign seeds, and whether it is used on the floor system or germinated in the drum or compartment system, the barley will undoubtedly cause trouble and result in a malt of poor quality.

A. H. We are entirely in favor of your plan as suggested and have always advocated the installation of special pure yeast propagators in breweries where the output justifies the additional expense.

We, however, strongly recommend that you employ a special man who is particularly trained to look after the apparatus. Under certain conditions a pure yeast apparatus may prove a great advantage, whereas, if not properly manipulated, it may become a very serious source of trouble and annoyance.

O. F. The information you require could easily have been obtained from any book on physics. The hydrometer depends for its action upon the theory of Archimedes. "When a solid body is immersed in a liquid specifically heavier than itself it sinks down and does not become stationary until it has displaced a bulk of fluid equal to its own weight." Suppose for example you take an elongated body floating upright and with a specific weight exactly half that of water, you will find that it remains steady at exactly half its length, because its whole weight is counterpoised by a bulk of liquid equal to half its size.

D. L. There is no doubt that your trouble arises from the use of "steely" malts. The low initial temperatures of your mashing process allows a large percentage of starch to escape gelatinization in the mash tub. It is, therefore, not acted upon while the diastase is at its optimum of converting power. Your high "mash off" temperature, together with the high temperature of the sparge water afterwards, cause

a large proportion of this "steely" starch to be gelatinized and washed into the kettle, where it remains in an unconverted condition. A simple test with iodine solution will convince you of the correctness of this phenomenon.

B. M. A. It will be very difficult to give you the actual amount of coal required, because your plant is not modern and the manufacture of 60 tons ice daily complicates the calculation. We may say, however, in general terms that the total cost of fuel for all your purposes, brewing, cooling, ice making and bottling shop would not exceed say 12 cents per barrel of beer brewed. Roughly estimated for your output, you should not use more than about 3,500 tons of a good quality coal per year.

S. B. Your sample of pitch is of very unsatisfactory quality. Its melting point is abnormally low and it is to some extent soluble in 4% alcohol, giving the solution a peculiar disagreeable musty odor resembling old paint.

B. T. Your sample of well water sent for comparative analysis has been carefully examined by us and our results practically agree with those of your own chemist. In our opinion the reason for the difference found in the composition of the water between now and last February must be sought in the well, as it is well known that changes take place in waters taken from wells. This very often occurs in wells where the supply of water is of a "surface" type, but it is also experienced with deep wells; sometimes owing to the effect caused by sinking other boreholes in the immediate neighborhood, and sometimes by reason of certain strata running dry and others supplying the deficiency.

T. P. H. We are very favorably disposed towards the use of higher temperatures in the barley steeping water, but it is impossible to name any particular temperature that can be applied indiscriminately. You must remember that all we require is to develop sufficient vital activity in the barley germ to bring about a regular and uniform transformation throughout the entire kernel when the barley is undergoing germination. We are not able to state with precision at what stage the enzyme diastase first develops; the enzyme peptase from the nature of its action we assume is brought into activity at a very early stage, in order that the insoluble matter may be sufficiently broken down to readily diffuse through a membrane. We advise you to feel your way "step by step" and not to make any revolutionary changes of steeping temperature.

THE DETECTION OF SUGAR COLORING IN BEER. The methods of detecting sugar coloring in beer, hitherto in use, are three in number. That of Griessmeyer is based on the fact that, in contrast to what happens in the case of color malt, beer colored with sugar coloring does not become paler in color when salted out with ammonium sulphate. According to Aubry, when the beer is salted out with ammonium sulphate and treated with its own volume of alcohol, two strata are formed, the upper one of which is the darker when color malt has been used, but the lower one in the case of sugar coloring. The third method, that of Amthor, is based on the precipitation of the caramel in sugar coloring by paraldehyde, and the resulting deposit giving a yellow precipitate with the known phenylhydrazine reagent. Zetsche, in "Zeitschrift für analytische Chemie," finds that the Amthor method alone is reliable, the decisive factor being the positive result with phenylhydrazine, since the brown coloration with paraldehyde appears also in the case of color malt. He also succeeded in dissolving the osazone deposit in ammonia, but not in reprecipitating the ammoniacal solution with hydrochloric acid.

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Some Reflections.

Subjoined we publish a few clippings from exchanges to show our readers what friends and opponents of the trade think of the causes of the new impetus to Prohibition, and what they suggest to the trade as remedies to be employed:

"WHAT NEXT? The results of the vote at the November election of the thirteen States which had on their ballot various phases of the prohibition question, were, to say the least, not favorable to our cause, and it is, perhaps, timely to ask the question: 'What next?' . . . We can readily see that one of the main reasons for the present prohibition movement is the discovery and abuse of the distilled liquors. For this the brewer is not responsible, and he as well as the wine merchant would possibly do well if they could divorce the sale of their products from that of the distilled spirits. Another reason, equally important in the solution of the question why the 'wet' and 'dry' issue has become so acute, is the laxity of control which is exercised over the modern saloon, in conjunction with the unfortunate American 'treating' habit. While the harm which may be done by the presence of a saloon in a certain community, is rarely, if ever, caused by the beer which is consumed therein, moreover by the distilled spirits, the blame always falls upon the brewer, because, in most cases, the saloon happens to be brewery property. The prohibitionist rarely accepts any explanation as to the true state of affairs, and it is, therefore, up to the brewer to see to it that the distributing end of his business is as clean as his product, and to assist the public authorities in the control, and if necessary in the closing up of such places as have given reason for public offense. If this is not done, we will lose ground steadily, and that we cannot afford to do this without eventually meeting with complete disaster, one glance at the accompanying map suffices to show."—"Communications of the Master Brewers' Association of the U. S.")

SALOON BUSINESS IN MICHIGAN "INTOLERABLE." "The blame for the small majority against prohibition in Detroit, about 5,000 votes out of a total of approximately 120,000 votes cast in the city on the proposition, and the decisive vote for it in other parts of the State, which cast approximately 600,000 votes on the proposition, is placed by the 'wet' leaders on the reckless, lawbreaking policy of a large number of the State's 3,060 saloons. If these saloons had been kept closed on Sunday, and if they had been run in orderly fashion instead of the wide-open, money-grabbing methods that have prevailed in many of them, the wet leaders say the result would have been different. The saloon business, as it has been run in parts of this State, has been indefensible and the people found it intolerable. Naturally, the brewers and wholesale liquor dealers are not escaping each other's criticism, and some of them are now convinced that it would have been better not to sell their goods to disreputable joints, which paid well for their goods, but which aroused general resentment against the liquor business."—(St. Louis "Post-Dispatch.")

SOMETHING MUST BE DONE! "Election results show that something must be done. The question is: Exactly what should be done and who is to do it? * * * If reforming or abolishing the saloon would do the liquor business any good, why did Oregon, where they had no saloons at all, vote for the 'bone dry' amendment, which places its impertinent hand on the private dining table in every home in Oregon, and forbids the private citizens from drinking even one small pint of beer in his own house? The saloon did not pass the 'bone dry' amendment. Exactly the same com-

plete lack of results attaches to every other reform which has ever been launched upon the defenseless liquor business by its friends and its enemies. * * * With schemes to reform the liquor business along hackneyed lines, some of which have been indicated in this article, the 'Review' will have nothing to do, because it has been amply demonstrated that if such schemes have any result at all, the only result is to increase the dry vote. One thing is quite sure, and that is, it is not worth while to continue to do any of the things which so far have been done. * * * The liquor business needs no more generals. It does need an inventor."—("Wholesalers and Retailers Review," San Francisco.)

"WHAT IS IT ALL ABOUT? While the prohibitionists are gloating and chanting over their victories in some States and ignoring their defeats in other States, let us try to find the answer to this question: 'What is it all about?' There must be some excuse for a vast destruction of lawful property; some excuse for throwing scores of thousands of wage-earners out of employment; some excuse for destroying immense local, State and National revenues—but surely that excuse, whatever it may be, is not public hatred for beer or for whiskey, or for what the vintner sells. * * * Who is so foolish as to believe that nation-wide prohibition, so-called, would create anything but a nation-wide necessity for a solution of the liquor problem? Then why not solve it now? Why not do away with the objectionable features of the liquor business and retain the features that are necessary in furnishing the products that practically everybody insists that we shall have?"—(T. M. Gilmore, President National Model License League.)

"THE TIDAL WAVE OF PROHIBITION. The election adds to the nineteen prohibition States four more, Michigan, Montana, Nebraska and South Dakota, with the prospect of two others, Utah and Florida, coming in later. Half of the States, and, if we include Alaska, more than half of the area of continental United States, are now dry territory. Besides this, liquor is now excluded by local option or high license from a large part of most of the other States. The meaning of this is plain. It is simply that the American people are becoming slowly but soundly convinced that alcohol is too dangerous to be allowed at large in the community. This is no outburst of fanaticism. The people have not been carried off their feet by eloquence. They have not been misled by exaggerated statements as to the evils of the liquor traffic or of the advantages of abstinence. They know what the saloon does, they know what prohibition does, and they prefer the latter."—("The Independent.")

"SHALL WE DO WITHOUT 'SALOONS'? Prohibition, so-called, is advancing. But everywhere the recognition of personal liberty is advancing, too. * * * Eventually the issue will be brought out something after this fashion: Shall we do without saloons, and encourage a race of private and solitary drinkers and drunkards, or shall we fight the liquor evil in the open? Some States where prohibition experience has been bitter, would like to talk on that issue now, no doubt."—(Boston "Journal.")

WE LOST MUCH GROUND. "It is well known that prohibition laws are ineffective and create conditions in many instances far worse than even badly conducted saloons, and we hold no brief for the indecent drinking emporiums; but something is radically wrong and we are searching for the cause, because we believe that the liquor industry of the United States is facing a crisis which may not prove fatal if the proper remedies are applied without delay. We have lost much ground. We must not lose any more or we shall be dangerously near national prohibition, and that means

the destruction of our vast industry in all of its branches. It means confiscation of capital and property."—(Bonfort's Wine and Spirit Circular.)

ALL OF THEM WERE DRINKERS. "The patriarchs, prophets and reformers referred to in the Bible were all drinkers of wine and strong drink, and Jesus himself approved it by giving 'yahyin' (fermented wine) to his disciples at the Last Supper; and by turning water into wine at the feast of Cana, and generally recognizing moderate drinking as among the proprieties of social life. The use of the Hebrew words 'yahyin,' meaning fermented wine, and 'torash,' referring to unfermented grape juice, is important in this connection to meet the puerile argument of some prohibitionists, who, to serve their purposes, try to torture into the Bible texts what is not there. In the instances referred to, the word 'yahyin,' and not 'torash,' is used by the writers of the Synoptics and the books of the Old Testament."—(Arthur J. Westermayr in the "Open Court.")

LEAVE THE FIELD OPEN FOR BEER AND WINE ONLY! "We believe that the country would be a great deal better off if there were no liquor to be had anywhere, but we do not believe that such a thing is possible, not at the present time. To jump suddenly from a liquor-consuming nation to a 'dry' nation is impossible. People who have been accustomed to drinking will continue to get it in some way; experience shows that. The wise thing to do would be to make it a crime to sell or even manufacture whiskey, gins and strong alcoholic liquors, leaving the field open only for beers and light wines. This would regulate the liquor evil and would put America on the same plane as Italy, Germany, France and other countries, where liquor is not a problem. By confining liquor to beers and light wines the country might then work out of the use of liquor entirely in a few more generations."—("Justice," official organ of the retail and wholesale liquor interests of New Jersey.)

AIMED AT THE SALOON—NOT DRINK. "In most localities Prohibition is aimed primarily at the saloon, and it is the saloon perhaps more than the beverages purveyed therein that is on trial for its life. In numerous instances the sale of liquor is the least of the things that have put the saloon on the defensive. It may not be that saloon reform would immediately check Prohibition sentiment, but it is certain that saloon abuses will continue to stimulate it as they have done for years past."—(New York "World.")

CUT LOOSE FROM WHISKEY! "The liquor interests of the nation have been shaken to their foundations by the results of the late election. The country is going dry and they know it. What are they going to do about it—now that it is just possible that it is too late to do anything to stem the tide? What is going to be done to rectify the mistakes of the past? What is going to be done to save the necks of those who carry on what we believe to be legitimate business? If the breweries are to save their business the sooner they cut loose from the whiskey promoters the more chance they will have of success. If reputable saloon men are to save their business, the sooner they cut loose from whiskey interests and dive interests the more chance they will have of success."—(Thomas F. Martin, Secretary of State of New Jersey.)

DISTILLERS' HOPES NOT BUOYANT. "The presidential election held scant interest for our trade, in comparison with the elections in the States where prohibition was the issue, and the voting 'dry' of four entire States with its probable effect of influencing the members of Congress from those States to favor a national prohibition measure, is not calculated to buoy up the hopes or spirit of the dis-

tillers, wholesale liquor dealers and others in the wine and spirit trade. Yet the tremendous consumption of alcoholic beverages at this very time, when prohibition sentiment is apparently becoming an irresistible wave, and the knowledge that a large part of this consumption is in the States already legally 'dry' and those that have just voted to join that class, make it hard to believe that the people of the United States are ready for or desire real prohibition."—"Wine and Spirit Bulletin," Louisville, Ky.)

JOINT INTERESTS WILL FIND A "MODUS VIVENDI." "There is unquestionably middle ground whereon the liquor interests and those who sincerely strive for conditions of national temperance can erect a modus vivendi which would so appeal to all but the professional intolerants that a vast preponderance of public sentiment would stand behind their mutual conclusion regarding what best should be done in the joint interests of personal liberty and actual temperance."—(St. Louis "Times.")

WILL CONGRESS DO ITS WORST? "The success of the prohibition propaganda in this election—in the form of a non-political and essentially sumptuary issue—indicates that the question of regulating individual habit is more alive now than ever. Earlier successes might have been regarded as flashes of revolt against liquor, but it becomes apparent that a steady and strong impulse is at work. This is not a flash. It is a progress. It reveals a tendency that grows stronger with each year. Each year gives it its increment and the next increases it. Therefore, national prohibition is nearer a reality now than carelessly thinking men would have dreamed possible even two years ago. It is within rational conception that inside of a few years the United States Congress will act in accordance with the wishes of advocates of national prohibition and that the country will accept an amendment to the Constitution and will drink on the sly thereafter."—(Chicago "Tribune.")

"IT WOULD BE STRANGE if we, as business men, did not take note of public sentiment. Before we educate the public to the use and not the abuse of liquor, we must clean up our business by weeding out the 'rum holes.'"—(Neil Bonner, president of the National Liquor League.)

WHAT A NEW JERSEY SHERIFF SAYS: "It is clear to my mind that we will have to make a choice at the next Presidential election between Prohibition on the one hand and the present liquor conditions on the other. If the brewers will cut loose absolutely from the distillers, there is a chance to change the issue in the next campaign from Prohibition to Temperance—and Temperance will win! When the liquor business is reduced to beer and light wines, there will be no drunkenness; at least, it will be minimized, for people do not get drunk on beer. The nation must wipe out whiskey and gin, and strong alcoholic drinks; wipe out their manufacture as well as their sale."—(Sheriff Kinkead, of Hudson County, N. J.)

"THE WISE THING TO DO would be to make it a crime to sell or even manufacture whiskey, gins and strong alcoholic liquors, leaving the field open only for beers and light wines. This would regulate the liquor evil and would put America on the same plane as Italy, Germany, France and other countries where liquor is not a problem. By confining liquor to beers and light wines the country might then work out of the use of liquor entirely in a few more generations, but to attempt to jump from present conditions into the ideal State of having no liquor is not practicable."—"Hudson Dispatch.")

FIGHT TOGETHER? "Will the big brewers, distillers and

retailers in other States take warning from the fate of Michigan and get together and fight together continuously and all the time?"—"National Liquor Dealers' Journal.")

"THE SALOON MUST GO." "Instead of trying to sterilize the dram shop and pull out its teeth it would be far better and in accord with sound judgment to prepare to discontinue the business and get out of it gracefully. The saloons have run their day. * * * The wave of Prohibition will never be checked by futile efforts to reform the saloon, nor by threats, nor subtle arguments, nor by astute politicians. I suggest the liquor dealers use their business sagacity and foresight and money in transferring their business into legitimate industries, and it will be to their credit to do it quickly and gracefully before they are forced to close out their business by the very law that has been unable to regulate and control them."—(John L. Brandt, St. Louis.)

"PROHIBITION OF THE LIQUOR TRAFFIC is an attempt to force uniformity of habits and tastes upon individuals who vary in personal characteristics to an infinite degree."—"N. Y. Commercial.")

"IN SOBER TRUTH, the waste and the loss involved in the proposed revolutionary changes to prohibition would be offset by no real or permanent benefits. The sacrifices would prove vain."—(Edward C. Wentworth, in the "Economist.")

WELL, KANSAS NEEDS IT. "It is difficult to understand Prohibitionists. When they organize a campaign, they tackle Kansas, first jump out of the box. The Flying Squadron devoted as much time to Atchison as to Kansas City, which has as many saloons and liquor-employed as Atchison has people."—(Atchison [Kan.] "Globe.")

MISUSE OF CHURCHES. "I fully approve of the church as a place for honest, sincere, moral and religious teaching and preaching. What I object to is the 'misuse' of the churches by a small army of traveling imitation reformers who use the anti-liquor subject as a cloak for their necessary propaganda and selfish ends."—(J. H. W. in "The Evening Sun.")

CURE TOO EXPENSIVE. "The 'drys' are offering us the remedy that will cost the people of the United States \$330,000,000 per year in tax revenue to Uncle Sam alone. That makes prohibition a very expensive cure, and as prospective buyers we have the right to thoroughly investigate its merits and make known our criticism."—(Daniel A. Levy, Chicago.)

"SPEAKING OF MONEY. If people in dry States save their money as the dry spouters claim they do, why is it that the savings accounts in Kansas are only one-half as large as the savings accounts of the rest of the country? Kansas has been dry for thirty-five years. Prohibition has had ample time to show its effects—to bring untold 'blessings' upon the people."—(Omaha [Neb.] "Protector.")

LAWS MUST REFLECT COMMUNITY'S SPIRIT. "So far from government being able to do everything, it can in reality do very little to establish the fundamentals of Christian character and morality. This must be the work of individual training and discipline. The spirit of a community that is moral and honest will be unconsciously reflected in its laws and in the characters of the men chosen to fill official positions. But no amount of zeal in executives and legislators can create, by fiat, public morality from a corrupted constituency. The legislation which attempts to do so by minutely regulating conduct is contradictory of all teachings of experience."—"Peace Forum.")

Bryan's Quack Medicine Counter.

To the nauseating nostrums with which Wm. J. Bryan has tried to cure a suffering body politic since 1896, he has now added Prohibition, hoping to therewith boost himself into the Presidency of the United States in 1920, an ambition which an intelligent electorate has refused to advance three times. And so it will again, should this discredited political quack succeed in capturing the presidential nomination for the fourth time. The American people will not swallow the Prohibition pill, no more than it swallowed free silver and the rest of the insipid and repulsive Bryan patent medicines.

The whole subject of excise legislation is a remarkably intricate one, but if there is one lesson from past experience which seems more clearly defined than any other it is that State-wide Prohibition does not prohibit. The most effective to produce temperance would be a public opinion, which would make each man his own prohibitionist.—(New York "Tribune.")

Collier's Weekly, The Independent and The Literary Digest, while pretending to be fair and impartial recorders of current events, are simply disguised organs of Prohibition and theological intolerance. They should be shunned by every fair-minded American.

There looms before us a deficit of over \$185,000,000 in the treasury of the United States at the next fiscal year. And yet some harebrained fanatics propose that the enormous revenue the government derives from the "liquor traffic" be cut off by Nation-wide Prohibition! Could such collective political insanity be propagated in any other country but ours?

Actuaries of insurance companies and official statisticians of governments alike attest that accidents are rarely caused by the respective sufferers having consumed beer previous to the accidents having occurred. It is also a fact that comparatively few accidents take place in breweries. In Missouri this has resulted in the employers' liability insurance for employes in the breweries of that State having their rates for risks of this class reduced 35 per cent. Here again we have evidence that beer-drinking is preferable to the drinking of beverages containing a larger proportion of alcohol.

There is one war chariot in Europe that is both novel and effective, and it is the water wagon.—*N. Y. Sun.*

You don't mean it, brother. But if you do, you are mistaken, at least as far as the efficiency of the water wagon is concerned in regard to the armies of the European belligerents. They are not on it. They all get beer, wine or rum, except the Turks, and they are, as far as the censor permits us to know it, the least efficient of all, in spite of the fact that the German Kaiser told his naval cadets at Kiel that "in the next war the army which drinks no alcohol will be victorious."

On the water wagon are just now only the poor stay-at-homes, who, that the fellows in the trenches may be efficient, must make munitions and guns and eat black war-bread, all other grain being baked, fermented or distilled for the benefit of the armies at the front.

Sales of Beer in the United States During the Fiscal Year 1914-1915.

The annual report of the U. S. Commissioner of Internal Revenue shows that during the fiscal year ended June 30th, 1916, 58,564,508 barrels of beer were removed from breweries, tax paid, and 69,116 barrels were removed from breweries for export, free of tax, making a total of 58,633,624 barrels produced. This is a net decrease of 1,174,586 barrels as compared with the production in 1914-1915.

The total receipts of the bureau for the past fiscal year amounted to \$512,723,287.77, exceeding by \$97,042,263.91 the receipts for the preceding fiscal year (1915), which were then the largest in the history of the bureau.

So, the brewers have paid about one-tenth of the immense sum which the American people spent last year for the maintenance of the Republic's government.

The fiscal year 1916 witnessed a large increase in the production and tax-paid withdrawal of distilled spirits; a falling off during the early part of the year in the production of fermented liquors, but with a steady increase in production during the later months following. A great increase in corporation and individual income-tax receipts further emphasized the general prosperous condition throughout the country.

The number of breweries operated during the year was 1,332, a decrease of 40 as compared with the previous fiscal year. Pipe lines were employed for conveying fermented liquors to the bottling premises at 374 breweries, being an increase of 12 as compared with the previous fiscal year.

The table showing the sales of beer during the last ten years indicates that in 1915-1916, the sales increased in 20 States, while they decreased in twenty-two, the increases in the number of barrels ranging between 42 and 467,911 barrels, and the decreases between 486 and 447,582 barrels. The State showing the largest increase was Pennsylvania, while New York showed the largest decrease.

The subjoined table shows the amount of taxes paid by the entire brewing trade during the last fiscal year:

	1915.	1916.	Increase.
Fermented liquors (barrel tax)	\$78,460,380 97	\$87,875,672 22	\$9,415,291 25
Brewers (special tax)	124,719 15	128,231 28	3,512 13
Retail dealers in malt liquors (special tax)	241,018 65	249,153 55	8,134 90
Wholesale dealers in malt liquors (special tax)	502,827 95	518,046 94	15,218 99
Total	\$79,328,946 72	\$88,771,103 99	\$9,442,157 27

While less beer was sold by the brewers, wholesalers and retailers, they had to pay higher taxes to the Federal Government.

The five States which produced the largest quantity of fermented liquors are New York, 12,732,529 barrels; Pennsylvania, 7,634,211 barrels; Illinois, 5,955,231 barrels; Wisconsin, 4,525,027 barrels, and Ohio, 4,844,239 barrels.

The three collection districts which produced the largest quantity of fermented liquors are third New York, 5,168,070 barrels; first Illinois, 5,045,561 barrels, and first Wisconsin, 3,723,400 barrels.

The way how Prohibition "prohibits" is illustrated by the fact that during the last fiscal year 3,376 illicit distilleries, with 28,868 gallons of spirits, were seized by Federal Revenue officers, most of the seizures having been effected in the Prohibition States of Alabama (603), Georgia (667), North Carolina (882), South Carolina (238), Tennessee (330), Virginia (336), and West Virginia (16).

No Prohibitionist ever mentions these facts!

SALES OF BEER IN THE UNITED STATES.

For the Fiscal year ending June 30th, 1916, and the ten preceding years

STATES AND TERRITORIES.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	Increase, 1915-1916.	Decrease, 1915-1916.	STATES AND TERRITORIES.
Alabama	105,430	113,247	89,566	57,204	11,520	13,290	39,835	44,945	45,426	35,659	6,590	678	35,659	Alabama
Alaska	50,901	68,103	68,181	52,971	58,292	6,283	7,417	5,891	8,983	5,912	6,590	678	35,659	Alaska
Arizona	13,207	13,412	12,411	11,442	11,886	15,147	18,850	20,410	21,235	8,535	2,510	.....	6,025	Arizona
Arkansas	7,925	10,100	11,775	10,024	12,700	10,025	8,850	10,550	10,950	10,827	6,004	.....	4,823	Arkansas
California	1,032,728	1,132,728	1,164,397	1,128,565	1,163,891	1,215,405	1,296,355	1,335,449	1,390,890	1,281,951	1,382,589	100,638	162,594	California
Colorado	341,310	374,385	403,114	381,710	412,962	435,072	387,761	389,472	374,853	326,138	163,544	.....	162,594	Colorado
Connecticut	612,781	700,237	717,528	708,621	770,148	736,146	736,261	786,267	786,272	760,502	909,114	148,612	.....	Connecticut
Delaware	152,619	160,620	160,595	154,654	162,501	142,017	129,695	145,395	137,820	125,599	132,530	6,931	.....	Delaware
Dist. Columbia	316,205	330,093	339,949	310,883	325,112	286,721	284,576	266,580	230,944	169,973	122,285	.....	47,688	Dist. Columbia
Florida	17,044	17,200	14,968	15,750	19,425	18,350	21,200	25,500	25,455	29,983	28,218	.....	1,765	Florida
Georgia	172,745	175,860	118,370	115,155	128,750	129,455	138,955	141,620	142,430	110,073	80,387	.....	29,686	Georgia
Hawaii	14,775	16,360	12,642	14,018	13,618	16,683	20,567	25,348	31,335	35,194	40,858	5,664	.....	Hawaii
Idaho	30,201	38,945	45,086	42,669	43,900	32,780	29,591	27,213	20,545	23,796	11,830	.....	11,966	Idaho
Illinois	5,196,920	5,423,280	5,535,167	5,525,473	6,024,884	6,630,254	6,263,862	6,656,923	6,987,568	6,269,757	5,955,231	.....	314,526	Illinois
Indiana	1,332,638	1,412,326	1,365,420	1,272,017	1,303,166	1,469,030	1,546,292	1,639,281	1,769,038	1,568,028	1,436,099	.....	131,929	Indiana
Iowa	391,182	420,956	411,455	437,177	482,668	511,536	447,114	484,088	503,370	472,764	210,498	.....	262,266	Iowa
Kansas	15,356	15,690	12,676	5,872	510	.....	.....	.....	20	763,112	.....	.....	.....	Kansas
Kentucky	708,778	743,533	738,381	704,710	756,225	822,555	801,935	821,640	858,515	502,811	672,417	.....	90,695	Kentucky
Louisiana	425,742	490,265	510,258	473,027	462,795	471,560	483,988	542,156	524,965	502,811	547,014	44,203	.....	Louisiana
Maine	.....	.....	.....	.....	.....	.....	.....	.....	1,631	590	104	.....	486	Maine
Maryland	940,774	961,353	960,236	911,108	936,716	1,077,884	1,093,838	1,139,620	1,177,744	1,116,811	1,119,896	3,085	.....	Maryland
Massachusetts	2,042,713	2,158,850	2,201,861	2,042,993	2,112,006	2,381,435	2,386,905	2,541,615	2,521,618	2,378,437	2,450,411	71,974	.....	Massachusetts
Michigan	1,382,535	1,521,305	1,539,833	1,483,207	1,538,663	1,724,156	1,792,105	2,008,371	2,113,494	1,929,472	2,154,802	225,330	.....	Michigan
Minnesota	1,112,808	1,238,932	1,337,976	1,411,570	1,578,706	1,652,184	1,612,139	1,633,452	1,749,555	1,643,108	1,511,916	.....	131,192	Minnesota
Missouri	3,580,292	3,848,693	3,841,337	3,704,978	3,890,147	4,223,769	4,030,390	4,170,065	4,142,160	3,567,763	3,344,092	.....	223,671	Missouri
Montana	276,892	310,848	335,888	335,998	346,888	241,385	232,618	268,851	288,247	241,642	276,567	34,925	.....	Montana
Nebraska	330,679	355,570	383,088	389,820	414,519	436,268	413,014	442,388	453,640	425,919	412,921	.....	12,995	Nebraska
Nevada	48,712	70,714	82,136	60,132	81,204	18,740	18,662	15,420	17,580	17,558	14,515	.....	3,043	Nevada
New Hampshire	316,774	323,363	301,132	274,733	268,168	260,395	266,720	289,010	283,100	282,027	279,124	.....	2,903	New Hampshire
New Jersey	3,003,678	3,138,398	3,178,958	3,114,713	3,260,914	3,418,162	3,397,375	3,531,616	3,495,594	3,219,685	3,278,613	58,928	.....	New Jersey
New Mexico	14,516	15,935	14,786	13,083	15,089	8,777	9,240	8,756	8,637	9,168	9,850	682	.....	New Mexico
New York	12,345,189	13,016,904	12,962,152	12,572,042	13,095,353	13,732,743	13,677,850	13,956,878	14,040,387	13,180,111	12,732,529	.....	447,582	New York
North Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	North Carolina
Ohio	4,254,248	4,323,141	4,401,313	4,058,438	4,252,077	4,573,275	4,742,665	5,150,187	5,147,419	4,622,581	4,844,239	221,658	.....	Ohio
Oklahoma	14,209	26,295	14,424	.....	.....	.....	.....	178	.....	13	55	42	.....	Oklahoma
Oregon	154,299	205,757	196,905	194,231	224,722	245,002	243,819	222,888	212,276	181,272	106,260	.....	75,012	Oregon
Pennsylvania	6,961,277	7,541,796	7,569,557	7,050,262	7,664,141	7,811,731	7,449,543	7,959,509	8,008,786	7,166,300	7,634,211	467,911	.....	Pennsylvania
Rhode Island	471,318	525,518	522,377	502,967	541,217	649,171	667,385	701,630	691,734	621,977	650,775	28,798	.....	Rhode Island
South Carolina	1,735	3,001	4,090	5,157	2,942	5,258	2,688	3,362	4,607	3,767	812	.....	2,955	South Carolina
South Dakota	41,617	41,277	45,845	44,940	50,605	52,345	44,808	44,352	44,557	43,052	43,403	351	.....	South Dakota
Tennessee	283,091	290,895	260,638	255,200	221,850	256,395	273,850	278,882	225,923	89,573	48,548	.....	41,025	Tennessee
Texas	480,764	556,776	546,917	552,976	611,399	678,796	673,262	744,911	740,502	661,867	706,910	45,043	.....	Texas
Utah	65,900	73,132	83,068	81,861	85,266	140,123	129,105	140,648	149,715	130,121	139,112	8,991	.....	Utah
Virginia	210,955	211,557	192,774	164,267	174,451	190,473	196,756	208,511	197,035	164,517	153,806	.....	10,711	Virginia
Washington	554,373	787,862	802,937	749,966	801,589	875,028	854,147	876,772	965,562	876,962	468,073	.....	408,889	Washington
West Virginia	392,342	334,241	341,700	293,189	302,780	363,330	370,142	371,017	342,942	.....	.....	.....	193,404	West Virginia
Wisconsin	4,532,678	4,986,139	4,875,965	4,569,941	4,790,797	5,287,347	5,016,701	5,171,179	5,278,989	4,718,431	4,525,027	.....	.....	Wisconsin
Wyoming	19,450	24,661	34,666	29,689	37,855	16,110	16,935	15,300	15,425	14,872	19,332	4,460	.....	Wyoming
	54,651,637	58,546,111	58,747,680	56,303,497	59,485,117	63,283,123	62,176,694	65,324,876	66,189,473	59,808,210	58,633,624	1,478,904	2,653,490	

Net Decrease for the Fiscal Year ending June 30th, 1916, compared with the preceding Fiscal year, 1,174,586 barrels.

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Prohibition and Mortality.

While the consumption of "liquor" has been increasing in the United States ever since the first bottle of spirits was brought over from Europe, the death rate among its population has steadily decreased. And this increase and decrease in mortality is greatest and most rapid in "wet" territory, because there is more intelligence and more money to apply the principles of sanitation and the prevention of disease. The reason why people die in a larger proportion in "dry" than in "wet" places is that Prohibition, not prohibiting, prevents public authorities from scientifically administering their duties toward their constituents. Prohibition, engendered by ignorance and stupidity, shortens the lives of those who adopt it.

"Liquid Bread."

The German government is again to still more restrict the production of beer in that country to enable it to continue the war. But Bavaria is to be excepted from the restriction, as in that State beer is considered a food—"liquid bread," as Justus Liebig is quoted as thus having designated the national beverage of the Germans. Well, the Bavarians drink more beer than anyone else, and it nourishes them. They drank it probably longer than most other people and that is the reason why the Government dares not touch that Bavarian necessary of life.

If beer could assume such a commanding position in the political economy of Bavaria, it can do so in other countries. And it *will* do so in the course of human development. Some day beer will be a necessary of life all over the world, when Prohibition has been dead and forgotten.

Clergymen as Bartenders.

A New York clergyman, calculating that he might thereby increase the numbers of his flock, has set up a bar in the basement of his church, announcing that he expects to thus drive "Demon Rum" from its vicinity. But lo! At his bar only lemon soda, Bryan grape juice and other insipid liquids are being dispensed, and the result has been that the Demon laughs in its sleeve.

If Bishop Potter could not succeed in experimenting with a regular "booze" bar, how in thunder can any other experimenter in that line succeed with a soft drink establishment?

Clergymen as barkeepers make a sorry figure, no matter what they may dispense over their bar. Let them ever keep in mind the old saying: "Cobbler, stick to thy last."

If the Webb-Kenyon law by which it is intended to prevent the shipping of liquor from "wet" into "dry" territory is sustained by the United States Supreme Court, there will be a reversion of feeling among the people of those States who have foolishly permitted themselves to be bamboozled by the Prohibitionists. When people can no longer procure what they like to drink, they will quickly vote to get rid of the incubus of Prohibition.

This Change Would be Desirable.

There is a widespread demand for abolishing the electoral college, the obsolete machinery for electing a president of the United States. We heartily indorse this movement, as it would give the American people a chance of really expressing its choice. But it should not stop here: The question of deciding whether or not the manufacture and sale of "liquor" should or should not be permitted in this country ought to also be decided by a majority vote of the population. It would then be shown that the Prohibitionists, who have been "drying up" State after State at the behest of a few desperate theologians, their political tools and a small number of misled ignoramuses, are in a pitiable minority.

The trade should vigorously agitate for a change in this respect.

Another Phase of the Saloon Question.

Whether married men spend more time in the saloon than single men is an open question. At least we have no reliable statistics upon the subject. However, the "Commission on Temperance of the Federal Council of the Churches of Christ in America" at its recent quadrennial meeting held in St. Louis, with the customary cocksureness of theologians (who always know it all), proceeded to make this ponderous statement:

"It is a striking fact that married men spend more time in the saloon than single men. This is somewhat startling, because married life is supposed to have a sobering effect upon a man. Can it be that in many of these cases the home has failed to function? A careful student of the subject revealed that about twice as many married men go to the saloon as do single men. This may be due to the higher idealism of the younger men and it may also be attributed to the fact that they spend a great deal of time in the company of their sweethearts, who naturally would not visit the saloon with them."

Be this as it may, but surely the home of hundreds of thousands of American workingmen is not as attractive as it ought to be, these men being unable to procure the comforts that would be inducive of home life and the result is—life in the saloon.

Has it not been said millions of times that "the saloon is the poor man's club?"

And the young bachelor who, before the wedding, took his girl on a moonlight stroll, or to the soda fountain, will seek the saloon not very long after the wedding.

But the goody goody parsons, who are so eager to gather in the nickels and dimes which they imagine will be theirs as soon as they have made their "field" "dry," want to take his club away from the poor man, it being immaterial to them how he will then attain the poor little comforts his scanty wages afford him.

Of course, the parsons never think of assisting the poor man in improving his economic condition, as that would in-

terfere with the interests of the employers of labor who are among the deacons and other pillars of the church, without whose pew rent and fat contributions the parsons would be landed high and dry!

Idealism and Materialism.

In Connecticut a case is to be decided next March which is of considerable importance to the trade, as it involves the right of publicly discussing the question whether or not theologians should go into politics for the purpose of destroying the "liquor" industry, hoping that they thereby may improve their poor economic condition. The facts are these:

In Brooklyn, a suburb of Waterbury, Conn., populated by about 10,000 Lithuanian wage-workers, employed in munition and brass factories, a fight between a clergyman and the retail liquor trade has been waging bitterly for some time, as the clergyman, Rev. Peter Sauraisaitis had succeeded in closing a number of saloons and causing the arrest of many persons who had converted their dwellings into licensed liquor stores. The people thus injured then brought the Free Thinkers Alliance, with headquarters in Newark, N. J., into the fight, and Michael X. Mockus, a Lithuanian ex-priest and lecturer, came to Waterbury to enlighten its citizens upon the question of personal liberty. He also discussed the "Difference between Belief and Knowledge through Experience," pointing out that the Reverend Mr. Sauraisaitis was using arguments which are not based upon reliable evidence when he fought against the "liquor" trade. The lecturer, in his discourse, attacked the Hebrew bible and used some strong language.

Thereupon the clergyman, invoking the Connecticut "Blue Law" of 1642, had the lecturer arrested, charging him with having "blasphemed against God, the Scriptures and the Christian religion." Mr. Mockus was convicted and sentenced by City Court Judge W. J. Larkin to serve ten days in jail and give a bond of \$1,000 to guarantee "good behavior" for six months. An appeal was taken by the lawyers of the Free Thought Alliance, and District Court Judge Francis T. Reeves is to decide by the time the spring term opens, next March, whether the lecturer's conviction was or was not in violation of the constitutions of Connecticut and the United States.

The Connecticut statute under which Mockus was convicted reads:

Sec. 1323—Every person who shall blaspheme against God, either of the persons of the Holy Trinity, the Christian religion, of the Holy Scriptures, shall be fined not more than \$100 or imprisoned in a jail not more than one year, and may also be bound to his good behavior.—A. D. 1642-1821, Revised, 188, Sec. 1535.

But the constitution of Connecticut says:

Sec. 3. The exercise and enjoyment of religious profession and worship without discrimination, shall forever be free to all persons in this State, provided that the right hereby declared and established, shall not be so construed as to excuse acts of licentiousness or to justify practices inconsistent with the peace and safety of the State.

Sec. 4. No preference shall be given by law to any Christian sect or mode of worship.

Sec. 5. Every citizen may freely speak, write and publish his sentiments on all subjects, being responsible for the abuse of that liberty.

Sec. 6. No law shall ever be passed to curtail or restrain the liberty of speech or of the press.

And this is what the constitution of the United States says:

Amended Art. 1. Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press;

or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

The Connecticut statute of 1642 is still in force, having never been repealed. Among other bestialities, it provides capital punishment for "witchcraft," and under it, on March 10th, 1664, thirteen persons were declared to be witches, and they were hanged on Monday, March 17th, of the same year.

It is very doubtful if the case against Mockus will result in the immediate repeal of the Connecticut "Blue Laws" and, therefore, it is important that the agitation for the repeal should be taken up by the trade with serious determination.

It is high time that the eyes of the American people should be opened so that they may see how the childish idealism of bygone ages still threatens its liberty and its material welfare.

The statements of certain persons that they are ordained by a personal divinity to direct and regulate the actions of millions of other human beings cannot be demonstrated to be founded in fact. They are singly based upon the idea that what they assert is a fact and if they assert that their idealism is to make humanity good and happy, they are sadly mistaken, if not deliberately wrong. Ideas not based upon fact cannot result in the establishment of universal happiness, moderation, prosperity and peace. They have never so resulted.

Only statements founded in matters of fact can guide man to the millennium of which the idealists dream, but the means to attain which they do not, or will not know, because the materialism which will lead us out of our present universal confusion and distress, will ultimately shatter the system which for thousands of years has made the self-chosen advocates of unproven idealism the masters of the world. Because they are mortally afraid to be deposed, and to be forever made innocuous, they fight to the death materialism and science, by which the masses are now rapidly being enlightened.

The case in Connecticut is an affair of national importance and its outcome, if in favor of the defendant, will be a great step toward the final deliverance of the people from the enemies who hate the prospect that we all shall be really free from oppression of all kinds *some* day.

What has happened in Michigan, may also happen some day in Indiana, Ohio, Massachusetts and a few other States, where some members of the trade are wiser—or is it more selfish?—than other members.

The Liberals have been caught napping in Michigan, as Allan P. Cox, one of their staunchest champions in that State, asserts. "They were conspicuous for their blundering incompetency, crass ignorance and total lack of generalship," Mr. Cox continues. Even so. May be he is right. But why didn't he tell them what he thought he knew about them before it was too late?

Negroes are leaving the South in large numbers to locate in the North, where they are not tormented by race prejudice and Prohibition laws. Now, if they should all of them leave, our Southern friends might make their States "wet" once more. That would be very nice. But what of the northern States where the millions of colored settled down? Would race and Prohibition persecution follow in their wake and thus conditions be reversed? There are always two sides to every question!

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

WASHINGTON, D. C. One of the most complicated and many-sided fights of and against prohibition which has ever been staged in Congress enlivened the sessions of the Senate beginning on December 8th. Senator Sheppard, of Texas, unexpectedly called up the District of Columbia prohibition bill, which already had a place on the calendar. As usual, Sheppard chose a time when as few as possible of the anti-prohibition Senators were on the floor, hoping to get the bill through without taking time to read it. When it became evident that there was to be another attempt to "rush" things, Senator Hughes, of New Jersey, appeared on the scene and spoiled Senator Sheppard's plans. He demanded that the bill be read. There are twenty-six pages of it, and it covers everything from sunrise to sunset, except that, in its original form, it does not limit the quantity of liquor a resident may buy or have in his possession. By the time the reading of the bill was concluded most of the anti-prohibition Senators were on the floor, and Sheppard deemed it the part of wisdom to hold back.

On Monday, December 11th, the bill came up again, and the real fight started. Sheppard introduced another amendment (the sixth he has introduced to the bill) limiting the quantity of liquor any resident may buy or have in his possession in any one month. This started the fireworks. Senator Hitchcock, of Nebraska, violently assailed the amendment as an attempt to regulate the amount of liquor persons in the District could use, and called it the worst kind of sumptuary legislation. He was followed by Senators Martine, Penrose and others, who strongly criticised this proposed restriction. A prolonged and acrimonious debate broke out over this amendment, which would limit to a quart of distilled liquor or a gallon of beer or a gallon of wine the amount any person or family could have in one month. Senator Hitchcock pointed out that when the bill was before the Senate several days before Senator Sheppard made the statement that the measure was intended to prevent the manufacture and sale of alcoholic liquors, but was not intended to interfere with personal use. He charged Sheppard with absolute prevarication in bringing in such an amendment. "When the Senator proposes to limit the amount the person may have in his own home and the frequency with which he shall import it he is converting this bill from an anti-saloon measure into a sumptuary measure in which he attempts to dictate how much the inhabitants of the District shall use. Senator Wadsworth, of New York, asked whether the restriction would apply to the diplomats from foreign countries. Sheppard replied that they were allowed different amounts from the residents of the District, and could have five gallons of wine or beer instead of one. Said Senator Penrose, of Pennsylvania: "I have been profoundly impressed by the difference in capacity for absorption of liquor on the part of natives and the foreign-born who are here for official purposes. I ask the Senator from Texas why this distinction?" Sheppard tried to explain that many foreigners were accustomed to having wine on their tables, and he did not think it advisable to seek to interfere with their customs. "I understand," said

Senator Martine, of New Jersey, "that the object of this bill is to save humanity. Then why omit the legations? They are humanity."

Senator Underwood, of Alabama, here took a hand. "I would rather have a provision in the bill prohibiting absolutely all liquors in the District of Columbia than this miserable subterfuge. Have courage to state the facts if you do not want any liquor in the District, and do not trick the people into a bill that might by mischance put them in the penitentiary. If you are fighting the saloons say so. Some say it is morally wrong to take a drink; it is just as morally wrong to have one quart in your house as it is to have twenty. Be fish, flesh or fowl. Here is what you would do: You would endanger the happiness and liberty of the people if you passed this bill as proposed. You may say that any one citizen can import a quart a month and no more. If two members import they are guilty under the bill. If a father imports a quart and does not tell his son, or the son imports a quart and does not tell the father, then they both go to jail or workhouse. What kind of a law is this? I tell you you had better squarely face the proposition you say you believe in. You don't believe that any person should ever take a drop. Then, I say, be honest. Put it in the bill and let us vote on it. Don't set a trap. The people of the District shall and will pass on this bill. Have courage, I say, and be square about it."

Sheppard tried to get in an excuse of some sort about the people not knowing what is good for them, and referred to Senator Underwood as working for the liquor interests, but it fell flat.

"Because I stand for liberty of conscience and freedom of action," said Senator Underwood, "it has not been an unusual thing for people to apply to me the term the Senator from Texas has just applied. All I want the Senator to do is produce a reasonable bill, not one with a trap in it."

After a number of other Senators had torn the bill to ribbons, Senator Sheppard withdrew the amendment limiting quantity.

At this juncture Senator Underwood introduced an amendment calling for a referendum vote of the District. Then more complications came. Senator Kern, of Indiana, followed with another amendment allowing women of the District to vote in the referendum. That brought in the question of woman suffrage, and a lot of Senators held up their hands.

To your correspondent's way of thinking, the Sheppard bill is as mysterious a bit of legislation as was ever proposed in Congress, and after the combined assault on it by many Senators with their amendments it becomes such a complicated puzzle that it is freely predicted that before the Senate debates end, the vote will be on a Simon-pure proposition of making the capital dry as the desert of Sahara, with no ifs, ands, buts, exceptions, provisos or exemptions.

In the House prohibition came up linked with woman suffrage—funny how these two things keep getting together when each is trying so hard to pull away from the other! It looks at this writing as if there will be a vote

at this session on national prohibition and woman suffrage, judging by the action taken at the meeting of the House committee on judiciary on December 13th. The committee reported favorably the joint resolution amending the constitution to provide for national prohibition.

There isn't much fear that prohibition will get through the House, either the District of Columbia bill or the constitutional amendment.

So no matter what the Senate may or may not do, three important barriers stand in the way of the District bill: the necessity of passing the House (which I predict it will not do), the need of getting the majority of the votes of Washington residents if the referendum goes through (which majority will never be given), and the absolute certainty that the President will veto the bill.

Senator Smoot, of Utah, introduced a substitute prohibition bill for the District of Columbia, which (if enforceable) would not only close all saloons, prevent advertising liquors in Washington papers or in any publications coming into Washington, prevent bringing liquor into the District in any manner, but would put any person who had a drop in his possession in jail or workhouse. Then Senator Kern, of Indiana, hooked up woman suffrage with prohibition, and wanted women in the District to vote if the Underwood referendum amendment went through. This complicated matters still more.

On Monday, December 18th, the Senate defeated the Smoot bill by a vote of 61 to 8. Within a few moments after the Smoot substitute was defeated, Senator Underwood, of Alabama, brought up his referendum amendment to the Sheppard bill. He strongly urged that the people of the District ought to have a voice in saying whether prohibition should prevail in Washington.

On Wednesday, December 20th, realizing that the chances for passing the Sheppard bill were growing less daily, further consideration of the measure was gladly postponed by the prohibition forces, and January 9th set as the date when it will be again taken up. It is freely predicted that the bill will have less chance of passing then than it has had during the past week.

On December 19th, the Senate committee on post offices and postroads had before it the Bankhead bill, which would exclude all liquor advertising from mails entering States which have laws against such advertising. It is said that the committee is about equally divided on the question.

The national prohibition constitutional amendment, materially altered from the form in which reported to the House, was ordered favorably reported by the Senate judiciary committee on Thursday, December 21st, by a vote of 13 to 3. As altered by the committee the resolution reads: "The sale, manufacture or transportation of intoxicating liquors within, the importation thereof into and exportation thereof from the United States and all territories subject to the jurisdiction thereof for beverage purposes are hereby prohibited. Congress shall have power to enforce this article by all appropriate legislation. This article shall not be construed to abridge the power of the several States to enforce State prohibitory laws."

There will be a deficit of about \$370,000,000 in the U. S. Treasury at the end of the fiscal year and, to wipe it out, the House Committee on Ways and Means are figuring on more taxes on "liquor," beer to be raised to \$2 per barrel.

Hundreds of thousands of letters and telegrams from organizations and members of the trade and addressed to

Representatives and Senators, asking them to vote against Prohibition, have arrived here during the last two weeks; also labor organizations, among them the Central Labor Federation of New York, demanded a vote against the hateful incubus.

Senator John Kern, of Indiana, floor leader of the Democratic party in the Senate, is a strong opponent to Prohibition and he is one of an increasing number who are advocating compensation to the trade.

From Alaska we have a lobby here representing the druggists of that frigid Territory, who want strict Prohibition for what they assume would be a protection to their trade against "blind tiger" pharmacies.

Wm. J. Bryan keeps himself in the lime-light by talking Prohibition at dinners and public meetings, always with a keen eye upon his expected fourth nomination for the Presidency in 1920.

Cardinal Gibbons has sent a letter to the Anti-Suffrage convention which recently met here, declaring that he regarded "women's rights," women and leaders of the new school of female progress, "as the worst enemies of the female sex."

The Department of Justice has announced that the notorious Thomas C. McCoy, convicted of whiskey frauds in Jacksonville, Fla., will also be tried this month at Fort Smith, Ark., the Department being determined to bring to justice every one of the participants in these frauds, perpetrated from Jacksonville and Fort Smith as the centers of the great conspiracy headed by McCoy.

SACRAMENTO, CAL. In the CALIFORNIA Legislature a bill will be introduced this month to authorize the Governor to appoint a commission that will be representative not only of the active "dry" and "wet" interests, but of the financial, agricultural, industrial, labor and religious elements of the community, to agree upon a compromise for the regulation of the "liquor" trade.

DENVER, COLO. To make COLORADO "100 per cent. dry," an amendment to the present prohibition statute will be introduced at the session of the Legislature this month. The bill will make it a "crime" for any person to have liquor in his possession.

HARTFORD, CONN. The CONNECTICUT Legislature is to be asked to raise the "liquor" license fee in this State from \$750 to \$1,000 per year and to reduce the number of licenses from one for each 500 to 1,000 each per head of population.

TALLAHASSEE, FLA. Governor-elect of FLORIDA, Sidney J. Catts, whom the Prohibitionists claimed to be one of their own kind, has written a letter "to the People of Florida," sorely disappointing the Antis, because in that letter he said: "I appreciate the fact that Florida is the 'playground of the Americas,' and I will be happy and content to continue its upbuilding. I am a broad-minded man, and not a fanatic—as has been so often charged in this heated campaign—and will work to upbuild, and not tear down, what is destined to be the greatest State in the Union."

INDIANAPOLIS, IND. To "get square" with those in the trade who turned against the Democratic Party last year, some of the party leaders have announced their intention of introducing in this year's Legislature of INDIANA a Prohibition bill, and William J. Bryan, who has been here since the November election, has promised his "influence" to help the work of revenge along. He has already assisted in organizing the Indiana "Dry" Federation, which is to be the backbone in the legislative battle for ruin and oppression.

DES MOINES, IOWA. Governor-elect W. L. Harding being opposed to Prohibition, and the masses of the people of IOWA being disgusted with the return of their State to bigotry and fanaticism, many members of the trade whose business has been destroyed are working with might and main for a bill which is to again legalize the trade in this State. The Anti-Prohibition bill is to be introduced in the Legislature this month.

FRANFORT, KY. Bills to kill the trade in KENTUCKY and to make the women voters will be introduced in the Legislature of this State. This is settled and the trade can do nothing but insist upon compensation to be included in the dastardly scheme of confiscation by constitutional amendment. Col. Watterson, opposing the measure, has said in the "Courier-Journal": "Prohibition has been nowhere successful in the extirpation of alcohol and alcoholism. It has brought in evils peculiarly of its own. The isolated, bucolic State of Maine where the experiment is seventy-five years old, stands as living, ghastly testimony to its futility. But if, with a mountain of evidence before their eyes, the people of Kentucky—in spite of the enormous material interests involved—want to try it they have the right to do so."

AUGUSTA, ME. The newly elected Governor of MAINE, Carl E. Milliken, although before the election proclaiming that he would favor new laws to enforce Prohibition, will probably not advocate any bills to be passed to that effect by the State Legislature. He has intimated that he will "rely upon the Sheriffs to do their duty."

JEFFERSON CITY, MO. The Prohibitionists, claiming that they have elected a majority of "dry" members of the MISSOURI Legislature, announce that state-wide Prohibition bills will be passed in less than no time, but the governor-elect, Col. Fred Gardner, whom the antis viciously opposed, is expected to veto any bill of that kind to be laid before him.

LINCOLN, NEB. The NEBRASKA Legislature is to pass bills for enforcing Prohibition, and whatever he can do, Col. W. F. Stoecker, although the Prohibitionists refused to elect him governor, will use his experience as an ex-legislator to make these bills operative. Col. Stoecker, although a native of Germany, is a sworn enemy of the trade, particularly of the American brewers, of whom he has said: "Since the brewers have refused to go on the operating table to have their politics cut out, we must take them there in the prohibition ambulance. To eradicate from our government the influence of the brewers requires absolutism. To do away with their arrogance and bribery and total disregard for law, to get rid of the officials who, installed by the brewers, eat up our substance, who occupy the high places in our government solely on their agreement to protect the brewers against the consequences of law violation—to do away with all this, absolute and radical measures are required. For a long time I thought it possible to so regulate the brewers that their influence might be eliminated from politics. I published articles on the subject. I talked it privately and publicly. I formulated a plan whereby the brewers and distillers might keep their profitable business and the people their drink. In vain. The brewers do not want to be regulated; they will not be regulated. They will have the whole loaf or none. Such was the answer I got while in the race for governor on my platform of regulation. When I withdrew from the gubernatorial race, it was with my lesson well learned. I stopped talking regulation. I began to talk prohibition. I was perfectly satisfied that the brewers would not be regulated, that only the absolute hand of prohibition could check them in their lawlessness. I now say: Wipe out the brewers and with them, if need be, the drink."

And yet, this man says he has a plan to make prohibition tolerable and not destructive of the trade! In what this wonderful "plan" consists, Col. Stoecker has not told us.

TRENTON, N. J. The commission appointed by Governor Fielder to codify the laws of NEW JERSEY will not recommend to the Legislature of this State any Local Option law, nor any other law to change the licensing power, but the Anti-Saloon League's tools will reintroduce their Gaunt bill and some backwoods county assemblyman, doing the bidding of the State grange of small farmers, will even go so far as to propose State-wide Prohibition. They say that the saloon must go, cost what it may!

SANTA FÉ, N. M. Statutory Prohibition will probably be enacted this year by the NEW MEXICO Legislature.

ALBANY, N. Y. Governor Whitman, who, owing to the clamor of selfish and un-American elements in the State of NEW YORK, has been re-elected, although it was almost certain that he was a dyed-in-the-wool reactionary, has declared that he is "heartily in favor of the general principles of the Prohibition movement," and he will also say this is his message to the Legislature. This is in his keeping with his Presidential aspirations for 1920, and Mr. Whitman probably thinks like "Billy" Bryan, that the Prohibition bugaboo may boost him into the Presidency of the United States. But what the Legislature will do to help him in that scheme, is another question.

HARRISBURG, PA. The 1917 Legislature of PENNSYLVANIA has seventeen Local Optionists less in its ranks than last year and so it is not very likely that it will pass a Local Option bill.

SALT LAKE CITY, UTAH. It is a settled fact that a State-wide Prohibition bill will be before the UTAH Legislature this year and, as it will probably be passed, the new Governor will sign it.

OLYMPIA, WASH. To make Prohibition feasible, a bill prohibiting the importation and possession of "liquor," except for sacramental purposes, will be introduced into this year's session of the State Legislature of WASHINGTON.

MADISON, WIS. William T. Evjue, Republican member of the WISCONSIN Legislature, hailing from Kenosha, will introduce a bill through which this State is to be made "dry" by referendum in 1918.

CHEYENNE, WYO. There is but little hope that the Legislature of WYOMING will refrain from passing a State-wide Prohibition bill this year.

Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc., Action by Civic Bodies and Others For or Against Prohibition.

ALABAMA. It now turns out once more that the Prohibitionists lied when they told the people that Judge W. T. Lawler, of Huntsville, had been murdered because he advocated Prohibition: He was killed in a political feud by one David D. Overton, who has confessed and is now in prison.

For having emptied a bottle of whiskey in the Springville Lake, whereupon some fish became intoxicated, so that they could be caught by hand, a young man was recently arrested and fined by the mayor of Springville.

Off the thousands of gallons of whiskey confiscated at Girard, large quantities have recently mysteriously disappeared—the officers appointed to watch the stuff assert that "burglars did it."

CALIFORNIA. In Los Angeles a prohibition conference was recently held for the purpose of collecting a \$100,000 campaign fund wherewith to elect Prohibition Congressmen and a Prohibition Legislature for California next fall.

COLORADO. In Denver they have passed an ordinance under which the Board of Health is to inspect and analyze

all "liquor" found in the possession of any person living in that city, the avowed object of the scheme being to protect people from the effects of adulterated beverages.

CONNECTICUT. Although since 1886 the population of Connecticut increased 50 per cent., the Prohibition vote, which 30 years ago was 4,699, dropped down to 1,500 last November.

GEORGIA. The "dryness" of this alleged Prohibition State may be judged from the fact that in November last 50,622 consignments of "liquor" were registered at the Atlanta ordinary's office, and that at Albany, Dougherty County, there are about 3,000 shipments of "liquor" every month. Goodness knows how much "booze" is consumed in the entire State?

IDAHO. The drastic Prohibition law of Idaho is being tested in the United States Supreme Court in the case of one Ed Crane, who appealed from a judgment declaring him guilty of violating the Prohibition law by having had in his possession a bottle of whiskey while being guest in a hotel at Moscow.

ILLINOIS. At East St. Louis the number of saloons in that city is to be reduced to 200, while the license fee is to be raised to \$1,000 per year; also doors to be closed from Saturday midnight to Sunday midnight; no music of any kind without special permit from Mayor; no man not a citizen of the United States to hold saloon license; no minors to be allowed in saloons; no wineroms, no gambling, no obscene language, no boisterousness; no man to be served drinks whose wife notifies saloonkeeper not to serve him.

Labor unions in Rock Island have asked the City Council there not to grant any licenses to saloonmen who are opposed to union labor.

Numerous bootleggers were recently arrested at Matton.

INDIANA. War between Mayor R. O. Johnson and members of the City Council of Gary over the question of "absolute" or "reasonable" regulation of conditions in that city have resulted in steps by the Mayor to clamp a tight "lid" on the town, to enforce blue laws, and to close 150 saloons on Sundays.

IOWA. The decent people of Iowa are so disgusted with Prohibition that this State will probably go "wet" next November when citizens get their first chance to vote on the question. The "drys" admit they are in danger of losing the State.

KANSAS. The State Board of Correction of Kansas reports that the crop of crime in this alleged Prohibition model State is at present just as abundant and the penitentiaries and lunatic asylums just as crowded as in States not disposed to boast of civic righteousness as "bleeding" Kansas.

KENTUCKY. The Appellate Court of Kentucky has decided that under the statutes of this State, providing that it shall be unlawful for any person to have in his possession liquor for purposes of sale, it is not material whether the accused owned or controlled the building in which the liquor was kept or whether he was the owner of the liquor, as it is the fact of having in his possession for purposes of sale and not the ownership of the building or the ownership of the liquor that constitutes the offense. But in a prosecution under this statute evidence that the accused owned the building and the liquor is competent.

At Clay, Webster County, the license for soft drink stands has been raised from \$1,000 to \$3,000 per year, thus making the business prohibitive for a number of persons.

MAINE. It is to laugh! At the November election last year the Prohibition candidate for President, Hanley, received just 595 votes.

Attorney-General William R. Pattangall has satirized the

proposal to give power to the Governor to remove sheriffs and county attorneys, and pleads for "a fair trial of enforcement of the prohibition law."

In Lewiston a Baptist minister recently stated that organized vice in Lewiston costs the taxpayers of Androscoggin County at least \$1,000,000 a year. He noted that in October, 101 retail liquor stamps, seven wholesale malt liquor stamps and three retail malt liquor stamps were held in Lewiston. He concluded that such are used as one Saturday night he made a little tour and found that "the saloons were all wide open and were doing a rushing and unhindered business." He also found punch boards and slot gambling machines running unimpeded and he told his hearers that "at least \$700,000 flows into the tills of Lewiston saloonkeepers every year—more than all the municipal expenditures put together. And these conditions were found in Lewiston, right in prohibition headquarters.

Numerous liquor raids were made by Federal officers last week in Portland, and fines aggregating \$5,000 were imposed.

MARYLAND. The "wet" and "dry" campaigns in various parts of Maryland last year cost \$105,593.37, of which \$74,877.38 was contributed by the Maryland Brewers' Association.

The constitutionality of the Carroll County "dry" law of 1914 is being tested in the Circuit Court where 47 cases against 14 alleged violators are pending.

The Baltimore police report that since towns in the vicinity went "dry," a wave of crime has been flooding large parts of the State.

MASSACHUSETTS. There were Local Option elections in Massachusetts, and the Antis were dead sure that they would make every town "dry" where the vote on license or no license was to be taken—even Boston, where they had "Billy" Sunday and his ridiculous sawdust circus, imported precisely for the purpose of "driving out Demon Rum." But did they do it? Not exactly: Boston just remained "wet" by a majority of 23,462; the vote in favor of license being 53,459, with 29,997 against. That was something, as the "wets" had increased their vote by 7,344, while the "drys" vote slumped by 1,880, as compared with the result of the last preceding Local Option election. Here we have an instance of what the trade *can* do if it is wide-awake. And that it was in Boston this time—its army of speakers, distributors of enlightening literature, banner carriers, advertising trucks and all sorts of other vehicles carrying legends exposing the lying hypocrites of the Prohibition deceivers, were on the move day and night during the entire campaign, which was more lively and exciting than any previous Local Option campaign.

The "drys" gained a total of six cities. That's all. The cities and towns which voted *for* license were Gloucester, Holyoke, Marlboro, New Bedford, Northampton, Pittsfield, Springfield, Chelsey, Chicopee, Lawrence, Lowell and Worcester; *against* license voted Brockton, Cambridge, Fall River (from "wet" to "dry"), Haverhill ("wet" to "dry"), Leominster ("wet" to "dry"), Salem, Taunton ("wet" to "dry"), Waltham, Attleboro, Beverly, Everett, Lynn, Malden, Medford, Melrose, Newburyport, Newton, Revere, Somerville, Woburn, North Adams ("wet" to "dry"), Fitchburg ("wet" to "dry"), Peabody and Quincy.

In most of the cities voting "dry," the "dry" majority has decreased, while in the places voting "wet," including Boston, the "wet" majority increased considerably, even the residence and church districts showed increased majorities, notwithstanding the fact that in "Billy" Sunday's circus

over 20,000 "men" had "hit the sawdust trail," solemnly swearing off "Demon Rum!"

The Massachusetts Supreme Court has overruled Mayor Wendell D. Rockwood, of Cambridge, in vetoing the action of the Cambridge City Council in granting sixth class liquor licenses to 27 drug stores. The Mayor contended that he had full authority to veto the council's vote, but the court held that the Mayor is without power in the premises and that the City Council has the same authority as licensing commissioners.

The Supreme Court, in a case of the James Hanley Brewing Co., Providence, R. I., intervening in a suit of liquor dealers against the City of Worcester, Mass., claiming the amount of \$1,000 paid to the city for a liquor license, has also decided that the money must be returned to the brewing company, as it had loaned it to the saloon man with the understanding that it was to be so returned if the license were not granted.

MICHIGAN. The brewers and others in the trade in Michigan, at a conference held November 13th in Detroit, have considered the question of trying to modify the Prohibition amendment adopted November 7th, so as to permit the production of bottle beer to be sold to the consumer direct. A definite plan was not decided upon, but it may materialize in the near future.

The Retail Druggists' Association of Detroit will petition the Michigan Legislature to pass a bill by which to prevent the sale of liquor and wines by druggists, even for "medicinal, mechanical, chemical or sacramental purposes," as permitted by the terms of the newly adopted Prohibition amendment.

MISSOURI. That Prohibition was defeated by about 117,000 majority is only due to the fact that St. Louis cast 141,046 "wet" votes. To the shame of Kansas City it must be said that it gave a large "dry" majority; still it is doubtful whether the "drys" will succeed in voting out the saloons of Kansas City at a Local Option election this month.

There is a strong movement for compensation to the trade should it be destroyed by Prohibition in Missouri; over 100 prominent bankers and business men of St. Louis are at the head of this movement.

The organized saloon men of Missouri are agitating for high license and limitation of the number of saloons, and they expect the brewers to cooperate with them in carrying out this plan.

MONTANA. The Supreme Court of Montana has ruled that a saloonist's property cannot be destroyed without compensation except as a last resort, "available only in the presence of imminent and overwhelming necessity which brooks no delay."

NEW HAMPSHIRE. The towns of New Hampshire voted on Local Option last month with the result that Stewartstown, Errol, Eaton, Wentworth's Location, Livermore, Middleton, Newbury, Wakefield, Epping, New Market, Rollinsford, Derry, Sharon, Deering, Pembroke and Allentown voted for license, while Belknap, Cheshire and Sullivan counties, with no saloons in them, remained "dry." The cities will not have a Local Option election until 1918.

NEW JERSEY. Sheriff E. A. Kinkead, of Hudson County, is strongly opposed to State-wide Prohibition for New Jersey, holding with President Wilson that the "liquor" trade should be regulated locally, and that it is the business of local officials to punish violators of the law.

In Bergen County Judge Wm. M. Seufert has ordered all wholesalers to submit their books to excise inspectors, to

prevent that not more than two boxes of bottle beer be sold per week to any person by any wholesaler.

In Burlington, James H. Birch, carriage manufacturer and Democratic leader, recently had Wm. J. Bryan for his guest, and, at a public dinner given to the discredited politician, nominated him for the Presidency of the United States in 1920—on a Prohibition platform.

Speak easies thrive at Millville, although raids and arrests are made there by excise officials almost every day.

"Billy" Sunday, invited by a few Prohibition zealots to bring his sawdust circus to Newark, has declined, seeing not enough spot cash to come in from that city, it being too near to Trenton and Philadelphia, where he skimmed off the milkpot of ignorance and stupidity during the early part of last year.

NEW YORK. The Metropolis has just at present a little storm in its teakettle over the question of whether or not to permit Sunday "movies." The matter was stirred up by a number of "reverends," who want no competition on their only workday in the week; however, the retail liquor dealers, for once, agree with them upon the subject. The "reverends" have also engaged "Billy" Sunday for three months, to begin his performances next April. Very rich men, among them John D. Rockefeller, have agreed to contribute the money for building an auditorium seating 20,000 persons. This is to inaugurate a campaign to make New York City "dry," and so we have a chance to outdo Boston, from where "Billy" just comes with a very black eye.

On Tuesday, December 19th, Supreme Court Judge Platt, sitting at White Plains, ruled that Sunday "movies" are not illegal, and Mayor Mitchel, of New York City, says the same thing.

There were no all night licenses in the city last night, Mayor Mitchel having decided that New Year's night revelry should stop at the legal hour.

In committing an acknowledged drug addict to the Metropolitan Hospital last month, Magistrate Simms, sitting in Yorkville Court, said that the spread of prohibition has increased the use of habit-forming drugs. "Oh, you mean the fellows who travel around a great deal and into 'dry' territory," said the magistrate. "This is another bit of information which seems to show the relationship between the spread of prohibition and habit-forming drugs. When the confirmed alcoholic cannot get what he wants he finds a substitute which can be easily carried around. Then he boasts of the merit of the substitute to persons easily influenced by the boasting."

Governor Whitman's declaration in favor of Prohibition is not taken seriously by Republican politicians in this State, as they know Mr. Whitman to be carrying water on both shoulders, always ready to jump on the safe side of the fence. Among the members of the Republican County Committee of New York County the opinion, strongly expressed by Municipal Justice Frederick De Witt Wells and others, prevails that the State of New York will not be made "dry" by parsons and fools for a good many generations to come. The County Committee protests against action by Congress favoring Nation-wide Prohibition.

Chief Magistrate McAdoo reports that while in one year the arrests in New York City increased from 220,306 to 236,591, there was a considerable decrease in the arraignments for the more serious crimes, and also for intoxication.

NORTH CAROLINA. "Prohibition," says Mayor J. D. McNeill, of Fayetteville, "is the biggest farce that has ever been foisted upon a community. Instead of stopping or reducing the use or sale of liquor, prohibition has increased both the use and sale in North Carolina, and this community alone is

sending out more than \$400 every day to "wet" States for liquor. Prohibition is doing everything that is bad and nothing that is good for Fayetteville and vicinity. It is making honest men crooks and young men drunkards. It doesn't prohibit anything but the legal sale of liquor. We are full of blind tigers and bootleggers are roaming our streets by day and night. I venture to say that a man could buy a barrel of whiskey in Fayetteville in a couple of hours if he wanted to."

OHIO. The Ohio Anti-Saloon League has announced its determination to move for State-wide Prohibition this year. The details of the plan are to be arranged at a convention in Columbus, January 16th to 18th.

In Cuyahoga, Summit, Trumbull and some other Ohio counties the State Liquor License Commission has overriden the decision of County License Board and granted permits to saloonkeepers against whom the local boards ruled when licenses were dispensed.

Mrs. Henry E. Talbott, of Dayton, president of the Ohio State Association Opposed to Woman Suffrage, reports that as a result of a canvass made by her organization it was found that of 134,417 Ohio women over 21 years old, 120,706 were opposed to woman suffrage, 12,140 in favor and 1,571 indifferent.

OKLAHOMA. Two Federal officers and a number of citizens in Bartlesville have been arrested for having sold "liquor" to Indians in Oklahoma. The officers are Deputy U. S. Marshal John J. O'Brien and Bart Van Sickle.

OREGON. In their campaign for modifying the Oregon Prohibition law, the organized brewers of this State, and their friends of the Equal Rights to Home Industry League, have expended \$7,962.46, and one individual Liberal, A. S. Benson, of Portland, contributed \$1,341.85.

PENNSYLVANIA. A motion to quash the indictments against seventy-two brewing corporations in Pennsylvania because of their alleged political activity has been filed in the United States district court at Pittsburgh, the defendants alleging that the federal corrupt practices act, under which the indictments were drawn is unconstitutional. The decision was adverse and now the case will be appealed to the United States Supreme Court.

The Acme Brewing Co., Bentleyville, has filed an answer to the petition for the revocation of its license, stating that it had discharged agents alleged to have been guilty of law infractions. District Attorney Isaac W. Baum had asserted that the company had violated the law in Ellsworth, Cokesburg and other points by having agents solicit business and deliver and collect money for beer. The company's counsel say that Charles P. Fischer, manager of the brewery, has resigned and that the three agents have been dismissed. The brewery promised that there will be no more violations.

Judge Whitehead, Lycoming County, has ruled that it is not necessary for a saloonkeeper to be warned not to sell to a person of intemperate habits. "The man who sells 'booze,'" the Judge said, "knows very well who the men of intemperate habits are, and, warned or not warned, he is violating the law when he sells to one. Judge Whitehead says that if anyone will prove that a person of intemperate habits has purchased liquor of a Lycoming County dealer, he will refuse to renew that license. He also gives warning that so-called hotels which have failed to provide ordinary comforts for their guests, and who seem to care for nothing but bar trade, will be refused license at the next Court."

"To sign an application for a liquor license or to present such an application in the courts of law is the worst form of copperhead Christianity." This is what the "Rev." Edwin J. Reinke, of Philadelphia, is stated to have said in his

report on behalf of the temperance board at the meeting of the Synod in Colton Memorial Chapel, Lafayette College. Mr. Reinke said that the man who sold liquor to-day was no better than the white slaver.

TENNESSEE. At a Baptist convention recently held in Morristown, the Rev. J. A. Carmack, chairman of the convention's Temperance Committee, said: "From the viewpoint of our own beloved State prohibition presents a complicated and very unsatisfactory situation. The flagrantly open saloon is gone by reason of our statutes, but liquor is not gone nor does temperance reign. After all, temperance has not made any marked progress. We submit that real temperance cannot be legislated into any people." The convention rejected the report, substituting one declaring that prohibition does prohibit, and expressing gratification over the vigorous enforcement of anti-liquor and "other good laws" in Tennessee.

TEXAS. An informal conference was held in Austin last month at the office of the Attorney General of Texas, to consider the question of prosecuting persons who sell drinks in "dry" territory which are being manufactured by the large breweries. These beverages are labeled non-intoxicating and no malt used. The Attorney General insists that the beverage is subject to the tax of \$4,000 per annum when sold in "dry" territory; that if it is not a malt liquor it is a substitute for it, and, therefore is liable for the prohibitive tax.

Attorneys present did not represent the manufacturers, breweries in St. Louis and Milwaukee, but appeared for wholesalers and distributors in Texas who want the question settled. If it is unlawful, they will get out of the business. However, they are to communicate with the manufacturers and it is expected that a test case will be arranged. A test case is sure to come and chemists will testify whether or not the beverages have a malt base, even though non-intoxicating. The breweries will contend that since the drinks are not of malt extraction they do not violate the law and that it is an erroneous construction of the law to say that a substitute is subject to the high tax, especially when it is non-intoxicating and no malt base.

VIRGINIA. S. P. Williams, of Richmond, treasurer of the Virginia Anti-Saloon League; W. McDonald Lee, president of the Virginia Public Company, Richmond; T. W. Stevens and C. S. Reams have been indicted at Danville for maintaining a disorderly house and keeping a house of ill fame.

Unmarried men in Virginia not living with their parents must not have shipped to them the quart of whiskey a month allowed under the new prohibition law. Prohibition Commissioner Peters has so ruled to-day on the ground that the law does not recognize a boarding or rooming-house, club, or lodge room as a "home" in which liquor may be kept for private consumption.

WASHINGTON. Fixtures and furnishings valued at \$40,000 in a so-called barroom and dining-room of the Hotel Cecil, Seattle, were destroyed last month with axes by the "dry" squad of the Seattle Police Department for alleged violation of the prohibition law. John E. Savage, proprietor of the hotel, said no liquor had been sold in the hotel since the prohibition law became effective.

The Seattle courts are clogged with trial for alleged violation of the Washington Prohibition law and large numbers of persons are almost daily fined \$100 and over.

WISCONSIN. Judge F. A. Ross, of the Circuit Court in Superior, has confirmed the conviction of two agents of the Duluth Brewing & Malting Co., and the Fitger Brewing

Co., Inc., both of Duluth, Minn., who had been fined \$500 each for having sold beer in "dry" places of Wisconsin.

CANADA. The great strides recently made by Prohibition in Canada are simply due to the European war. A Canadian province has no right to prohibit the manufacture of spirituous liquors, and there is a strong feeling about personal liberty which makes it nearly impossible to place many restrictions upon the right of the individual to have liquor in his home. The result is that the law merely prohibits the traffic in liquors containing more than 2½ per cent. proof spirits between residents of the province. But any man who has money and forethought can get all the liquor he wants in Toronto. "Case goods" can be shipped in from anywhere in Canada or the United States, and a great deal of it does arrive every day from Detroit and from Quebec. There is no difficulty at all about the transaction. A case of wet goods may even change hands after it reaches Toronto without violating the law. If A has a case of whiskey that B wants to buy, B may 'phone to a friend in Buffalo and sell the goods to him, and he may, over the same 'phone, resell it to A. It is readily seen how this loophole in the law could be stretched so that almost any sort of a liquor deal would go through it; but the Toronto authorities say that no attempt is made to violate the spirit of the law. In fact, it is a proud and oft-heard boast of the Canadians that they have more respect for law than "Americans," as they call us. Whether this be true or not, it is probable that the common sense and liberality of the law is its strength. It has abolished drinking at bars and much of the street drunkenness which resulted. It has kept whiskey away from the soldiers. It has not prevented the man of means from having alcoholic beverages in his home, and it is probable that no law ever accomplished that. As for the 2½ per cent. liquors, they are harmless, if for no other reason, because so few people drink them. Montreal and the city of Quebec both are still wide open, and in both the perils of selling liquor in a city full of half-idle soldiers are plainly evident. The prohibition advocates are now working for a federal measure which is to enable them to limit the inter-provincial traffic in liquor.

The Legislature of Quebec has put another heavy war-tax upon "liquor."

ECUADOR, C. A. U. S. Vice Consul James H. Roth, departs from Guayaquil. The liquor industry of Ecuador is placed on a new basis by a law. The law provides that the domestic manufacture of wine and spirits is permitted only within the restrictions of this law. A tax is imposed on each hectare of land planted with sugar cane for distilling purposes. Distillers must obtain licenses, and may not sell their products in less than 10-liter quantities. Spirits may not be transported without a permit. A special tax shall be imposed on establishments selling imported liquors. While this law is in force, no other tax may be placed on liquors imported for the use of municipalities or public institutions. The law becomes effective today.

Where liberty is supposed to abide, there must be light and enlightenment. The Prohibitionists are working in the dark; their perversion of the truth is an instrument they have borrowed from their predecessors, who made the dark ages an intolerable period of mankind's history.

FENCE JUMPERS. "The Prohibitionists try to show that there are no good and necessary uses of liquor and therefore draw their entire argument from the mischief done to or by those who misuse it. To attribute, however, to a commodity itself the effects resulting from its abuse is to jump all the fences of logic and common sense.—(Joseph F. Schweer.)

Is National Prohibition Wise?

Before a distinguished audience, a debate on the question, "Is National Prohibition Wise?" was recently held under the auspices of the Brooklyn Institute of Arts and Science, in the Academy of Music, Brooklyn, N. Y. The speakers for the affirmative were Capt. Richmond P. Hobson, of Alabama, and former Governor J. Frank Hanly, of Indiana; for the negative, Hugh F. Fox, Secretary of the United States Brewers' Association, and Albert J. Nock, writer and publicist, both of New York. In accordance with the custom of the Institute, no vote was taken at the conclusion of the debate.

In opening the debate, Mr. Hanly declared that the liquor traffic challenged the sovereignty of the American people, and suggested that if it were true, as had been asserted, that National Prohibition could not be enforced, this amounted to an abdication of the right of free government. He added: "There is not a city in America of great size, of great population, where government does not tremble at the dissolving point at this hour. I do not guess, I know. . . . In every one of them, government trembles at the dissolving point, and at the heart and core of the cancer sore sits this traffic. . . .

"If it be true, as former President Taft has boldly declared—if it be true that an amendment of the Federal Constitution prohibiting this traffic would be an idle and a futile thing, because it could not be enforced by the nation, then, this great basic elemental right of every free people to choose for themselves policies of State, and to have their choice effectuated, has been lost in this nation. If an amendment to the Federal Constitution, made in the slow, orderly, thoughtful process provided by that great instrument for its amendment, a process requiring a concurring two-thirds majority in both branches of the Congress of the United States, a process requiring subsequent ratification by three-quarters of all the States in the Union—if such an amendment, so made, expressing the crystallized conviction, the purposeful will, and the high resolve of the American people cannot be enforced, when made, then, this great basic right of free government is lost in this nation; for what boots you or me to amend this charter of your liberties if after amending it you are impotent to effectuate the thing you have done?" . . .

Mr. Nock, at the outset, pointed out that the terms of the debate prescribed the discussion of a method, "not an experience meeting over the challenge to our right of self-government," nor "miscellaneous volubility about the evils of the drink traffic."

"I think," he added, "that his Excellency has said nothing to the question. Nothing is more amazing to me than the assumption that no one has any practical interest in this question except the people who peddle liquor and the people who peddle prohibition. That is an enormous misunderstanding. There is an immense number of people—I am one of them, and in a sense I conceive myself to be representing them here to-night—the people who would not lose a single dollar nor a single drink under National Prohibition; but who, nevertheless, are vitally interested, because they are earnest and consistent advocates of temperance. . . .

"Now, National Prohibition is unwise, in the first place, because it is based on a most grotesque and incompetent theory of law. It is based upon the naïve assumption, almost peculiar American, and, in a way, I am glad it is, because it reflects our cheerful optimism—His Excellency gave you a marvelous exhibition of that just now—that a law and a statute are the same thing. But in plain words, ladies and gentlemen, the assumption is that whatever time-serving

assortment of men may gather together in a national capital or in a State capital, in whatever country, beset by the demons of need, greed, and vain-glory, and whatever these write down on a piece of paper and publish in a book has necessarily the binding force of law.

"I suppose the classic example of this theory is the one Brand Whitlock speaks of in his autobiography. I recommend that book to you, by the way. It is an example of the legendary law-givers of Bohemia, who decided that the population was growing too fast, and so they decided they would pass a prohibition statute on marriages for one year. This statute did not turn out to be a law. It was what we call nowadays 'a scrap of paper.' The population really did not stop growing. Their statute was 'a scrap of paper,' and so is any other product of the same theory of law.

"I venture to say that not very many of you have ever tried to answer the very simple but exceedingly difficult question—I wonder if his Excellency has ever tried to answer it—the very simple question: 'What is law?' It has exercised some of the greatest minds in the world, and they have all confessed that a competent definition is not only well-nigh impossible, but that when you get it, it inevitably pushes through the door of convention into the most radical and revolutionary order of thought. Try to answer it yourselves—'What is law?' I will content myself in this connection with referring you to the Harvard lectures of Mr. James Coolidge Carter, for many years leader of the New York Bar. It is a little volume published by Putnam, under the title, 'Law, Its Origin, Growth and Function.' If you wish to know in detail the chief reason why the temperate and thoughtful among us, those who stand at neither extreme, are opposed to prohibition, I recommend you to read this book. It will not take you long, and you will not only find it informing, but extremely interesting. You will find there, probably, the ablest dissection that has ever been made of this most extraordinary theory of law upon which Prohibition depends; and you will have no trouble in making up your mind about validity.

"'What we call law,' as Emerson said, 'is only a registration.' Golden Rule Jones, probably the most considerable man that the United States ever bred—it did not produce him, for he was born in Wales—gave perhaps the best working definition of law, that 'Law is anything that the people will back up!' Anything that the people will back up, that is just what it is. I think that definition will appeal to your experience and common sense. A legislature passes a statute, but if the people do not back it up, it remains a statute, but it is not a law. There is no way for it to get itself obeyed; and I presume that something of this was what our distinguished ex-President had in mind on the occasion referred to by his Excellency just now. Therefore, it is clear that no statutory special reformation of any kind can be effected when it does not have the sanction of public opinion.

"Now, the Prohibition theory is, as I understand it, in the face of all human experience, if you only have enough law and enough policemen, and, above all, if you only get enough people in jail, you can enforce any statute in the teeth of an indifferent majority and an actively hostile minority.

"Ladies and gentlemen, in the first year of the war I spent a great deal of time in Brussels, Belgium. The German army clapped a rigorous closing order on cafés there that they should close up at ten o'clock at night. Night after night, as I walked along the Boulevard Ansbach—which is in a sense the Broadway of Brussels—I found no end of these cafés doing a land office business at half past twelve, and I do not know how much longer, because that

was as late as I stayed up. It occurred to me then, and it occurs to me now, that if the German army—which is a fairly efficient thing—cannot enforce a closing order in the city of Brussels, or will not enforce it, the outlook for National Prohibition in the United States is extremely dark.

"We all know, ladies and gentlemen, that there is no such thing as Prohibition in the United States at present. Prohibition leaders admitted this in their hearings before the House Committee, although they are chary about saying much about it in public. I do not blame them for that. His Excellency came within a hair's breadth of it to-night, and I thought he was really going to step over the line, but he did not.

"We know further that the nominal laws, the statutes, were passed in the several States—let me have your attention here—by the acquiescence of a majority, conditioned on the continuance of opportunity to pursue their own personal habits, whether legally, as in Kansas; more or less surreptitiously, as in the South; or in open disregard of the statute, as in the State of Maine. . . .

"Now, again, Prohibition is unwise because it is un-republican. It subverts our theory and institutions of government. Where State-wide Prohibition prevails it is administered by men whose first allegiance is to a private society. In Tennessee, where a federal certificate is *prima-facie* evidence against the holder, the courts in Chattanooga were recently intimidated into compelling the surrender of the certificates held within their jurisdiction, to the local superintendent of the Anti-Saloon League. Under what is called the Ouster Law duly elected local officials can be and are deposed and superseded by others who may be appointed by the court, at the dictation of the same organization. Now, if any one claims that under National Prohibition an administration would take place under a more republican method, I think past performances put the burden of proof on those who make the claim." . . .

Mr. Hobson prefaced his argument with the assertion that every government of the world knew now that it must become sober or perish and that every government had tried the regulation system and was now turning to prohibition. He said that Russia had adopted prohibition, and that insurance experts held it was saving more lives than were being sacrificed in the war; that more land was under cultivation; the output of industries greater; the savings of the people largely increased and the problem of public revenue solved as a result. Other countries were adopting advanced measures and eight million citizens had petitioned the United States Congress in behalf of the Hobson resolution. He added:

"What is this Prohibition? I wish some of you would take occasion to read that Hobson resolution, and inform yourselves of it, so that you won't be misled. It does not prohibit a citizen from drinking liquor, it does not invade anybody's liberties; it does not propose to coerce you at all; it does not prohibit a citizen from having liquor in his possession for private purposes. It will not invade the sanctity of the home, or any institution you hold dear. It prohibits the sale, the manufacture, the transportation for sale, and—mark you, for beverage purposes. It denies the channels of trade to the liquor traffic. You may feel that you have a perfect right to drink liquor, but you do not feel that you have an inherent right to sell liquor. Decisions of the Supreme Court of the United States have declared that no citizen has an inherent right to sell liquor. Three hundred and ninety-nine out of every four hundred American citizens are not allowed to-day to sell liquor.

"It is not a question of your rights. It is a question of suppressing a certain business, in the same way by which

we have suppressed the lottery business, the traffic in impure foods, the white-slave traffic; and, what is the principle, my good friends won't have to go to any vague theory of law. A few citizens have no right to carry on a business that harms society at large. If the great liquor traffic in America does not harm society, I will join my friends here to protect it. If it does harm society, even they ought to do their duty as American citizens and join us to have the government deny it the channels of trade." . . .

Mr. Hobson declared alcohol to be a protoplasmic poison and gave what purported to be a chemical view of its nature and a physiological view of its effects upon the human system.

In response Mr. Fox combatted the theory that alcohol was unqualifiedly a poison, much less a protoplasmic poison, quoting the International Physiological Congress of London; the experts of the Committee of Fifty; the Galton Laboratory of the University of London; Dr. Quensel; the Swedish Medical Society and other authorities in support of his view. He remarked that he could go on piling up testimony to show that there were a number of questions, which in scientific circles were not regarded as settled, according to Mr. Hobson's view, but which were still susceptible to much inquiry and investigation. Mr. Fox aroused applause by declaring that we had become a sober nation, and that drunkenness was no longer tolerated in any business or industry, or in any walk of society.

"Other nations," continued Mr. Fox, "have learned that the wise way to deal with this question is to encourage as much as possible the use of the mild beverages, and to discriminate against those in which alcohol is presented in a concentrated form, by various methods of taxation and regulation. In the Scandinavian countries, for instance, mild beers are tax-free. They not only pay no tax for manufacture, but they are sold without any tax. In the recent prohibition law that was passed in Canada, the same principle is written into the law. The same principle obtains in the Iceland law, which is a National Prohibition country. Now, my friend Captain Hobson has referred to Russia. I believe, Captain, that it would be wise to suspend judgment with regard to Russia for another year or more. Certain information which is coming through official and other sources, gives one real concern about the condition of affairs in Russia. I have not any doubt, it is true, that there is more area under cultivation than ever before. Why not? There is a greater demand for the products of the soil than ever before, and prices are greater than ever before. And the same is of course true in Germany and France and in England. It is also probably true that in some parts of Russia there is a notable increase in the savings of the people. The same is true in Germany, in spite of the terrific sacrifices that are being made for the maintenance of the war; but we are beginning to hear sinister rumors of the awful poverty of the people in the principal Russian cities, of the possibilities this winter of their either starving or freezing to death, for lack of either food or fuel. We are beginning to hear that the question of the vodka monopoly, and the revenue from vodka, may positively be revived again, for political and fiscal reasons. It seems a dire thing to contemplate, and yet I do not think it is wise for us to read too many lessons from Russia at this time, but let us keep our opinion with regard to the results of this reform in Russia somewhat in suspense, for fear that, like the Republicans the other night, we might have to change our opinions when the returns are all in. My friend Captain Hobson asked the question whether the use of alcohol does not harm society, and therefore whether society should not put it down.

I submit that it is a question between the use and the abuse of alcohol. Somehow or other for over 5,000 years, or as far back as history goes, the people of all nations and all tribes have used alcohol in some form, and have made it in some form. Is it possible that there is some sort of human craving, which the use of alcohol serves and which society at least has never learned absolutely to dispense with? Now, this question of the enforcement of law, this question of National Prohibition, involves a great many very difficult considerations. I am not going to lay emphasis upon the question of revenue, because I believe that this country will find some means of paying its bills, if it is satisfied that a sacrifice such as Captain Hobson proposes is necessary; but, at the same time, as practical people, we must consider that question. The country is getting to-day between two and three hundred millions of dollars in revenue from beer and spirits. Besides the amount of revenue, something like \$100,000,000 is being paid in the form of license fees. Something like three-quarters or four-fifths of all that revenue is received from the twelve great industrial States, and those same great industrial States are paying well over three-quarters of the income tax. Now, if we are going to dispense with this revenue, either we have got to quadruple the income tax, which brings the pressure again on the same group of people of these twelve industrial States, or we have got to enormously increase our import duties, which brings the pressure upon the consumer, or else—and this is more probable—we have got to put a tax upon land. At any rate, we are facing a staggering fiscal question, which the government must consider very seriously indeed. Here again comes in the suggestion made by my friend Mr. Nock, that perhaps it would be just as well to make a careful investigation of all the aspects of this question, a thorough inquiry, a thorough study of them, before we determine what is the best plan to pursue, and what the alternatives may be.

"Now, I submit that if it takes 150,000 troops to patrol the Mexican frontier against outlaws, that the police problem of patrolling all our borders and our coast line, is a pretty big one; and that is what would have to be done under national prohibition. Not only that, at the present time the suppression of moonshining, which is increasing constantly year by year, is entirely left to the Federal officials, to the revenue agents. Of course, there would not be any revenue agents under National Prohibition, because there would not be any revenue to collect, and so the enforcement of this law would be left to the local authorities. Well, now, in every State where a prohibition election has taken place, the people in the important cities have voted against prohibition, and the result has been secured by the votes of the people from the rural units. My friend talks of the number of people who are in favor of prohibition. If you will analyze the vote for and against, in the States that have voted on prohibition, you will find, taking a popular vote, that there are nearly half a million more of people who have voted against prohibition than have voted for it. That is the record of the prohibition vote in the States to-day." . . .

In responding to Mr. Nock's argument, ex-Governor Hanly said he repudiated the suggestion that prohibition by National Amendment could be government by a minority and declared that it was not more difficult to enforce a prohibitory than a regulation law.

"This traffic is an anarchist. It is against all law, whether it be a license law, a regulation, or prohibition; and, with a wave of the hand, the gentleman who followed me says that I did not touch the question when I pointed out to you this thing, this King of Anarchy, this Lord of Misrule, that challenges the rights of the American people to administer

their own government. This question is: 'Is National Prohibition Wise?' I answer National Prohibition of any traffic that is an outlaw and an anarchist, that knows no law, and no sovereignty of the people, would be wise and wholesome. He confesses that he pins his faith to the proposition that the law could not be enforced, not perfectly, not all the time. I know of no law that has 'Thou shalt not' in it, human or divine, that is constantly enforced and perfectly enforced. Do you? There is a law in this State against murder; yet, people have walked the streets of your city in daylight and committed murder; but, because of that, do you repeal the law? There is a law in my State against arson, but men continue to burn down the property of other men. The prohibitory law would be now and then violated, but the violation would be the exception and not the rule. I know of no country in which the ten commandments are not violated every day by some one somewhere; but, because of that, do we petition the Throne of Grace to repeal the ten commandments and leave human nature unrestrained?" . . .

Mr. Nock, replying, called attention to the fact that he had not made any objection to the method prescribed for amending the Federal Constitution. He had merely asked the audience to picture the social effect of the coercion of a majority by a minority. "I have, for the purpose of this debate, ladies and gentlemen, not the faintest intention of conceding or denying anything that his Excellency and Captain Hobson have said—anything that they have said. I merely say that as a method towards that great goal of temperance reform, which I just as keenly wish for as they do, or as anyone in the audience does, I disbelieve in the wisdom and efficacy of prohibition—as a method. Now, my friend, Mr. Hobson, I regret to say, has misconstrued what I have said. If he will produce anything out of the stenographic notes that I have said which gives color to the inference that I am protecting the liquor interests that I am interested in protecting the liquor interests—I will concede him the debate, and make him as handsome an apology as I am capable of making. I do not care, ladies and gentlemen, two pins for the liquor interests. I said at the outset of the debate, what is perfectly true, that I would not lose a dollar, and I would not lose a drink, under National Prohibition, because my drinks are water, tea and coffee; and one of them, I regret to say, is a poison to me—coffee; I have to use it very sparingly; but I do not put any prohibition on myself; and, moreover, if my friend, Mr. Fox, here, and this retinue of his, that his Excellency just referred to, in a spirited way, ever come around and undertake to pass a law that I shall not get my coffee, they are going to hear from me. Captain Hobson threw out a challenge saying that we ought to be on the other side—I cannot speak for my associate, Mr. Fox, but will you permit me to take up that challenge and say, repeating what I said in substance in my speech, that if the Anti-Saloon League were what it claims to be, and if it were conducted honorably, I would join it. I have said that the Anti-Saloon League is an infamous political Camorra. I said I believe that it is, and I think I can substantiate the statement. I believe further that its object is not the revision or reform of the retail distribution of liquor, which is particularly what I am interested in, and which prompts me to say I would join it, if that were its object; but its object is directed towards National Prohibition, which I believe is the greatest enemy, or one of the greatest enemies, to that temperance which I hold dear and towards which I am working, of any that are among the social phenomena of the present day."

In his second speech Mr. Hobson combatted the conclusions of some of the scientific experts, quoted by Mr. Fox, and reiterated the statement that alcohol was a poison and

that the most fruitful source of disease and death. He added: "There are one million seven hundred thousand deaths in America every year. I do not care what they try to pretend to the contrary. That is a thousand for every sixty-one thousand of the population, according to the most accurate estimate that has been made. If there was no liquor in the land, the mortality would drop to that of total abstainers, in the end. A saving of seven hundred thousand lives a year, that is what it would mean, my friends."

"Now, with regard then to the blighting of the offspring. If both parents are alcoholics, five out of six of those children are degenerates; only one out of six is normal. If those parents are total abstainers, nine out of ten of their children are absolutely normal. The nation is made up of families. Let liquor run its course, and that nation will go down to extinction. Let the nation be sober, and their families will rise, and not only have a rapid increase, but rapidly follow along the line of evolution, and have children greater than their parents have been. Babylon, Nineveh and Tyre, Carthage, Greece and Rome—they ought to be living and flourishing to-day. Dissipation is what did it, and here to-day it is shortening the existence of America, and possibly shortening the existence of all nations. My friend referred to five thousand years that liquor has been on the earth. Yes, and he has seen the rise and fall of nations and empires and civilizations, and nature does not exterminate any other organism, except men, like that. The human race has been poisoned with the specific for degeneracy, with the millstone hung around its neck, and the curse of nature upon it. I submit to you the greatest question of our age, for any age, is for each one of us to do our duty, so that in the shortest length of time our generation may cut that millstone from its neck." . . .

The effect of the so-called Hobson amendment was discussed by Mr. Fox in his second speech. He said in part: "This proposed amendment will prohibit the manufacture or sale, the transportation for sale, and, in fact, the entire traffic in every form of alcohol, no matter how small a percentage it may be, so that the only way in which the individual can exercise this liberty that my opponents speak of, is by making his own liquor. My friend says, 'import it.' There have been some notable experiments of that sort in other countries. There has never been a time in the history of Sweden, and perhaps in the history of the world, when a nation was as drunken as Sweden was, in the middle of the last century, when the people made their own alcohol; and it was because of the deplorable condition of the Swedish people under that practice of home distillation, that the Swedish Temperance Society was formed, and the whole great fabric of temperance legislation has been enacted in Sweden. We used to be told that France was a wine-drinking and a sober nation. The northern part of France to-day is seriously crippled by inebriety. Why? Because not so many years ago the government passed a law exempting from taxation, up to five gallons, spirits that were made by the individual householder. In other words, any family could make its own spirits for its own use, up to five gallons, without paying tax on it. Recent government reports show that something like one million three hundred thousand persons took advantage of that privilege, and the French government, which is a pretty efficient government, has found it so difficult to supervise that law, so as to keep the manufacture within the five gallons and prevent the selling, that the law itself has practically broken down."

"Now, then, what would happen in this country? Don't you think it is reasonable to suppose that a very large number of people would avail themselves of the same privilege

of home distillation? It is a very cheap process, it is a very simple process. It does not require any more intelligence than the baking of bread, but looking at it from a practical temperance standpoint, don't you think the driving of this traffic into the home, in the form of a highly concentrated beverage, might work out rather disastrously? So that after all it does seem to me that there is a question of method which we have to consider.

"Now, I am sorry to have to differ, or to present authorities that will differ with Captain Hobson, in those very dramatic and startling figures that he gave us about mortality; but, if I understand him aright, something like fifty-seven per cent. of the entire mortality of all ages in this country is due to alcohol. Just think of it! There has only been one real study made of this question, apart from the figures of the insurance companies, and the figures of the insurance companies are at great variance. He can quote one insurance company, and I can quote another one. The insurance company which has perhaps collected the largest body of evidence on this question is the Northwestern of Milwaukee. The Northwestern has made a very thorough analysis of some one hundred and sixty-five thousand policies, and they say this, taking into account the experience at all ages, that there was scarcely any appreciable difference between the ratios of actual to expected mortality, in the Northwestern policy-holders, of abstainers and non-abstainers; and in two groups, namely thirty to thirty-nine, and fifty to fifty-nine, the results were lower in the case of the user of beer and light wines than in the case of total abstainers. So you see the experts differ. The most careful investigation that has been made, so far, perhaps the most thorough, was made a few years ago by a gentleman named Phelps, who was editor of the "American Underwriter" and a very well-known member of the American Statistical Society. Mr. Phelps took the evidence from three of the largest insurance companies in the country in this way: He made a list of something over one hundred diseases, into which alcohol might enter as a factor, and then he got the opinions of the medical officers of those three largest companies, and they worked out an average of sixty-six thousand people a year, who die, not, mind you, from alcohol, but who die of diseases in which alcohol might be a contributing factor; so that it is not as serious a problem as my friend, Mr. Hobson, would have you believe. After all, my friends, we are a practical people. We are, I hope, going to try to deal with this question constructively. You are not going to get anywhere by a destructive policy that is based upon hatred; that is a force, but it is not a constructive force. Is it not wise for us to collate the experience of other great nations and the experience of our own nation, recognizing frankly that there have been gross evils in the conduct of the liquor business, and let us see if it is not possible to work out some kind of a plan of distribution; some kind of a plan of restriction, if you please, which will give us some hope of practical results and which will advance the temperance of the nation."

After the speaking, questions were asked by persons in the audience, and during a reply to one question Mr. Hobson was rather sharply warned by the presiding officer that he must stick to the point. He betrayed some irritation over the incident.

"STATE PROHIBITION never has prohibited, nor has it restrained the use of liquor to a degree that a sound basis of evolution may be said to have been made for the operation of national Prohibition."—(L. Ames Brown.)

Prohibition's Ideal: Low Wages.

Dr. Woods Hutchinson, the great medical scientist and sociologist, says that the higher workingmen's wages are the less they are apt to be drunkards. He adduces reliable statistics to prove his assertion.

We have often said the same thing, because we know that intemperance is the result of low wages and misery.

Therefore, if the Prohibitionists were honest—which they are not—they would advocate high wages for workmen—which they do not.

Why?

Because they are the mouthpieces of the desperate middle-class, a class that still hopes to survive by reducing to the lowest possible minimum the wages of the few poor workmen it can employ.

The small manufacturer, who is compelled to compete with the large capitalist, must needs employ men who are willing for less than his powerful rival. Or else he will go under. And so it is with the small shopkeeper. The smaller a business be, the lower are the wages paid by its owner.

And did you ever hear of the antis, the principal leaders in the Prohibition crusade, pay high wages to domestics, or any other person working for them? They even expect people to work for them for nothing!

So you see that the Prohibition crowd are the natural enemies of the laboring class; particularly the salaried agitator. He knows that when wages are high, the drunkenness barometer goes down and, the less drunkenness there be, the less there is any use for the agitator. If drunkenness were to disappear altogether, the agitator would have to disappear with it.

High wages will do away with Prohibition, and high wages are bound to come, here and everywhere else, if the social fabric is to hold together. And it will hold. The collective intelligence of man will see to that.

"AFTER THIRTY-FIVE YEARS OF TRIAL, Prohibition with all the trimmings, has given Kansas an enormous rate of divorces granted wives for cruelty and drunkenness; an unusually high and increasing rate of pauperism; school systems ranking only twenty-ninth in efficiency; an extremely high and increasing rate of insanity."—(Paul S. Conwell.)

THE AGITATOR'S PROFITABLE GAME. "Agitation on the part of individuals or organizations for the enactment of laws prohibiting the manufacture and sale of alcoholic beverages has never been really representative of public sentiment. It has, however, proven a profitable game for the gentlemen who devote their time to it."—Philadelphia "Sunday Dispatch.")

WILL NOT REMEDY CONDITIONS. "The manufacturers who are demanding that their employes become total abstainers are sadly mistaken if they believe for a moment that the movement for fairer and juster relations between employer and employe can be checked by raising the 'temperance' issue. The workers know that their plans for social betterment will be long delayed, if not made impossible of achievement, if the people can be convinced that liquor is the cause of all social ills. They know that giving up drinking will not bring about shorter hours, higher wages, or any of the other reforms for which they are striving. And they will resent the attempt to divert public attention from the need for social reforms by the pretense that excessive drinking is responsible for the condition of labor."—(Whidden Graham.)

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, Room 1313, People's
Life Building, Randolph and 5th Avenue,

CHICAGO, December 28th, 1916.

Chicago is one of the American cities where the Prohibitionists shout loudest, while the production and consumption of beer steadily increase. Last month the taxed output of the Chicago breweries amounted to 392,194 barrels, while in November, 1915, the output was 377,059 barrels. Many of the local breweries are making improvements and establishing outside agencies; their output of bottle beer is larger than it was ever before.

Mayor Thompson, politically dead, acknowledges his defeat by going over, skin, hoofs, claws and all, to the Antis, having announced that he will assist them this year in making Chicago "dry" by local option in 1918. Most of his late supporters have already abandoned him. He has stopped revoking saloon licenses for alleged violation of the Sunday closing law, though; but this is considered to be a desperate attempt to again get into the good graces of the trade, whose members know him too well to forget that he broke his pre-election pledge as soon as he had been elected by the aid of the Liberal element.

Corporation Counsel Ettelson has ruled that there must be no "traveling saloons" on Sunday, meaning that liquor dealers are not to be permitted to deliver liquor on Sunday, purchased on Saturday.

Wm. J. Bryan has not yet accepted the challenge to debate the Prohibition question with Charles A. Windle, sent to him by the Manufacturers' and Dealers' Association. In one of its publications, which the Association distributes widely to fight Prohibition, the literary committee says: "The legitimate saloon-keeper may be driven by distress to seek a living by evangelizing. The proper thing now is to form an aggregation of ex-baseball players, prize fighters, circus touts, three card monte men, faro dealers, Bowery gun men, thimble riggers, porch climbers and second story men to shout: 'Glory to Jesus,' 'Down with the Demon Rum,' and get the money from millions of 'suckers.' This is the day for reformers like Jack Rose, Pat Crow, Jack Cardiff, Billy Sunday, unfrocked preachers and disbarred lawyers. By and by we will have more Evangelists than Industrial workers; the 'church in action' in every block and a Reformer on every corner. The stirring and manly tune of 'Yankee Doodle' will fade away and the 'Te Deum' will fill the air with solemnity, sobriety and sadness. From the 20th century back to the 'Dark ages.' Everywhere it will be: Holy, Holy—'Holier than Thou' shouters."

Edward A. Gore, an influential member of the Chicago Association of Commerce, has devoted his attention to propagating the demand that the trade be compensated for eventual destruction of property by Prohibition. He says, "the treatment accorded the liquor man in this country is unjust and un-American."

At the headquarters of the Prohibition party in this city they are trying to ascertain how many votes were cast for their presidential candidate Hanley, November 7th. They

have not all the figures as yet, but from their statistical tables it appears that the usual number of 250,000 has not been reached, as they got only 225,101 votes. In 31 States Hanly received 174,318 votes, as compared with 149,453 for Chafin in 1912, an increase of 24,865. The increases were all in Arkansas, California, Florida, Illinois, Maryland, Massachusetts, New Jersey, Pennsylvania and Virginia, while their vote decreased largely in Colorado where women vote (about 50 per cent.), Connecticut (30 per cent.), Delaware, Indiana (3,000), Kansas (!), Kentucky, Maine (40 per cent.!), Minnesota, Missouri (over 30 per cent.), Nebraska (2,000), New Hampshire (about 50 per cent.), North Dakota (30 per cent.), Oklahoma (4,000), Ohio (3,000), Rhode Island, South Dakota (gone "dry"—over 50 per cent.), Tennessee (nearly 300 per cent.), Vermont (45 per cent.), Wisconsin and Wyoming.

In Chicago Hanly was the only Presidential candidate to get a bigger vote from women than from men. He received from men 985 votes, from women 1,324.

Everywhere the Socialist vote was about three times as large as that of the Prohibitionists, which goes to show that the issue presented by these labor agitators is gaining, while the dead one of the Prohibs remains stationary ever since 1888.

The members of the trade, not to be outdone by the Antis, are sending telegrams and letters to the Illinois members in Congress, demanding that they defeat the Prohibition bills with which the Antis are threatening to destroy us.

The plant of the Ernest Tosetti Brewing Co., defunct, was recently sold for \$199,900, the property having been bid in by J. J. Kelly, an attorney. The sale was conducted by Frank Sampson, trustee for the United States District Court, which ordered the sale, and Michael Gesas acted as attorney for the trustee. The plant had been appraised at \$220,000. There were many bidders present at the sale, the first bid being \$115,000.

The friends of Charles J. Vopicka, former president of the Atlas Brewing Co., and now U. S. Minister in the Balkans, remained at his post in Bucharest, while most other foreign ministers accompanied the Rumanian Court, when the armies of the Prussians, Austrians and Turks entered the capital of Rumania.

Peter S. Theurer, president of the Peter Schoenhofer Brewing Co., has been re-elected treasurer of the Illinois Manufacturers' Association.

"REALIZE WHAT IT WOULD MEAN to turn out into the world the thousands and hundreds of thousands of workers in the liquor industry, the breweries, distilleries and wineries; on the farms culturing and producing the raw materials that find their way to the breweries, distilleries and wineries; the coopers who make the barrels, the woodsmen who fell the trees, the transportation men who haul them, the printers that print the labels and set the advertisements—in fact it would be ad infinitum to carry this to its logical conclusions."—(W. Harry Spears, Labor Writer.)

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, December 20, 1916.

California is different from any other State in the Union; her problems as related to the liquor industry are different because of her great wine industry and all this was taken into consideration at the meeting of the California State Brewers' Association which was held the first of the week of December 11th at the association's headquarters in the Humboldt Bank Building. It was the 8th annual meeting of the association and was well attended by representative brewers from all over the State.

Thos. Alton, who has been president and leading spirit of the organization since it was first organized, presided, and he was re-elected president of the organization. W. J. Eilett was re-elected one of the vice-presidents and John G. Zobelein was elected the other vice-president to take the place of Edward Zobelein who served last term. Henning Thode was re-elected treasurer and William Schuldt was re-elected secretary. No changes were made in the directorship except to add Louis Hemrich to the number and to elect W. A. Remensperger to serve instead of Ulrich Remensperger. The directors are: Joseph Grace, Santa Rosa; H. J. Widenmann, Vallejo; John W. Bourdette, San Francisco; W. A. Remensperger, San Francisco; Charles Hyer, Hayward; Carl S. Plaut, Oakland; H. M. Wreden, San Francisco; J. Henry Zitt, San Diego; E. C. Roeder, Sacramento; Otto H. Schons, Los Angeles; J. P. Rettenmayer, San Francisco, and Louis Hemrich, San Francisco. Carl S. Plaut, the California trustee of the United States Brewers' Association who had just returned from the national convention which was held at Cleveland, gave an interesting report to the State convention of the meetings and recommendations of the national body.

G. M. McDowell who had charge of the State anti-prohibition campaign during the 1914 and 1916 campaigns, gave an exhaustive analysis of the election returns with particular attention to the vote cast in the regulated and unregulated districts of the State. In the well regulated districts where the number of saloons has been cut down and where strict regulation is enforced the prohibition vote has increased. His interpretation of vote is the most authentic available. He also compiled lists showing the percentage that voted of the registration in different sections and the percentage that did not vote on either one of the prohibition amendments. He said that in some of the counties like Amador County 14 per cent. of those who voted did not vote on the prohibition amendments; in Mono County the percentage was 23 who did not vote on the prohibition question, proving that there the rural population is not interested in the prohibition question. In the counties containing the large cities, like Los Angeles County, only 7 per cent. of those that voted did not vote on the prohibition question; in San Francisco County the interest in the question was so great that less than 4 per cent. of those that voted failed to vote on the prohibition question.

Mr. McDowell resigned after the Brewers' meeting and returned December 19th to his former home in Detroit, Mich., where he will resume the practice of law. His successor has not been named yet but it is rumored that the appointment will be given to a San Francisco man for the next year at least. There is no question but what California will face another prohibition election in 1918.

J. P. Rettenmayer, of the Acme Brewery, who was very active in the campaign, gave an interesting report on conditions in the State as evidenced by the election returns to the brewers' meeting.

Directly after the California Brewers' Association had adjourned J. Henry Zitt, of San Diego, left for an eastern trip on business and for a much needed vacation after his strenuous campaign work.

A. C. Pollmer, who built the first brewery in the South Sea Islands, was a San Francisco visitor this month. Mr. Pollmer's brewery is located at Papeete, Tahiti Islands, and he says that beer is taking the place of strong drinks among the natives and proving so beneficial to their health and morals that the English and French governments are backing his brewery.

At the annual banquet of the California State Brewers' Association held the first night of the meeting of the convention Dr. Max Henius, of Chicago, suggested a plan for stopping the wave of prohibition, advocating clean, bright drinking places with flowers, birds and girl waiters where a man could take his wife to get a glass of beer or light wine and where no strong drink would be sold. "I am not against public drinking," said the Doctor, "I favor it. But I want different conditions. For five years I have urged the brewers to ask American lunch rooms to handle beer and to handle wine and to show their enmity to the saloon as conducted. I want to see evident in drinking places an atmosphere of cleanliness of mind and I do not want to see strong drink sold."

An effort is being made by the grape growers who think that two years hence prohibition will carry in California (which it will if the prohibitionists gain as they did in the last election) unless something is done to change conditions. They have gone on record as not being in favor of the saloon, as it exists to-day, and have pledged themselves to either clean it up or wipe it out of existence, and they are trying to get the brewers to combine with them in an effort to banish drink stronger than fourteen per cent. alcohol from California. They purpose to eliminate the so-called American bar and replace it with drinking places such as they have in Germany and France. As yet no agreement has been reached between the brewers and the wine men, although a number of conferences have been held and a number of the brewers are in favor of the plan while others point out that wherever the saloon has been eliminated prohibition has been the result and the prohibitionist wants prohibition, not temperance, and does not recognize the difference between light beers and wines and the stronger drinks.

The total registration in California was 1,314,446, the total vote was 1,045,858.

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,
46 Cannon St., E. C., December 15th, 1916.

The output of beer will have to be further restricted in the United Kingdom, as during the first quarter of the fiscal year under the Restriction Act the reduction was only 12½ per cent. below the production of the fiscal year 1915-1916, the act providing that the entire output shall be less than 26,000,000 standard barrels. Consequently, the output must be reduced to more than 14 per cent. to attain the limit prescribed by the act. The output during the quarter ended September 30th, 1916, amounted to 7,324,915 barrels, or 1,111,543 barrels less than during the corresponding three months of the preceding fiscal year, and 2,251,947 barrels less than during the same period of 1914-1915. In the meantime the Restriction Act has been amended to the effect that the adjusting period asked for by the brewers is to be extended three months and, therefore, brewers will not

be fined for overbrewing if on March 31st 1917, his output does not exceed his maximum barrelage as prescribed by the original act. Another amendment gives additional relief to brewers who, under the hardships imposed by the act, had to close their plants, and a third amendment provides for special certificates to be issued to brewers for supplying beer to canteens. This latter amendment was inserted through the efforts of the Brewers' Society. The debate upon the amended bill in the House of Commons resulted in a vote of 97 for and 85 against, a government majority of 12 votes. The move to permit a brewer who produces less than his allowed quantity of beer to add to his output that amount which some other brewer has not brewed, has met with decided opposition on the part of the President of the Board of Trade, Mr. Pretyman, who declared: "I cannot see my way to agree to any general provision for transferring brewing rights from one brewer to another."

What the new Food Controller, appointed by the government, may have in store for the trade is not known as yet, but it is not believed by even the worst of pessimists that he will do to the brewers what has been done to the distillers, to whom the production of whiskey and gin has been altogether prohibited. At any rate, the Food Controller, most conspicuous of men after the now Prime Minister, Lloyd George, will hardly be the most popular man in England for some time to come. So far, he has had the same experience which the Prohibitionists have had everywhere they imposed their hateful scheme upon a defenseless public—he has discovered that Prohibition does not prohibit, cannot be enforced; the rules and regulations to restrict eating and drinking in public places are disregarded everywhere. To make human beings temperate, or worse, ascetics, even for the purpose of winning a war, cannot be accomplished over night by law or decree, it must be a matter of education and training continued through more than one generation. Still there is one radical measure left, and that is confiscation, or commandeering, all food by the government, and doling it out in the portions desired, to the masses of the people and strictly prohibiting the accumulation and resale by individuals. But what machinery would have to be created by the State to carry out a scheme like that!

The price of barley being almost prohibitive, many brewers had resorted to employing wheat as part substitute in their malt. They are now forbidden to do so, because all wheat obtainable is required for feeding the army, the navy and—the civilians. So brewers have another difficult problem to solve. Barley has recently been quoted at 77s. and malt at 83s., and prices are still soaring.

The Board of Agriculture estimates that the total produce of barley in England and Wales in 1916 was 5,217,574 quarters against 4,527,929 quarters in 1915. The barley acreage for 1916 was 1,332,076 against 1,231,714 in 1915. Although the yield of barley was about $1\frac{1}{2}$ bushels per acre below average, the yield is higher than last year, and, with the average increased, has given a total of nearly 700,000 quarters in excess of 1915.

At the Twelfth Annual Meeting of the Brewers' Society the Finance Committee's report showed a satisfactory increase of subscriptions and a considerable growth in newly admitted members, mainly through the personal efforts of the chairman, Colonel J. Gaskell, V. D., Cardiff. The retiring members of the general committee, Messrs. Adams, Barclay, Brain, Sir John Brickwood, Mr. Burrell, Major Christie, Mr. Collier, Colonel Gaskell, Messrs. Plant, Sykes, Thorpe, Weller, and Wigan were unanimously re-elected,

also the honorary auditors, Messrs. Chatteris, Nichols & Co. Steps have been taken to answer a number of advertisements published in the daily papers by some fanatical Prohibitionists who denounced the brewers as being "unpatriotic" and "fat bellies," living in luxurious mansions and pocketing their millions. The National Trade Defense Association, replying to some of these dastardly slanders, has reminded the public that the brewers have not only contributed millions of money to the defense of the country, but also thousands of brave men and youths, who sacrificed wealth, health and even their lives upon the battlefields on the continent.

Lord Charles Beresford, M.P., has recently said, in a letter to a correspondent: "Although I am a total abstainer myself, I have always thought that teetotalers damage their efforts in aid of sobriety by taking too violent a line. The new liquor laws are, in my opinion, likely to produce great irritation tending to a division of opinion at a moment when we should have one thought—how we can best win the war. These new laws favor the heavy drinker at the expense of the moderate drinker, who naturally resents what he considers tyrannical interference with his liberty. Further, according to the returns, our country has never been so sober as it is at the present time. On the fact of it, therefore, no case has been made out to show that the new liquor laws are necessary."

Permit me to wish you all a Merry Christmas and a Happy New Year!

Brewing News from the European Continent.

The fact that the 1916 potato crop in Germany was far below the one of 1915, while the grain crop was more abundant this year, has caused the German government to increase the grain ration in the official scheme of feeding the civilian population and, consequently, a proportionate decrease in the amount of grain to be set aside for the production of beer has been decided upon, except for Bavaria where the government acknowledges that for the inhabitants of that State beer is a necessary food. For Bavarians "beer is liquid bread," and, to curtail that nutriment, would cause grave discontent among the masses—if not revolution. It is also asserted that a large amount of grain has been captured by the German army in Rumania, but it is doubtful if the brewers of Germany will profit thereby, the fact being, that although Rumania's grain crop was larger this year than the average amount, the quantity of grain which Germany could draw from Rumania will be less than optimists are calculating, large stocks of grain having been destroyed by the retreating Rumania army.

To still more limit the consumption of beer, the hours during which the restaurants, hotels, saloons and all other retail places for the sale of beer may be open have been reduced in the large cities of Germany.

The necessity of strict economy in the use of brewing materials has resulted in introducing several new methods of malting barley, one of which consists in reducing the loss of material often sustained in culms and by respiration on the floor. The maltsters also so regulate the degree of steeping that it is just sufficient to enable the biological processes to be carried out on the floor, the loss of substance being avoided by prolonging the chemical stage, and at low temperature until sufficient modification is obtained, cool flooring also lessening the necessity for frequent turning. Thus the enzymes continue working without any great degree of growth and respiration.

There is no improvement in the brewing industry of Austria, but the brewers of Austria-Hungary expect some bar-

ley to come to them from the stocks taken in Rumania. The government of Hungary has prohibited the use of coloring extracts in the production of beer. From Saaz the Hopfenbau-Verband reports that the hop market is quiet, prices ranging between 138 kroners and 180 kroners per 50 kilos. There is sharp speculation in hops at the exchanges in Vienna and Prague, even bankers joining in the artificial stimulation of prices. At the Vereinigte Saazer Hopfen signierhalle, 5,694 bales of hops were sold in October last.

From France continued increases in the production of beer are reported. During the month of October last the beer-tax paid by brewers amounted to 699,000 francs, an increase of 143,000 francs as compared with the beer-tax paid in October, 1915. The figures for the first 10 months of 1916 are 8,487,000 francs collected from brewers for taxes, as against 6,389,000 francs during the corresponding period of 1915. The importation of brewing materials also shows a proportional increase, the value of barley imported during the first 2 months of the fiscal year 1916-1917 being 26,973,000 francs, against 5,872,000 francs for the same months of 1915-1916; malt, imported from January to September, 1916, 29,275 quintals, against 20,989 quintals during the same period of the previous year, and 355,000 francs worth of hops during the first 9 months of 1916, against 109,000 francs for the corresponding period of 1915. Of late it was discovered that large amounts of hops, although imported from Sweden and Switzerland, were of German or Bohemian origin, the producers having sold them for re-exportation to these neutrals. But as soon as the discovery had been made, all orders for alleged Swedish and Swiss hops were stopped by French brewers, many of whom seemed not to have known that in Switzerland, for instance, hops are not grown at all.

As a war-measure, Premier Briand has introduced in the French Chamber of Deputies a bill for the "total suppression of the consumption of alcohol," but beer and light wines, without which the French army would not and could not be, are to excepted from the contemplated Prohibition. The text of the bill reads: "Until the end of hostilities the government is authorized to take by decrees, decided on by the cabinet, all measures which, in addition to or in derogation from existing laws, shall be required by the needs of national defense, notably in matters appertaining to agricultural and industrial production, equipment of ports, food supply, hygiene, public health, recruiting labor, and the sale, distribution and consumption of provisions and produce. In case of a decree necessitating a special appropriation, application for it shall be made within a week. Penalties not to exceed six months' imprisonment and a fine of 6,000 francs may be attached to a decree." Among the retailers this step taken by M. Briand has caused consternation, according to cable dispatches received from Paris, which say, in part: "M. Grizard, president of the Saloonkeepers' Federation, and M. Delrose, president of the Provision Dealers' Association, declare the new measure will bring ruin to 380,000 saloonkeepers now mobilized and fighting for their country, and that it will dry up one of the sources of national wealth. On the other side it is pointed out that, aside from consideration of the health of the people alcohol is needed urgently in the manufacture of munitions, for which purpose increasing quantities are being imported. The amount expended for this purpose in the present year is about 130,000,000 francs, compared with 30,000,000 francs last year. M. Riemain, secretary of the Anti-Alcohol League, says the prohibition measure will not injure the saloonkeepers, but, on the other hand, will benefit them, as they would get small profit with the doubled taxes on spirits while the sale of wine, beer, cider, tea and coffee will yield

handsome returns. The distillers will lose nothing, M. Riemain contends, as their whole output will be taken for industrial purposes."

The importation of "liquor" into France and Algeria has been prohibited by decree, December 23rd, beer and light wines to be permitted.

Jean Finot, editor of "La Revue," who for two years has carried on a campaign for the suppression of the use of alcohol in France, warmly welcomes Premier Briand's pledge to forbid the use of spirits. "The Government," he said, "has taken a long time to give its promise. The realization is not yet reached, but we have obtained the interdiction of the sale of alcohol to women, minors and mobilized men, who form eight-tenths of the population. Our programme goes further. Truth is now on the march and nothing can stop it. France, rid of alcoholism, will triple her moral and material strength."

To the pages of the Golden Book of the French Brewing Industry these names have been added: Charles Le Bourhis, fils, brewer at Dournenez, killed in the battle of the Somme, and Paul Macqueron, son of M. E. Macqueron, brewer at Abbeville, wounded and taken prisoner. The "Croix de Guerre" has been conferred upon Lieutenant Gaessler Marcel for great bravery displayed by him in attacks and counterattacks September 6th and 8th, 1916.

The members of the Brewers' Association of the Netherlands have resolved to raise their prices 3 and 4 florins per hectoliter of beer, and the retailers followed suit by raising the price of bottle beer 4 cents per bottle. Heavy new import taxes have been levied by the government of Holland upon barley imported from the United States.

The municipal council of Stockholm, Sweden, has renewed for three years to the Stockholm System Co. the monopoly of the sale of liquors, thus acknowledging the economic and social value of the Gothenburg system for government control of the liquor trade, dating from 1855, the respective company having not only authority to conduct all retail establishments for the sale of liquor to be drunk off the premises, but it may also delegate this authority to private persons or companies. Some forty of these so-called "off" licenses are thus held by persons other than the system company, but these will not be extended after the deaths of the present holders. Control of sales at the "off" places is effected by means of the passbook, which is issued to an adult resident of the city upon application, provided his or her record justifies it. The company maintains an elaborate card index, in which are listed not only all persons to whom books have been issued or from whom they have been withdrawn, but also all persons to whom, if they apply, books will not be issued. Books are not issued to habitual drunkards, to persons who have been arrested for drunkenness within a year last past, to paupers or to persons who have figured unpleasantly in police court records.

Four Russian distilleries operated during the year in Manchuria, producing about 800,000 gallons, a considerable increase over previous production and the result of the prohibition against the distillation of alcohol in Russia. About 75 per cent. of the product was distributed to towns along the Chinese Eastern Railway and to Chinese villages on the Sungari and Amur Rivers. The remaining 25 per cent. was worked over into vodka, liqueurs, and whiskies and sold locally. The price of raw spirit more than doubled during the year, rising from \$0.85 per gallon in the beginning to \$2 at the close.

The Government of Norway has ordered temporary Prohibition for the manufacture and sale of spirits, permitting beer and light wines.

New York State Brewers' Association.

More than one hundred brewers attended the annual convention of the New York State Brewers' Association at the rooms of the Lager Beer Brewers' Board of Trade, 109 East Fifteenth Street, New York City, on Wednesday, December 6th.

Those in attendance had investments of hundreds of millions of dollars in the brewing business in this State and pay something like \$20,000,000 revenue to the United States Government annually on approximately 13,000,000 barrels of beer.

The president, Col. Jacob Ruppert, of New York City, who occupied the chair, delivered his annual address amid prolonged and repeated applause. The address, in part, follows:

Prohibition is the mother of impractical theories, lies and fanatics. If the people are to be guided by them for the solution of the so-called liquor problem, nonsense, hypocrisy and calamity will overwhelm the country. The real truth and scientific remedy can never be ascertained in the heat and hysteria of a campaign carried on by the prohibitionists. They blindly and recklessly exaggerate the vices of alcoholic drink as well as the virtues of the prohibition movement. The States which have enacted prohibition laws are fooling themselves. The well-meaning men and women who advocate prohibition lack proper information and exercise poor judgment. They blame drink when they ought to blame the person. A drunkard is merely an unstable character, and may be taken in hand and corrected and punished without putting the entire people in bondage or under sumptuary laws. The State may control and regulate the liquor traffic so as to prevent the abuse and vice of a very small minority without ruthlessly taking away the privilege of harmless indulgence by the great and unoffending majority. That is what the law of New York aims to do, and so successfully accomplishes when it is properly enforced.

The futility of prohibition will further appear from the Internal Revenue Department figures when we note that while the so-called prohibition territory has increased from time to time there has been a continuously increasing amount of liquor manufactured, sold and dispensed. The figures of the Treasury Department for the fiscal year ending June 30, 1916, show an increased tax paid withdrawal of distilled spirits amounting to 11,602,661 taxable gallons over the previous year, and a decrease in fermented liquors amounting to 1,182,193 barrels for the same period. This seems to sustain the contention that as prohibition territory increases beer and light wines, because of their greater bulk, give way to more ardent spirits of lesser bulk. The official Internal Revenue figures show an increase of \$4,924,531.62 in receipts from distilled spirits and fermented liquors for August, 1916, over August, 1915.

Not only is as much or more liquor consumed, but excesses break out in other directions, usually in the dangerous drugs. In all the prohibition States the use of dangerous drugs has increased, and of course the number of insane has increased in proportion. Prohibitory laws may limit the indulgence of some in alcoholic beverages of large bulk, but that always results in increased indulgence in those communities in cocaine and morphine and other narcotic drugs. The Commissioner of Internal Revenue in his last report estimates that there are in the United States probably several hundreds of thousands of drug addicts, and Government figures show that while the importation of opium from the decade of 1860 to 1869 was 1,425,196 pounds, in the decade from 1900 to 1909 it had increased 351 per cent., or to the amount of 6,435,623 pounds, without taking into account the amount smuggled during that period.

Concurrent with the attempt to lessen by prohibition the so-called drink evil there seems to be an impetus to the creation of a new or far greater evil.

Just these brief observations on the erroneous, false and misleading representations and contentions in favor of prohibition:

Prohibitionists claim that the next generation will drink less, but this is disproved by the police data from the State of Maine, which shows that notwithstanding the long reign of prohibition in that State the young offenders arrested for intoxication have not decreased, but rather increased.

The nutrition laboratories and others have been conducting experimental investigations of the effects of moderate doses of alcohol on man. The results are entirely too inconclusive to warrant the formation of opinion or the passage of any radical measures with reference to alcohol as a beverage. But these experiments for injurious effects are confined to alcoholic drink. Why not food?

How would results compare if experiments were made with the same man to ascertain the results of a hearty meal of corned beef and cabbage, broiled lobster, ice cream and coffee or other heavy food? Many of the luxuries we indulge in are momentarily depressing, but that does not signify that they are to be put under the ban of society. I have it upon competent medical authority that the deleterious effect or impairment of efficiency is three times as great in the case of a heavy meal as it would be in the case of moderate alcoholic drink, and that the effect of the drink passes off much more rapidly than that of the food. Some high authorities contend that light alcoholic beverage is necessary, beneficial and stimulating for many people, and for all under certain circumstances.

There is no basis for the assumption that alcoholic drink plays any material or serious part in the efficiency, punctuality or attendance of labor. These are matters concerning which the Government through its various labor, Industrial and Workmen's Compensation Commissions gather information, and in the reports of these commissions it appears that the percentage of accident, absenteeism or lateness on the part of labor which may be laid to the use of alcoholic drink is exceedingly small and practically negligible. When we are considering industrial accidents we must not overlook the elements of fatigue and monotony. These frequently do, while alcohol seldom does, lead to the negligence and shiftlessness that cause mishaps.

For our industry we ask only the fair consideration of the public. We have no quarrel with those who believe in and advocate true temperance. But we do caution and ask them not to lean too far toward tyrannical and impractical sumptuary laws and too far from sensible and practical regulatory laws. We have confidence in the present New York law because it is one which will have the sympathy, approval and support of public sentiment wherever it is understood and enforced, and which constitutes an incentive to public officials to undertake the kind of control and supervision of the liquor traffic that experience has proven to be the most practical, efficient and desirable.

Col. Ruppert also contended that New York State has the best excise law in the United States. He further called the attention of the brewers to the fact that the total revenue from distilled and fermented liquors paid the United States Government for the fiscal year ending June 30th, 1916, was \$247,453,543.52, or almost an amount equal to the entire appropriation for the Army and Navy for a similar period.

Col. Ruppert was followed by William H. Hirsh, attorney for the State Association. Mr. Hirsh said, in part:

Whenever Mr. Bryan undertakes to find a national issue he immediately becomes a calamity howler, and rainbow chaser. The country has uniformly rejected every idea of Mr. Bryan on an important question from the free and unlimited coinage of silver down to the policy of unpreparedness. Where his leadership has been accepted he has invariably led his party astray and down into the ignominy of defeat. The experience of the past will certainly make any party loath to accept him as a guide in the future. No election takes place and no important event happens but what Mr. Bryan is ever ready with criticism and pessimism. His latest prediction is that Prohibition will become a national issue.

Mr. Bryan is as usual in error and on untenable ground when he asserts that Prohibition can properly become a national issue. The fact that there are 22 so-called "dry" States in the United States does not sustain his contention that the National Government has a right to vote that condition upon any small minority of the remaining States any more than a necessary majority of "wet" States could combine to compel "dry" States to sanction the sale and dispensing of alcoholic drink. President Wilson has said and the leading Constitutional authorities agree that the Prohibition question is one for the States to determine for themselves and not one which should be considered a subject for Federal action. The care of the public health, morals and welfare include the control of the liquor traffic and constitutes that most important function of government called the police power. This power was purposely and unequivocally reserved to and has always been carefully and jealously guarded by the separate States. It deals most intimately with the personal affairs of the citizen, and must be adapted and applied to meet the peculiar conditions and wants of each State.

A police regulation which may very well suit and control the people of California might be very objectionable to and useless for the people of New York. National Prohibition proposes to transfer the police power from the States to the Federal Govern-

ment and deprive the States of the most potent and substantial reason for the existence of their government.

The fact that 17 of the 22 "dry" States gave Wilson their electoral vote has absolutely no significance. Prohibition was not an issue and played no part in the campaign. Mr. Bryan knows very well that the great number of those "dry" States which voted for Wilson did so because they are overwhelmingly and irrevocably Democratic. A Republican has as much chance to carry one of those States as a snowball has in Hades. Not only is Mr. Bryan a false prophet, but he is also a blind interpreter. The "dry" States have voted themselves such because of local conditions and issues which grew out of the peculiar situation in each of those States. The co-called liquor question is not presented the same way in any two States, and I venture the prediction that no State which once adopted and enforced a practical method for the regulation and control of the sale of liquor would vote itself "dry." Wherever the people have been led into accepting abuses you will find that the traffic in liquor has been permitted to go on without any well considered and properly adapted license system for its regulation. No State has gone on the water wagon that previously had a competent State vehicle to carry out a uniform and sensible policy of control and regulation of the sale of alcoholic drink throughout the Commonwealth. Therefore Mr. Bryan or any other Prohibition advocate cannot speak for the future action of the "wet" State. If the people of these States will only have clearly presented to them a State scheme and method for the administration of the sale of liquor which will avoid abuses and punish abusers, they will not be deluded into the adoption of impractical measures which breed hypocrites and contempt for law and lead to increased use of harder liquors to the exclusion of milder ones such as beer and wine, and also bring on the frightful and ravaging drug habit, all of which follows upon the wake of Prohibition according to official statistics. No people who are enlightened instead of blinded by experience and facts would put the entire State in swaddling clothes because of the offenses and weaknesses of a very small percentage of the population. To the informed and fair individual, to one who gives either human nature or the experience of ages a moment's serious reflection it must be manifest that Prohibition does not prohibit, and that even if it did prohibit it would constitute a tyranny incompatible with the lofty aims of our country. There were 19,874 arrests for "drunkenness and disturbance" in the city of Portland, Me., in five years from Jan. 1, 1910, to Jan. 1, 1915.

Occasionally the ministerial mind, the misguided zealot and sham reformer have undertaken to settle the question, but without success, and for this reason: If one is to offer a cure for an evil he should first study the evil itself; without a correct understanding of the evil he will be without ability to conquer it either in himself or others. Those who are the most vociferous in their pretensions to curb intemperance are most ignorant as to its causes and most stubborn in accepting the inevitable lessons of both reason and experience. These producers of halcyon days consider a psychopathic weakness in man as a political disease of the State. They locate a symptom and then proceed to treat that so as to make it appear in some other form, but stop short of attacking the real root of the evil pursued. They just fulminate against the use of any liquor because some suffer from excesses. They extract the tooth because it has a small cavity instead of having it filled. They pull down the house because the roof leaks instead of having it repaired. They labor under the false notion that vice can be eliminated, if it is only exhibited and ranted about. They proceed like those who would stop the evils of the theatre by parading its immoralities, instead of undertaking the cultivation of better taste in the public and the check or cure of the looseness of morals in the people of which indecent performances on the stage are but symptoms and reflections. An ulcer is not healed by outward application, but by eradicating the cause of it. The State does not become rid of the drunkard by enacting a law which puts all of the people in the same class with him. But the drunkard can be saved, corrected or punished by a law which deals with him directly and does not concern itself with the sober and temperate man. A so-called moral issue cannot be met by an immoral method for its treatment. And it is immoral to enact a law which everyone knows cannot and will not be enforced.

I have said that no State would vote itself "dry" if it once had a sensible law for the handling of the liquor traffic. The State of New York, save for some misinformed people and professional agitators, is perfectly satisfied with its present Liquor Tax Law. Whenever the question is raised here the Anti-Saloon League is not permitted to throw confusion into the campaigns by arraying so-called temperance advocates against those trafficking in liquors. The bad saloon is not the issue. Its evil is conceded on all sides and its obliteration unanimously desired by all good people. The issue in such campaigns is rather the way in which the evils shall

be wiped out. The question raised is whether the scientific and eminently satisfactory excise system of the State should be sustained or rejected. It is not the Anti-Saloon League or the Prohibition party against the liquor traffic, but it is the Anti-Saloon League and the Prohibition party against the well thought out, well tried, efficient and practical regulatory law. In all instances wherever an attempt has been made to inject the excise question into politics in New York the people have invariably voted to sustain the present license system as the best method for contending with, checking and preventing abuses, and have refused to accept Prohibition or Local Option as a substitute.

The brewers do not align themselves with any political party, but they ask fair treatment from all parties and are anxious that the public be not fooled by theorists, faddists or charlatans. The brewer does not run amuck and scatter wrong information and inflame passions in dealing with the liquor question, but he has been and is and will continue to be active in cooperating with the public officials to see that the law which seeks the suppression of the abuses of the liquor traffic is enforced, and that the business is carried on in a respectable and proper manner. In that way he helps in demonstrating that the correct method for dealing with liquor excesses is to enforce a law which aims at the excesses and not to substitute for it a senseless and absurd measure that strikes at everybody without rhyme or reason and to carry out which every attempt has proven abortive. The Anti-Saloon League might well follow the brewers' example with much profit to the State.

When one asks what do the people of New York think about Prohibition, I ask, what would New York be as a Prohibition city? Come, let us reason together. Would not every intelligent citizen when he contemplates its commercial activity, its transient population, its hotels, restaurants and theatres and its many other institutions which make it hospitable and attractive, exclaim, Oh, New York, I see thy fate if thou were really made "dry!" So why trouble our busy minds with impossibilities. Get down to practicalities. Have our excellent regulatory law enforced.

Buffalo, Rochester, Syracuse, Utica, Jamestown, Albany, Troy, Poughkeepsie and Hudson were represented and a large delegation from Greater New York was in attendance.

The following were re-elected officers and trustees: President, Jacob Ruppert; 1st vice-president, John Bradley; 2nd vice-president, P. F. Simon; 3rd vice-president, John Reisenweber; treasurer, John C. Heintz; secretary, Chas. J. Warner.

Trustees: Jacob G. Lang, Rudolph J. Schaefer, William Hoffmann, Louis B. Schram, B. T. Kearns, W. F. Welch, E. M. Jackson, Herman F. Scharmann, Edward Oswald, F. C. Loeb, Thos. F. Fitzgerald, Julius Liebmann; Counsel, F. E. Grant and W. H. Hirsh.

The Manufacturers and Dealers League of the City and State of New York.

The 9th annual meeting of The Manufacturers and Dealers League of the City and State of New York was held at the New York Produce Exchange, New York, December 19th, 1916. It was well attended, and considerable enthusiasm was displayed.

G. L. Savage, the President, called the meeting to order, and the reports of the President, Treasurer and Secretary were read, showing the League to be in excellent condition. The President's report covered the activities of the League during the past year, and contained suggestions as to what the League's Directors hoped to accomplish during the coming year.

The election of officers resulted as follows: G. L. Savage, President; J. Samuel Smoot, Vice-President; Frank Pentlarge, 2nd Vice-President; W. R. Couch, Treasurer; A. Kalthoff, Secretary; Directors, Chas. Roos, S. V. Steiner, T. Rosenwald, A. S. Barritt, Chas. Zoller, W. V. Hirsh, W. H. Brady, Phil. M. Rose, Wm. Gettinger, J. B. Vandever, Chas. S. Morris. At an open discussion following the election remarks were made touching on a closer cooperation between members, and plans to increase the League's activities and usefulness were discussed.

Wisconsin Brewers' Association.

The Wisconsin Brewers' Association held its annual convention at the Hotel Pfister, Milwaukee, December 13th. There was a large attendance of delegates and members, and president Fred A. Rahr, of Green Bay, opened the proceedings with the customary annual address, in which he reviewed the Association's business during the past year, and the grave political situation created by last fall's election results favoring the enemies of the trade. That four additional States went "dry," president Rahr asserted, was due to the diatribes of the Anti-Saloon League, rather than to actual Prohibition sentiment among the masses of the people. Mr. Rahr also advised his colleagues and all who are affiliated with the trade not to take part in local politics unless the "dry" and "wet" question was the predominant issue of a campaign. He accused the "dry" forces of spending huge sums of money in campaigns to secure their end. "Strength of the industry depends upon maintaining the good will and friendly feeling of the great middle class of our citizenship," he said. "The result of recent elections in various States, some of which centered into the 'dry' column, do not indicate so much a prohibition sentiment as they do the intensified organization of the Anti-Saloon League and its allied groups. They collect from the churches each year \$1,000,000 and spend it for political purposes and salaries. It is this political participation that I believe will be their undoing as soon as the public at large fully understands the extent to which it is carried on. For this reason I earnestly urge that all liquor interests refrain from any participation in local politics or local political elections, unless the question of license or no license is directly involved." Mr. Rahr referred to the present government tax on the brewers' product and contrasted the conditions to-day with those immediately following the Civil War, when the United States government was in its greatest financial distress and was seeking means to raise revenue with which to carry on the affairs of the government. Then the brewing industry stepped forward voluntarily, he said, and, without suggestion from anyone outside of its own membership, proposed to the United States government that a tax be put upon its product to aid the government through difficulties. "Since that time the brewing industry has been the butt of all taxation action by the government and it must be admitted that we contribute more than our share when other lines are considered. 'Dry' action in certain localities has resulted in losses which we can hardly comprehend. It is a fact that in some of the Southern States even the free public schools must be abolished because of lack of funds to support them. One-third of all revenues to the government comes from the liquor interests."

William H. Austin, counsel for the association, in the absence of Col. Pabst, president of the United States Brewers' Association, who was called from the city, discussed conditions in the country at large. He pointed out that four States which continued "wet" have a population greater than seventeen States that are "dry." He called attention to the method proposed by the "drys" in their attempt at Nation-wide prohibition and said it was unfair. "Many voters are of the belief that they will have an opportunity to vote directly upon this issue if its is submitted," he said. "That is not true. The prohibitionists intend to give the voter no direct voice in deciding the issue. It will be referred to State legislatures and not to the individual voters if passed by Congress. The voter has absolutely nothing to say."

When the usual routine business had been transacted an executive session was held to make arrangements for the

business and campaign against Prohibition during the current year, the details to be carried out by a special committee on ways and means.

The election of officers resulted as follows:

President, Henry J. Stark, Milwaukee.

Vice-President, C. J. Michel, La Crosse.

Treasurer, S. F. Mayer, West Bend.

Secretary and Counsel, W. H. Austin, Milwaukee.

Additional Members of the Executive Board, Oscar Schmidt, C. A. Miller, W. A. Gettelmann, Gustave Becherer, Milwaukee; Fred A. Rahr, Green Bay; Louis Kunz, Manitowoc; Otto Mathie, Wausau; Carl Kurtenacker, La Crosse; Henry Fauerbach, Madison; Fred J. Blumer, Monroe; Thomas Culver, Ashland; Christ Walter, Menasha.

MAINE LIQUOR SHOPS. "There is State-wide Prohibition in Maine, and the Webb-Kenyon law prevents the overriding of that law by other States, and yet there are cities in Maine that have more shops per capita for the public sale of liquor than my home city, which is the greatest distilling city in the world."—(Representative Claude U. Stone, of Illinois.)

IF ALCOHOL WERE ABOLISHED. "Considered socially and hygienically, it is an interesting speculation what would be the effect, supposing alcohol in all its forms were abolished. Inevitably something would be required to take its place. We are not machines; we are complicated organism. Owing to this psychological factor, we are subject to a feeling of exhaustion after prolonged strain, either physical or mental, and a craving is excited, a perfectly physiological and normal craving, for some form of stimulation. This stimulation takes various forms. Alcohol, tea, coffee, cocoa, or failing any of these legitimate forms of stimulation, some drug such as opium and its allies is taken. Take away alcohol, and you inevitably invite excess in some other direction. Deprive the working man of his beer, and he will probably become addicted to chewing strong tobacco in large quantities. The hardworking professional or business man, debarred from his whiskey and soda or wine, would probably smoke more and stronger. Possibly he would consume large quantities of tea or coffee. The unfortunate class of individuals who, lacking self-control, must get drunk or something, would get drunk on opium or some other drug."—("Popular Drugs: Their Use and Abuse," by Sidney Hillier, M.D.)

CULTIVATE WILL FROM WITHIN! "Efforts to regulate the morals of the community, however well meant, seldom achieve any permanent result for the simple reason that in most cases they ignore the vital distinction between vice and crime. They aim at eradicating by law human instincts and impulses which can be governed only by moral suasion. The essential distinction between the savage and the civilized man is the subordination of the individual desire to the common welfare. Passions must be checked and controlled in the interest of society. It is the province of law to see that they are so checked and controlled. But law cannot touch the sources of revolt. That is the province of morals. To make a vice a crime, to pass statutes against it and enforce them sporadically, as such statutes are enforced, accomplishes little or nothing for the regeneration of humanity. The will to be virtuous must be cultivated from within; it cannot be imposed from without. It is not likely that the recent spectacular police raids have turned a single sinner from the error of his ways. That can be done only by a real conviction of sin. The law can prevent or punish disorder, it can drive vice out of the open. But when it has done that the real problem remains unsolved."—"Public Ledger," Philadelphia.)

Kentucky Brewers' Association.

The Seventeenth Annual Convention of the Kentucky Brewers' Association was held on Tuesday, November 28th, in the assembly hall of the George Wiedemann Brewing Co., Newport, Ky. It was a most important meeting, as the threat of State-wide prohibition is hanging over the industry, and every brewer realizes the peril that this places his business in.

The officers of the Wiedemann Brewing Co., as usual, showed themselves the best of entertainers, and Charles Wiedemann and John Kloecker allowed nothing to be overlooked that could contribute to the pleasure and comfort of their guests. It is always a pleasure to the members of the Kentucky Brewers' Association to meet in Newport and to partake of the generous hospitality of the Wiedemann organization.

The convention was called to order by President H. J. McAvoy, of Henderson, whose annual address sounded the keynote of progressive policies and the adaptation of the sale of the brewers' products to the demands and wishes of the public. He urged the prime necessity for a thorough cooperation between the men in the liquor business and those engaged in general business and finance who would be vitally affected by the enactment of State-wide prohibition.

Charles Wiedemann welcomed the delegates and promised them the cordial hospitality of the great Newport brewery whose guests they were.

The Credentials' Committee having verified the representation present, the Nominating Committee reported the following Executive Board, the nominations being confirmed: Chas. Wiedemann, John G. Broxtermann, John Gund, Jr., Chas. P. Dehler, H. J. McAvoy, Chas. A. Weber and Wm. Riedlin, Sr.

The Executive Board at once effected an organization with the following officers to serve for two years:

President, Chas. Wiedemann, of Newport.

Vice-President, John Gund, Jr., of Lexington.

Treasurer, Frank P. Senn, of Louisville.

Secretary, Lawrence Reichert, and Assistant Secretary, Ben J. Johnson, both of Louisville.

The Association's orator, Chas. A. Weber, of Louisville, then made a charming speech in presenting to the retiring president a beautiful silver goblet service, to which the recipient feelingly responded. The following committee was then appointed to escort the new president to the chair: Messrs. Fehr, Dehler and Peter.

President Wiedemann, in taking the chair, spoke very earnestly of the necessity for thorough harmony and co-operation among the brewers for the common defense and deploring the dissensions that sometimes arise over trivial differences. With thorough cooperation, the president declared, the trade could confidently hope to preserve itself from destruction.

The convention then received a resolution from the Hotel and Café Association, pledging the retailers to the hearty support of the brewers and distillers in resisting the prohibition movement. The resolution was received with a vote of thanks to the Hotel and Café Association for its good will and pledge of cooperation.

The delegates were interrupted here by a call to enjoy a delightful luncheon served by the Wiedemann Brewing Co. in the Rathskeller, and after adjournment, in the evening, the delegates were guests of the company at a handsome banquet at the "Bismarck," at which wit and wine mingled in good fellowship until a late hour.

After lunch the convention went into executive session, which was concluded by 5 o'clock, when by unanimous vote Louisville was selected as the next place of meeting, and a vote of thanks was extended the Wiedemann Brewing Co. for their splendid hospitality.

The convention then adjourned to Cincinnati, where a banquet was the order of business for the evening.

The published report that the Association would consider the subject of higher prices for beer is unfounded, as the Association does not handle such matters.

THE OHIO BREWERS' ASSOCIATION will hold its 22nd annual convention at its headquarters, 22 Garfield Place, Cincinnati, January 24th and 25th.

BASED UPON UNSOUND THEORY. "You should oppose prohibition in whatever guise presented, because prohibition means that your personal tastes and habits are subject to the regulation of others, but more particularly because prohibition is based upon an unsound theory, namely, that poverty and its attendant evils are caused by intemperance rather than by unfair economic conditions."—(New Orleans "Labor Record.")

PAID AGITATORS MISLEADING THE PEOPLE. "There is in the land a great body of highpriced paid agitators who are clamoring for national prohibition. It is their profession, and members of this House should not be swept off their feet by demands from that body. The paid leaders have not dealt fairly with the great body of the people in the country. They have misled thousands of sincere, honest and God-fearing people into believing that this resolution means prohibition, when in reality it means unrestricted manufacture of intoxicating liquors."—(Representative J. Campbell Cantrill, of Kentucky.)

YOUNG DRUNKARDS IN MAINE. "One of the other results which it is said will be obtained if prohibition becomes general is that it will cut off the taste for liquor from the growing generation, thus preventing over-indulgence. The police data from the State of Maine shows that, notwithstanding the long reign of prohibition in that State, the young offenders arrested for intoxication have not decreased, but rather increased, both absolutely and relatively. It would therefore seem that the duty of our professions should be to preach and if possible obtain an era of true temperance which would mean regulation, so that there should be had or at least permitted, moderate indulgence, unless it should be shown conclusively by careful observation and tests that moderate indulgence in liquor is a bane."—(Prof. Oscar W. Ehrhorn, N. Y. Medical College and Hospital for Women.)

FIGHTING FIRE WITH FIRE. "Prohibition does not prohibit. The prohibitionist merely makes a choice in favor of the non-taxpaying bootlegger against the license-paying saloon. There is no end to the chatter of the corrupt politicians about the activity of the "liquor interest in politics," the effort being to blind the eyes of the people to their own activities. Inevitably the liquor interests, combating these corrupt politicians who to get votes seek to destroy them, use kindred weapons and fight the devil with fire. The breweries are a part of our business fabric. Their activities relate to property, not to politics. Where corrupt and corrupting they have the pretext and the excuse that they seek to protect what has been lawfully acquired against confiscation without compensation or due process. Of party politics they have none. For the matter of that, neither have the political rascals who make prohibition an issue."—(Col. Henry Watterson.)

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—American Brewing Co., Houston, Tex., have installed one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete, all furnished by the York Mfg. Co., York, Pa.

—Bartholomay Brewing Co., Ltd., Rochester, N. Y., erect a \$38,000 cold storage addition to their plant at Smith and St. Paul streets, Rochester.

—Fred Bauernschmidt, Baltimore, Md., erects a five-story addition, to cost, with equipment, over \$25,000.

—Magnus Beck Brewing Co., Buffalo, N. Y., erect a new building for their bottling department which, with new machinery, is estimated to cost over \$18,000.

—Peter Breidt City Brewery Co., Elizabeth, N. J. The new bottling plant now being erected by this company, is to cost \$102,718.

—Cataract Brewing Co., Niagara Falls, N. Y., are erecting a three-story stock house, 45x42 feet, to cost about \$25,000.

—Central Brewing Co., New York City, have completed the erection of a Barry-Wehmiller Soaker with Automatic Brushless continuous-operating Washer and Barry-Wehmiller Pasteurizer, duplicates of the same machinery previously furnished.

—Columbia Brewing Co., Shenandoah, Pa., are erecting a two-story addition to their bottling works.

—Connecticut Breweries Co., Bridgeport, Conn., have installed a Barry-Wehmiller Automatic Brushless Washer in connection with the B.-W. Soaker already in operation.

—F. W. Cook Brewing Co., Evansville, Ind., erect an additional warehouse for their bottling department.

—Deer Park Brew Co., Port Jervis, N. Y., are erecting a large addition to their bottling works.

—Eagle Brewing Co., Waterbury, Conn., erect an addition to their bottling works, and also to their office. The Architect is John Ph. Voelker, New York.

—Ecuador Breweries Co., Guayaquil, Ecuador, have ordered a 100 barrel per day Barry-Wehmiller latest improved type Pasteurizer.

—East St. Louis-Athens Brewing Co., East St. Louis, Ill., erect an addition to their bottling plant, new and modern machinery to be installed.

—Goebel Brewing Co., Detroit, Mich., are to turn their brewery into a dye plant, as reported by Detroit newspapers.

—Green Tree Brewery, Branch of the St. Louis Brewing Association, has completed the installation of an entire Barry-Wehmiller up-to-date unit, consisting of Soaker, Brushless Automatic Connected Washer, B.-W. Pasteurizer and B.-W. Rotary Labelling Machine, the entire outfit having a capacity of 100 bottles per minute, with automatic chain feeds through all connected machinery.

—James Hanley Brewing Co., Providence, R. I., have completed the installation of a Barry-Wehmiller High-Speed Rotary Labelling Machine in connection with their B.-W. bottling equipment; they also installed a Barry-Wehmiller Automatic Brushless Washer in connection with the Soaking Machine of the same manufacture previously furnished.

—Hastings Brewing Co., Hastings, Neb., are converting their brewery into a cold storage plant.

—Hyde Park Brewery, branch of the St. Louis Brewing Association, has installed a complete new equipment in

its bottling department consisting of three complete Barry-Wehmiller units, each unit comprising the Soaker with automatic connected Brushless Washer, the B.-W. Pasteurizer and a B.-W. continuous Rotary Labelling Machine; each unit having a capacity of 100 bottle per minute.

—Independent Breweries Co., St. Louis, erect an addition to their distributing depot on Knapp street, St. Louis.

—Iroquois Brewing Co., Buffalo, N. Y., have completed the installation of a Barry-Wehmiller eight-compartment Bottle Soaking Machine and a 300-barrel Barry-Wehmiller Pasteurizer, duplicate of machinery previously furnished.

—Jetter Brewing Co., Ltd., South Omaha, Neb., are preparing to turn their brewery into a plant for the manufacture of non-alcoholic beverages.

—Gottfried Krueger Brewing Co., Newark, N. J., after using one Barry-Wehmiller outfit have completed the installation of a second one with the addition of a Barry-Wehmiller Brushless Automatic Connected Washer attached to the Soaker of the same manufacture. The third installation of Barry-Wehmiller Machinery is now being erected in their bottling department addition.

—W. Kuebler's Sons, Easton, Pa. Peuckert & Wunder, Engineers and Architects, Philadelphia, have placed the contract for a new building, 45x100 feet, three stories high, for W. Kuebler's Sons, brewers at Easton, Pa. The building will be constructed of brick, stone, concrete and steel with ornamental terra cotta and granite trimmings, and will cost, with equipment, \$80,000. Work is progressing nicely.

—Leisy Brewing Co., Peoria, Ill., have installed a complete Barry-Wehmiller outfit, capacity 180 barrels per day, comprising Soaker, Pasteurizer and Labelling Machine; also a Barry-Wehmiller latest improved type of Rotary Labelling Machine, and ordered two additional machines as duplicates, completing their three units of Barry-Wehmiller machinery with their new style Rotary Labeller.

—Isaac Leisy Brewing Co., Cleveland, Ohio, are erecting a one-story concrete storage building, to cost about \$85,000.

—Los Angeles Brewing Co., Los Angeles, Cal., erect a new stock house and make other improvements at a cost of over \$30,000.

—Milwaukee-Western Malt Co., Milwaukee, are rebuilding their big grain elevator, recently destroyed by fire. The cost of the new structure will be about \$200,000.

—New Glarus Brewing Co., New Glarus, Wis., are preparing for the manufacture of temperance beverages, and equipping, for that purpose, the New Glarus Bottling Works, recently acquired by them.

—T. M. Norton Brewing Co., Anderson, Ind. The manager and officers of this company recently inspected the plant of the Thieme & Wagner Brewing Co., La Fayette, Ind., with a view to installing a pipe line to their bottling works, similar to that installed by the Thieme & Wagner Brewing Co.

—Paducah Brewery Co., Inc., Paducah, Ky., are changing part of their plant into one for the manufacture of artificial ice, while other parts are to be used for the local agency of the F. W. Cook Brewing Co., Evansville, Ind.

—Peoria Malting Co., Peoria, Ill. The five-story malt

house this company erect at the foot of Cedar street, Peoria, has ground dimensions of 99x140 feet, and its cost is estimated at about \$40,000.

—Pilsener Brewing Co., Cleveland, Ohio, have completed the installation of a Barry-Wehmiller Automatic Brushless Washer in connection with a Soaker of the same manufacture previously furnished.

—Popel & Giller Brewing Co., Warsaw, Ill., have installed a Barry-Wehmiller Rotary Labelling Machine taking care of all the labelling in their bottling department.

—Potosi Brewing Co., Potosi, Wis., are installing additional steam boilers in their power plant.

—Reading Brewing Co., Reading, Pa. Peuckert & Wunder, Engineers and Architects, Philadelphia, have placed the contract with W. A. Sharp, of Reading, for the alterations and additions to the plant of the Reading Brewing Company, 9th and Laurel streets, that city. The new building with equipment will cost about \$30,000.

—George J. Renner Brewing Co., Akron, Ohio, erect an additional storage warehouse, at a cost of about \$8,000.

—Rock Island Brewing Co., Rock Island, Ill., have completed the installation of the second complete Barry-Wehmiller unit installed in the last year, including five-compartment Soaker Automatic Brushless Connected Washer, chain feed to immediate machinery and including B.-W. Pasteurizer and B.-W. Rotary Labeller; each outfit capacity 200 barrels per day; they also installed a Barry-Wehmiller Rotary Labelling Machine, duplicate of the same machine which they have been operating throughout the past summer.

—Joseph Schlitz Brewing Co., Milwaukee, have installed a complete equipment of Barry-Wehmiller Rotary Labelling Machine. The equipment consists of ten latest improved machines and completes their labelling system, automatic throughout. These machines were installed after trying two of these Labelling Machines for six months.

—Schorr-Kolkschneider Brewing Co., St. Louis, have completed the installation of a complete Barry-Wehmiller equipment, comprising Soaker with Automatic Connected Brushless Washer Pasteurizer, and B.-W. Automatic Rotary Labeller.

—William Simon Brewery, Buffalo, N. Y., have completed the erection of a complete Automatic Barry-Wehmiller outfit, including Soaker with Brushless Washer, chain feed connecting up with Washer and any immediate machinery to B.-W. Pasteurizer and a B.-W. Continuous Rotary Labeller. The entire installation is automatic throughout and is of the latest improved pattern, and capacity of 200 barrels per day.

—Star-Union Brewing Co., Peru, Ill., are establishing a distributing depot at Toluca, Ill., the cost of the building being estimated at about \$14,000.

—Thieme & Wagner Brewing Co., La Fayette, Ind., are equipping their brewery with an electric power plant.

—Tivoli Union Brewing Co., Denver, Colo., recently installed one 60-ton shell and tube brine cooler, furnished by the York Mfg. Co., York, Pa.

—Union Brewing Co., Anaheim, Cal., are about to greatly enlarge their plant and equip it with additional modern machinery.

—Watertown Consumers' Brewing Co., Watertown, N. Y., erect a two-story, brick, concrete and steel addition, to cost about \$25,000.

—Weibel Brewing Co., New Haven, Conn., have installed a complete Barry-Wehmiller outfit consisting of Soaker, Brushless Automatic Connected Washer, chain bot-

tle feed connecting same and other machinery, including a Barry-Wehmiller 200-barrel Pasteurizer. Since the above installation has been finished they have contracted again for an additional B.-W. outfit complete of the same machinery.

—Willow Springs Brewing Co., Inc., Omaha, Neb., are remodeling their plant for the manufacture of "near-bear" and alcohol.

—Philip Zang Brewing Co., Denver, Colo., are remodeling their plant for the manufacture and storage of artificial ice.

Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....
November	4,386,268	4,474,950	88,682	.....
Total	26,411,165	28,803,921	2,542,585	149,829

Net increase for the first five months of the fiscal year 1916-1917 2,392,756

Motor Trucks.

There are motor trucks and motor trucks. Those which are preferred by brewers are the ones which are advertised in the columns of this trade journal, which is read throughout the year by every brewer who knows which of the brewery papers has the largest circulation and which of them conveys the most reliable information in regard to what is preferable among the materials and machines the brewer has to use in his business to accomplish desired results. Numerous testimonials from such brewers are showing this.

And repeat orders also are constantly reported to this office by manufacturers of motor trucks for breweries, and they are satisfied that, to advertise in THE BREWERS' JOURNAL is a remunerative investment.

The Prohibition States we now have comprise about one-third of the population of this country, and they represent a little over one-fourth of its total wealth, while they pay hardly one-tenth of the revenue required for the support of the national government. Let them be taxed in proportion to their number they will soon find out that their folly costs them far more than they thought they would gain by it.

"THE PROHIBITION POLICY AMOUNTS TO CAESARISM. They believe in going ahead, right or wrong. In the states where laws have been passed prohibiting the sale of liquor the entire state nearly has been legislated into crime, for if it is a crime to sell liquor it is a crime to buy it, and the majority have done one or the other. So unpopular have such laws become that the method of enforcing them has become more injurious than the original evil, and the officers whose business it is to enforce them have lost the sympathy of the common people."—(Francis Murphy.)

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW INCORPORATIONS. Mattabessett Brewing Co., Hartford, Conn.; capital, \$100,000. Incorporators: Sylvester P. Moscaletis, Samuel A. Quint and John Bozzi.

Officers have been elected by brewery companies as follows:

American Brewing Co., New Orleans, La.: President and general manager, Edward G. Schlieder; vice-president, Urban Koen; secretary and treasurer, James T. Boulet; additional directors: D. B. Martinez and Emile L. Schlieder. The brewmaster is George Waffenschmidt.

Anheuser-Busch Brewing Association, St. Louis: President, August A. Busch; first vice-president, E. S. Clauss; second vice-president, Adolphus Busch III.; third vice-president, Edward Magnus; fourth vice-president, Eberhard Anheuser; fifth vice-president, W. F. Anheuser; treasurer and secretary, Robert Holm; general superintendent, Henry Menzenwerth; brewmaster, Rudolph Gull.

Daniel Bermes Boulevard Brewery, Town of Union, N. J.: President and general manager, Frederick Schimper; vice-president, L. D. Sauer; secretary and treasurer, George F. Sauer; additional directors, A. K. Schimper and William S. Salway. The brewmaster is Karl Matz.

Bucyrus Brewing Co., Bucyrus, Ohio: General manager, J. M. Dostal; brewmaster, H. Scharfenstein.

Central Consumers' Co., Louisville, Ky.: President and general manager, Frank Fehr; vice-presidents, Frank P. Senn and Chas. Weber; treasurer, Geo. W. Kremer; secretary, Chas. P. Dehler; brewmasters, V. Fleitz and Jacob Senf.

Chesapeake Brewing Co., Baltimore, Md.: President, G. C. Polk; general manager, Mason Startt; secretary-treasurer, Wm. Heiger; brewmaster, Paul Mehr.

Cincinnati Home Brewing Co.: President, Louis P. Tritchler; vice-president, John Hoffmann; secretary-treasurer, Edward Beigel; superintendent and brewmaster, Charles Proebstle; additional directors, Wm. Hoffmann, Robert Meyer, Charles Buehler, Wm. Thie and Joseph Proebstle.

Columbia Brewing Co., Logansport, Ind.: General manager, John M. Schorr, succeeding the late John G. Keip.

Eagle Brewing Co., Newark, N. J.: President, E. C. Hay; vice-president and superintendent, Frederick A. Lisiewski; secretary-treasurer, Charles A. Scheffmeyer; brewmaster, Rieck.

Ebling Brewing Co., New York: President, William Ebling; vice-president, Louis M. Ebling; secretary-treasurer and general manager, Theodore Habler; brewmaster, Louis Gress.

F. Effinger Brewing Co., Inc., Baraboo, Wis.: President, Ferdinand Effinger, Sr.; vice-president and brewmaster, Ferdinand J. Effinger; secretary-treasurer and general manager, Fred C. Effinger.

Enterprise Brewing Co., Inc., San Francisco: President, Ulrich Remensperger; secretary, Peter Windeler; brewmasters, Henry F. Windeler, H. W. Remensperger and W. F. Windeler.

Engesser Brewing & Malting Co., St. Peter, Minn.: Brewmaster, Henry R. Fermann.

Flock Brewing Co., Williamsport, Pa.: President and general manager, H. F. Wm. Flock; vice-president and treasurer, J. Henry Flock; secretary, J. George Flock; additional directors, Mrs. Mary O. Flock and Miss Katie E. Flock. The brewmaster is Charles P. Anton, Sr.

Fortune Bros. Brewing Co., Chicago: President, John L. Fortune; vice-president, Frank P. Keogh; secretary and treasurer, William J. Fortune; brewmaster, George Gabler.

Gottfried Brewing Co., Chicago: President, John H. Weiss; vice-president, Carl M. Gottfried; secretary and treasurer, Norman M. Weiss; brewmaster, John Huhnke.

Theodore Hamm Brewing Co., St. Paul, Minn.: President and treasurer, William Hamm; vice-presidents, E. C. Nippolt, 1st; William Hamm, Jr., 2nd; secretary, H. J. Charles; general manager, Edw. C. Nippolt. The brewmaster is William Figge.

Hastings Malting Co., Hastings, Minn.: President and general manager, Jacob Hiniker; treasurer, Peter Hiniker; secretary, Mrs. Jacob Hiniker; additional directors, Mrs. Mary Niedere and L. E. Niedere.

Christian Heurich Brewing Co., Washington, D. C.: President, Christian Heurich; vice-president, Augustus B. Coppes; treasurer, August Daetz; secretary, W. F. Dismer; general manager, R. H. Gangwisch; additional directors, Leon Tobriner and Charles Jacobson. The brewmaster is Alois Pauli.

Jacob Hoffmann Brewing Co., New York: President and treasurer, William Hoffmann; vice-president, William J. Hoffmann; secretary, William P. Hoffmann; additional director, Jacob Riskus. The brewmaster is Joseph Schmieder.

Houston Ice & Brewing Association, Houston, Tex.: President, H. Hamilton; vice-president and treasurer, R. L. Autrey; secretary, Jas. H. Studdert; superintendent and brewmaster, Franz G. Brogniez.

Hyde Park Brewing & Ice Mfg. Co., Hyde Park, Pa.: President, treasurer and general manager, A. Maridon; vice-president, A. Ponsetto; secretary, Warner Utts; brewmaster, Ludwig A. Krenn; additional directors, Joseph Ponsetto and Valentine Cutler.

Kamm and Schellinger Brewing Co., Mishawaka, Ind.: President, Adolph Kamm; vice-president, Albin J. Kamm; treasurer, Nicholas Schellinger; secretary, Laura J. Kamm; superintendent and brewmaster, Rudolph A. Kamm.

Keeley Brewing Co., Chicago: President and general manager, Thomas F. Keeley; secretary and treasurer, Eugene M. Keeley; brewmaster, Max Stahl.

Koppitz-Melchers Brewing Co., Detroit, Mich.: President and brewmaster, Konrad E. Koppitz; vice-president, W. Bruce Howard; secretary-treasurer, F. P. Goettman.

Fred Krug Brewing Co., Omaha, Neb.: President, Fredrick Krug; vice-president and general manager, Albert Krug. The brewmaster is Isidor Walencikowski.

J. Leinenkugel Brewing Co., Chippewa Falls, Wis.: President, Martin Leinenkugel; vice-president, Susan Nagel; secretary-treasurer, Henry A. Casper; brewmaster, Andrew Fisher.

S. Liebmans's Sons Brewing Co., Brooklyn, N. Y.: President, Julius Liebmans; vice-presidents, Adolf Liebmans and Samuel Liebmans; treasurer, Alfred Liebmans; secretary, Charles J. Liebmans. The brewmaster is Niels Krarup.

David Mayer Brewing Co., New York: Vice-president, Oscar Mayer; secretary, Henry Mayer; brewmaster, Franz Rueff.

Mathie Brewing Co., Los Angeles, Cal.: President and general manager, Edward Mathie; vice-president and brewmaster, Robert Wannenmacher; treasurer, Henry Schlaudemann; secretary, E. H. McCullough; additional directors, J. Rudel, R. A. Todd and F. Lindenfeld.

McDonogh & Shea, Winnipeg, Man., Canada: Brewmaster, John C. Dries, successor to Carl R. Hirzel.

Leonhard Michel Brewing Co., Brooklyn, N. Y.: President, general manager and brewmaster, Leonhard Michel; vice-president, John Michel; secretary-treasurer, Charles Doll; additional directors, Chris. Hafers, Charles Reinert, Patrick Kilgallen, John Franzreb.

Millstadt Brewery Co., Millstadt, Ill.: Brewmaster, John M. Schorr, succeeding the late Leonhard Schoppe.

Christian Moerlein Brewing Co., Cincinnati: President, John Moerlein; vice-president, George Moerlein; secretary and treasurer, J. George Jung; additional directors, William C. Moerlein, Emma Moerlein, Christian J. Goetz and C. Christian Born. The brewmaster is Christ Maul.

North American Brewing Co., Brooklyn, N. Y.: President, Gustav J. L. Doerschuck; vice-president and general manager, George C. Doerschuck; treasurer, Henry R. Doerschuck; secretary, Richard W. Doerschuck. The brewmaster is Fritz Greiner.

Monessen Brewery, Monessen, Pa.: Brewmaster, Ernst Irion, Jr., succeeding John C. Dries.

Quinn & Nolan, Beverwyck Brewing Co., Albany, N. Y.: President and treasurer, Ann E. Nolan; vice-president and secretary, Frank J. Nolan; general manager, E. J. B. Murray. The brewmaster is Henry O. Sturm.

A. Schreiber Brewing Co., Buffalo, N. Y.: Superintendent and brewmaster, Carl R. Hirzel.

Schwarzenbach Brewing Co., with breweries at Hornell, N. Y., and Galeton, Pa.: President, James E. Schwarzenbach; vice-presidents, Roland Schwarzenbach and Walter Schwarzenbach; treasurer, A. Bloodsworth; secretary, Markus J. Handwerk; additional directors, Philip Meine and J. C. Breunig. The brewmasters are: Karl Schoenert, for the Hornell brewery, and A. Raub, for the Galeton brewery.

Standard Brewery, Chicago: President and treasurer, Francis J. Dewes; vice-president, August J. Dewes; secretary, Edwin P. Dewes. The brewmaster is August Kieffer.

Steinle Brewing & Ice Co., Delphos, Ohio: President, Arnold B. King; vice-president, Joseph Roth; secretary-treasurer and general manager, Charles G. Steinle; brewmaster, Rudolph Kipp; additional directors, H. L. Leilich and Felix Steinle.

Union Brewing Co., Anaheim, Cal.: President and general manager, W. E. Alexander; secretary, W. F. Laird; assistant secretary, William J. Heger; brewmaster, Emil Otto.

Washington Brewing Co., Columbus, Ohio: President, John Wahl; treasurer, T. E. Landers; general manager, George T. Drake; secretary, W. H. Eichelaub; superintendent and brewmaster, Peter Wittmann.

Claus Wreden Brewing Co., San Francisco: President, H. M. Wreden; treasurer, J. Lankenau; secretary, W. G. Wreden; brewmaster, Felix J. Wallner.

Personal Mention.

JOHN F. BECKER, treasurer of the Wm. Ulmer Brewery, Inc., Brooklyn, N. Y., appeals to his friends for building material to assist the interned German sailors in re-erecting the village of the Prinz Eitel colony at the Philadelphia Navy Yard, to which the interned ones were transferred from Portsmouth, Va. Mr. Becker has spent large sums of money and enthusiastic efforts in helping the colony ever since it was founded. On Thursday, December 21st, Mr. Becker celebrated his sixty-ninth birthday, the circle of his intimate friends enjoying with him a dinner at their "Stammtisch" in Karl Merz's wine restaurant, New York.

P. S. BERKES, assistant brewmaster of the Columbia plant of the Independent Breweries Co., St. Louis, has married Miss Anna Catherine Schader, of Elgin, Ill.

FRANK J. BIRK, manager of the bottling works of the Birk Bros. Brewing Co., Chicago, is a benedict, having married Miss Rita Theurer, Chicago, on Saturday, December 2nd. Miss Theurer's father was the late Joseph Theurer, and her brother is the president of the Peter Schoenhofen Brewing Co., Peter Theurer.

DR. SIDNEY BORN, for several years chemist of the Wm. J. Lemp Brewing Co., St. Louis, and now chief of laboratory for the Federal Dye & Chemical Works, Pittsburgh, is a son of Jacob Born, an intimate friend of Mr. Justice Zeller, New York. Among the chemical fraternity Dr. Born is known as the discoverer of a process by which gasoline may be produced from common low-grade oils, the patent on which brings the learned doctor, who is but 28 years of age, royalties amounting to over \$20,000 per year.

PETER DOELGER, president of the Peter Doelger Brewing Co., New York, and his wife, have announced the engagement to be married of their pretty and accomplished daughter Phoebe Doelger, to Karl Bissel, also of New York, the wedding to take place in April next.

PETER DOHR, vice-president of the Reno Brewing Co., Reno, Nevada, and his family recently attended the golden wedding of his parents, who reside in Appleton, Wis., where he is now staying with relatives, recuperating his health, as he has been ailing for some time past.

GEORGE EHRET, New York, has purchased the club house of the Arion Singing Society in this city. Mr. Ehret, who has been a member of the Arion for many years, had a mortgage of \$405,500 upon the property, and the society owed him \$29,000 for interest.

GEORGE GROSSELFINGER, widely known and successful as a dealer in brewing materials and supplies, New York, celebrated his seventy-fourth birthday on Tuesday, December 12th.

J. CHR. G. HUPFEL, one of the pioneer brewers of New York City, and president of the J. Chr. G. Hupfel Brewing Co., attained his seventy-fourth year on December 12th, receiving the congratulations and heart-felt wishes of good friends from near and far. Mr. Hupfel is as active and energetic in his business as when he was a youngster.

ADAM ORTSEIFEN, president of the McAvoy Brewing Co., Chicago, celebrated his sixty-sixth birthday on December 1st, being the recipient of numerous congratulations and gifts from his relatives and friends.

COLONEL GUSTAVE PABST, president of the Pabst Brewing Co., Milwaukee, and president of the United States Brewers' Association, observed the recurrence of his birthday on Sunday, November 26th, when he attained the fiftieth year of his busy and laborious life. The day was spent quietly by Col. Pabst and his family; but there was an immense mail, bringing innumerable messages of congratulations, and there were telegrams, flowers and presents.

WILLIAM PETER, JR., vice-president and general manager of the Wm. Peter Brewing Co., Union Hill, N. J., was congratulated by his relatives and friends, December 11th, when he celebrated his birthday.

HENRY AND WILLIAM PIEL, of Piel Bros., Inc., Brooklyn, and their staff, have tendered a banquet to Fritz Losleben, who, after twenty-seven years of faithful service with the Piel Brothers, has retired from active work in the trade.

WILLIAM D. RENNER, vice-president of the George Renner Brewing Co., Akron, Ohio, is reported to have won an election bet of \$10,000, which he had wagered on President Wilson.

COLONEL JACOB RUPPERT, New York, has returned from French Lick Springs, where he spent some time resting from his arduous work during the election campaign. As an enthusiastic baseball magnate, Col. Ruppert, in a comprehensive statement, indignantly refuted some baseless charges made by Dave Fultz, president of the Baseball Players' Fraternity, regarding the New York management for the treatment of players and payment of salaries to them.

FREDERICK SCHIMPER, president of the Daniel Bermes Boulevard Brewery, Union Hill, N. J., and his wife, celebrated their golden wedding on Tuesday, December 19th, 1916. Mrs. Schimper is a daughter of the founder of the Bermes Brewery, Daniel Bermes. By the members of their large family the venerable couple were presented with a coffee service set and other gifts, all made of solid gold, as was the service set at the Plaza Hotel, where the family enjoyed their golden wedding dinner.

ADAM SPAETH, manager of the bottling department of the West Bend Brewing Co., West Bend, Wis., entertained his employers and his fellow-workers very agreeably at the brewery on Saturday evening, December 9th, to celebrate his recent marriage.

EBERHARD STUHLMUELLER, first assistant brewmaster for George Ehret, New York, and his wife, née Leonore Wollenschlager, celebrated the twenty-ninth anniversary of their wedding December 14th. Mr. Stuhlmueller was born in Bruchsal, Baden, September 22nd, 1861, son of a brewer, in whose plant he learned his trade. In 1885 he came to New York to join the technical staff of the Ehret brewery.

GEORGE VON ZEDLITZ, son of Baroness Anna von Zedlitz, a daughter of George Ehret, New York, has been decorated by the Emperor of Germany with the "Iron Cross" for bravery shown at the front. Mr. von Zedlitz is a Lieutenant in the Züllichau Regiment of Uhlans.

WARRYING AGAINST NATURE. "Every one knows that the great law of fermentation will never yield to the demands of the corporation. Alcohol is the commonest thing in nature and absolutely necessary in the arts and medicine. So prohibition is warfare against the eternal facts and resources of nature."—(Henry C. Maine.)

MENACE TO THE NATION. "Whatever may be the good motives of the advocates of prohibition, its propagation can only be considered a menace to the nation. By the very nature of things it is not only inoperative, but it tends to breed the worst social conditions."—(Rev. J. A. Homan.)

"IF THE WORKINGMAN BELIEVES that the cause of his difficulties is that he drinks one or more glasses of beer, the work of the labor organizer in trying to arouse him to take his part in economic reform is much more difficult. So that the anti-saloon and prohibition agitation is calculated, if not designed, to thwart the real labor movement."—(Hutchins Hapgood, Author of "The Spirit of Labor.")

Obituary.

JOHN BRANDON, aged 85, one of the early settlers of Leavenworth, Kan., died at his home in that city on Monday, November 27th, after an illness from which he suffered for more than one year. He was a native of England and one of the founders of the Brandon & Kirmeyer Brewing Co., which ceased operations in 1889, after protracted litigation with the Prohibition State authorities, when the plant was remodeled for the manufacture of artificial ice. Mr. Brandon had retired from active business several years ago.

GEORGE W. GAUB, secretary of the Meadville Brewing Co., Meadville, Pa., lost his life when hunting with some friends, November 1st, a gun being accidentally discharged. His wife and several children and sisters, one of whom is married to Otto P. Hauck, president of the Meadville Brewing Co., are his survivors.

CHARLES GUENTHER, New York, widely known and very popular among the trade, died at his residence, 517 West 171st Street, New York, December 1st. He was born in Lauterbach, Germany, in 1843 and came to America at the age of 14 years. As a youth of 18 he enlisted in the Northern Army, joining the DeKalb Regiment No. 41, New York State Volunteers, and served with honor during entire four years of the Civil War. Thereafter with General Franz Sigel and other prominent German-Americans, he organized Gilsa Post, 264, G. A. R. of which he was the first Commander. As a young man, he entered the brewing industry, joining the forces of his uncle, John Kress, of the John Kress Brewing Co. Later he became an official of that company. He also served as Treasurer of the United States Brewers' Association and of the New York State Brewers' Association. He organized and was the first President of the Original Brewers and Coopers Benevolent Association which, after forty years, is still active in assisting the needy among the brewery employees in New York City. For the last ten years Mr. Guenther had lived in retirement. He passed away, mourned by a family of six children, to whom he was ever a dear father and friend.

EDWIN C. HALL, general manager and treasurer of the Haberle-Crystal Spring Brewing Co., Syracuse, N. Y., died there after a lingering illness, November 29th. He was born in Tully, N. Y., May 25th, 1857, and came to Syracuse when still young, but very soon was a leading figure in the commercial life that city. He was one of the founders of the Crystal Spring Brewing Co., which subsequently became consolidated with the Haberle Brewing Co. His passing away is keenly felt by his fellow citizens and his associates, at a special meeting of the board of directors of the Haberle-Crystal Spring Brewing Co., resolutions were adopted, saying in part: "In the death of Mr. Hall this board has lost a valuable director and officer and its members have lost a kind hearted and loyal friend. Mr. Hall possessed good judgment, had strong convictions for square and honest dealings with his fellowmen, was well fitted and qualified to discharge the duties of the office he filled so long and well, was far sighted to the future, and while a man of few words, he had unusual executive ability, so much so that his undertakings were most successful and as a man he possessed all the sterling qualities that make up a noble character, he was ever loyal, sympathetic, charitable and of pleasing manners, his honesty and integrity were unimpeachable and those that knew him best, loved him most." The deceased is survived by his widow and one sister, Miss Ester Hall, of Tully, N. Y.

BERNARD C. HOLLENCAMP, vice-president, superintendent and brewmaster of the Hollencamp Brewing Co., Dayton, Ohio, died at his residence in that city, after a two days' illness with pneumonia, November 27th, at the age of only thirty years. He had been associated with the brewery since he was graduated from St. Mary's college in 1905. He was a member of several social and fraternal organizations. Surviving him are his brother, Theodore Hollencamp; three sisters, Anna, Helene and Catherine, and Mrs. Charles Hollencamp.

E. L. HUSTING, president of the E. L. Husting Company, Milwaukee, died on Tuesday, November 28th, at the Sacred Heart Sanatorium, Milwaukee, after a brief illness. Mr. Husting was born in Luxemburg on Aug. 24th, 1848. He came to this country with his parents in 1853, settling in Theresa, Dodge county, Wis. In 1863, at the age of 15 years, he came to Milwaukee. His first employment was with a confection concern, for whom he drove a wagon, selling "yankee notions." Thereafter he was employed by Phillip Altpeter, pioneer brewer and maltster, at Third and Sherman streets. In 1876 he embarked in business for himself. His beginning was humble, the business occupying originally only the basement of his dwelling house, and all departments of the work being performed by Mr. Husting, assisted by his wife and children. Mr. Husting was a member of many societies and organizations and was active in many commercial and social organizations. He is survived by his widow, three sons, Oscar T., Eugene L., Jr., and Berthold, two daughters, Miss Elizabeth and Mrs. E. J. Henning of San Diego, Cal.; two brothers, John P. Husting, Campbellsport, Wis., and Peter Husting, Hastings, Minn., and two sisters, Mrs. J. V. Harter, Kewaskum, Wis., and Mrs. James Bannon, Mott, N. D. United States Senator Paul Husting is a cousin of the deceased.

JOHN G. KEIP, general manager of the Columbia Brewing Co., Logansport, Ind., died suddenly at the company's office, November 26th. He was born in Toledo, Ohio, November 8th, 1857 and received a college education. With the Columbia Brewing Co. he was connected for sixteen years.

HERMAN OSTERFELD, one of the officers of the Bellevue Brewing Co., Cincinnati, Ohio, and a son of its former president, August Osterfeld, died at his home in Cincinnati, December 4th. He was born in Cincinnati forty-two years ago and has been identified in various capacities with the brewing industry in Cincinnati since he left school. He is survived by his widow and a twelve-year-old son, Herman, Jr. George H. Osterfeld, President, and Frank Osterfeld, brewmaster of the Mohawk Brewing Co., Cincinnati, are relatives of the deceased.

JOHN G. SCHEUER, founder of the brewery which in 1904 became property of the Mishicott Brewing Co., Mishicott, Wis., died in that city on Sunday, November 19th. He had been ill for a number of years.

FRANZ STANGEN, one of the grandsons of George Ehret, New York, has been killed in action, "somewhere in France," November 24th, while fighting as a lieutenant in the Prussian Kaiser Franz Regiment No 2. Lieutenant Stangen was the youngest of the three sons of Mr. and Mrs. Ernst Stangen, Berlin, Prussia, his mother being one of George Ehret's daughters. His brother Fritz, who went to the war as a volunteer in the Prussian army, was fatally wounded at Ypres, France, one year ago, and subsequently died at a military hospital.

JOHN A. THEURER, son of Jacob F. Theurer, for many years brewmaster of the Pabst Brewing Co., Milwaukee, died on Friday, November 24th, in Sacramento, Cal. The deceased was born in Milwaukee in 1888, where he learned

his trade. About eight years ago he accepted a position in one of the Sacramento breweries.

JOHN A. WHITE, JR., President of the Berkshire Brewing Association, Pittsfield, Mass., died there on Sunday, December 17th, at the age of 77 years, having been a sufferer from bladder trouble during the last four years. In his death Pittsfield loses one of its prominent and progressive business men and one of its best-known civil war veterans, Mr. White having fought in the ranks of the 13th New York volunteers, in many bloody battles, Gettysburg, Chancellorsville, etc. He was born near Cassel, Hesse, Germany, December 27th, 1839, and came to the United States in 1856. Ten years later he settled in Pittsfield, where he was one of the founders of the Gimlich & White brewery, which is now, greatly enlarged and improved, the plant of the Berkshire Brewing Association. He is survived by his widow and ten children: Frederick C. of Newark, N. J., Walter G., Dr. David L., and W. W. Rockwell White of Pittsfield, Mrs. John Vogel of Albany, N. Y., Mrs. Wilham Hodecker of Newark, N. J., and the Misses Ella and Lillian White of Pittsfield, also three sisters, Mrs. Henry Von Nida, Mrs. John Frisch and Mrs. Paul Koepke of Pittsfield, and several grandchildren.

OTTO CHARLES WOLF, the prominent Philadelphia engineer and architect, died December 20th at his home, 6471 Woodbine Avenue, Overbrook. He was sixty years old. His death was indirectly due to overwork and a nervous collapse. Mr. Wolf was of German parentage and born in Philadelphia, where, with the exception of three years, he spent his unusually active life. His early education was obtained in the public schools of Philadelphia, but he entered the first class in mechanical engineering at the University of Pennsylvania. He was one of the youngest two members of the class of 1876, which graduated a number of men who later achieved brilliant careers in their chosen professions. Graduating in his twentieth year, he received class honors each year and from the university upon his graduation. In furtherance of his profession, he first entered United States Government employ as engineer and draftsman in the Ordnance Department then occupied in drafting foreign Army and Navy equipment on exhibition at the Centennial Exposition and World's Fair. Next, to acquire mechanical skill, he served an apprenticeship in a machinery works that made a specialty of Mint machinery, then with manufacturers of Corliss engines, power and machinery equipments, following which he for three years served with the Fred W. Wolf Company of Chicago as Supervising Engineer in the construction of enterprises requiring power plants and those in which artificial refrigeration largely enter. In 1883 Mr. Wolf returned to his native city with his family and established himself as a consulting engineer and later as engineer and architect in the planning and erection of breweries, malt houses, grain elevators, refrigerating plants, cold storage houses, ice making plants, electric lighting plants, pumping stations, yeast plants, factories and manufacturing industries requiring steam and electrical power and refrigeration, also designing the complete machinery equipments. His mechanical engineering and architectural business will be continued by his son and the efficient corps of assistants trained by himself. Mr. Wolf is survived by his widow, a son and a daughter.

THOMAS J. WHITE, secretary-treasurer and general manager of the Home City Brewing Co., Springfield, Ohio, aged sixty, died at his home in Springfield on Sunday, December 3rd. He had been with the Springfield Brewing Co. since 1908.

Deaths in Foreign Countries.

Arthur Batsford, head brewer for James Hole & Co., Ltd., Castle Brewery, Newark-on-Trent, aged 48.

Charles Le Bourhis, Jr., brewer at Douarnenez, France; killed in action at the Somme.

Antoine Coll, president of the Limoux Brewing Co., Limoux, Aude Department, France, aged 58.

Norman Digby, son of A. E. Digby, New South Wales, manager for E. J. Burke, Ltd., Dublin; killed in action near the Suez Canal.

William Gooley, head brewer for Perkins & Co., Ltd., Brisbane, Queensland, known as the "Father of the Queensland Brewing Trade," aged 62.

Henry Haslett, for 50 years with Barclay, Perkins & Co., Ltd., London, England, manager of the firm's outdoor department until 1903, when he retired; aged 78.

E. P. A. Hodges, brewer for Hodges Bros., Geelong, Victoria, Australia, aged 35.

William Hyde, head of Hyde's Queen's Brewery, Ltd., Brook's Bar, Manchester, England.

Second-Lieutenant Frank Ive, son of Henry Ive, of Ive Brothers, brewers, Henley-on-Thames, England; killed in action.

Captain Raymond Wm. Nicholas, laboratory assistant for Arthur Guinness, Son & Co., Ltd., London, England; killed in action.

Benjamin Powell, partner in Phillips & Sons, Ltd., The Brewery, Newport, Man., England, aged 87.

William Russell Willis, son of W. Hills Willis, director of the St. Anne's Well Brewery Co., Ltd., Exeter, England; killed in action.

—Members of the Plattdeutsche Volksfest-Verein were entertained December 6th by the officials of the Peter Doelger Brewing Co., Inc., New York, who conducted them to the various departments of the plant. Speeches were made against Prohibition, and the Plattdeutsche, to a man, promised to assist in the fight against the foes of the trade.

AMERICAN MACHINERY FOR BREWERIES IN JAPAN. Large orders for brewing machinery are being placed with Milwaukee concerns by the Dai Nippon Brewing Co., Sapporo, Japan, and the Kabuto Beer Brewery Co., Ltd., Tokyo, Japan, whose representatives, Juji Kasahara and K. Tachiki, were recently in Milwaukee. They have been in this country for some time and are inspecting leading breweries and malting plants.

UTTERLY RIDICULOUS. "The theory that because a few people abuse a privilege, or a pleasure, or a practice, it should therefore be prohibited, is the most utterly ridiculous one ever suggested by any sane being. Such a theory would never have been advocated, if its proponents did not see in it a means of making easy money. Prohibition is a trade, that is all, and thousands of unthinking people are hoodwinked by it."—(Arthur H. Dutton.)

BOTTLE CASE DECIDED IN FAVOR OF BREWERY. In the case of the Independent Brewing Co., Pittsburgh, versus E. Mallinger, a second-hand bottle dealer, tried before Judge Marshall Brown in the Common Pleas Court of Allegheny County, a verdict has been rendered in favor of the Independent Brewing Co. This verdict is important in that it has established in the first of a series of cases brought by the Brewing Company to control the use of their bottles and packages, the rights of the Brewing Company to control the use and possession of beer cases and bottles having been acknowledged by the court.

Obituary Record for 1916.

Many of our friends, who had devoted their lives and fortunes to advancing the interests of the American brewing industry, have passed away during the year 1916. Among them were men and women, notable for their great and good deeds, esteemed by all who knew them. Their memory will ever live with us, who have remained to mourn their loss. The names of the dear departed, as they have appeared in these columns from month to month, are:

Abbl, Michael, Cleveland, Ohio, April 4th.
 Bauermeister, John, Columbus, Ohio, November 7th.
 Biesinger, Harry M., Pittsburgh, May, 1916.
 Bloedel, H. C., Pittsburgh, January 3rd.
 Blumenthal, Max, New York, March 11th.
 Brand, Rudolph, Chicago, March 23rd.
 Brandon, John, Leavenworth, Kan., November 27th.
 Busch, Anna, Pasadena, Cal., April 8th.
 Clausen, Charles C., New York, October 20th.
 Conway, Henry A., Troy, N. Y., August 9th.
 Cosgrave, Lawrence J., Toronto, Ont., July 15th.
 Dawson, Joseph, New Bedford, Mass., February 4th.
 Dieck, Frederick C., Philadelphia, February 5th.
 Diehl, Emil, Cleveland, Ohio, June 17th.
 Doelger, Lillian Louise, New York, March 22nd.
 Doscher, Henry J., Charleston, S. C., May 4th.
 Edel, George, Canton, Ohio, January 11th.
 Epstein, Philip, Portage, Wis., May 28th.
 Ernst, Charles Emil, Chicago, November 11th.
 Everard, James, New York, January 4th.
 Failey, Stephen A., Utica, N. Y., April 15th.
 Faust, Adine Louise, St. Louis, September 4th.
 Gaub, George W., Meadville, Pa., November 1st.
 Gough, Richard, New York, August 4th.
 Greensfelder, Joseph S., Philadelphia, August 16th.
 Guenther, Charles, New York, December 1st.
 Gund, George F., Cleveland, Ohio, March 11th.
 Haberle, Frank B., Syracuse, N. Y., September 8th.
 Hack, Eugene, Vincennes, Ind., June 12th.
 Haefner, Joseph, Lancaster, Pa., January 10th.
 Haffen, Mathias, New York, July 23rd.
 Hall, Edwin C., Syracuse, N. Y., November 29th.
 Harris, Arthur, Portsmouth, N. H., August 4th.
 Harter, Ernst, Lawrenceburgh, Ind., July 11th.
 Harter, George, Menominee, Mich., January 22nd.
 Hauck, Barbara, Cincinnati, Ohio, March 26th.
 Heil, William, New York, June 24th.
 Hill, David, New Orleans, La., January 22nd.
 Hollencamp, Bernard C., Dayton, Ohio, November 27.
 Husting, E. L., Milwaukee, November 24th.
 Huth, Anton, Tacoma, Wash., September 8th.
 Keip, John G., Logansport, Ind., November 26th.
 Kendall, George M., New York, May 22nd.
 King, John A., Chicago, September 11th.
 Koch, Joseph W., Johnstown, Pa., November 10th.
 Kremer, Frank, Milwaukee, March 9th.
 Kubin, Antonia, Chicago, March 14th.
 Kumli, Joseph, Middlesburgh, Ky., September 28th.
 Kutscher, Louis, Bridgeport, Conn., February 9th.
 Leicht, Charles K., Newburg, N. Y., January 21st.
 Leisy, Christine, Cleveland, Ohio, April 24th.
 Leyendecker, Peter, Chicago, November 16th.
 Littig, August N., Davenport, Iowa, September 11th.
 Lutterby, Rudolph, Cincinnati, Ohio, June.
 Mader, Adam, Chicago, January 27th.
 Madigan, Frank P., Washington, D. C., June 21st.
 Marx, Frank, Wyandotte, Mich., May 24th.
 McGlinn, John, Philadelphia, June 12th.
 Michel, Leonhard, Jr., Brooklyn, N. Y., September 10th.
 Miller, Wendelin, Pittsburgh, June 1st.
 Moise, Walter, Omaha, Neb., October 6th.
 Moyses, Benjamin, Seattle, Wash., April 24th.
 Mueller, August, Trail, B. C., November 20th.
 Mueller, Eugene, Hamilton, Ohio, March 6th.
 Muessel, Henry A., South Bend, Ind., December 30th.
 Newick, John, Portsmouth, N. H., January 10th.
 Nunan, Matthew, San Francisco, Cal., January 15th.
 Offerman, Henry, New York, April 3rd.
 Osterfeld, Herman, Cincinnati, Ohio, December 4th.

Pascual, D. Candido, Manila, P. I., September 2nd.
 Pauxsztsis, Sylvester, Edwardsville, Pa., April 18th.
 Pelletier, Clinton D., Kansas City, Mo., November 4th.
 Piccaver, Frederick H., Albany, N. Y., February 17th.
 Polk, Lucius C., Baltimore, Md., October 6th.
 Powers, Sylvester D., Utica, N. Y., May 13th.
 Quinn, John T., Utica, N. Y., April 9th.
 Reher, Edward, New York, November 5th.
 Reinig, William C., Fond du Lac, Wis., May 19th.
 Rice, Thomas J., Winnipeg, Man., Canada, December 27th.
 Richards, Robert J., Easton, Pa., January 31st.
 Robbins, Henry S., St. Louis, June 14th.
 Robinson, Charles, Scranton, Pa., March 5th.
 Ross, Thomas L., New Orleans, La., May 28th.
 Ruoff, Augustus, Detroit, Mich., December 24th.
 Salmstein, Ernest A., Chicago, September 6th.
 Saltzmann, Albert, Oil City, Pa., May 2nd.
 Scheuer, John G., Mishicot, Wis., November 19th.
 Schmedtje, August, New Orleans, La., March 26th.
 Schmidt, Joaquim K., Boston, Mass., January 12th.
 Schoppe, Leonard, Millstadt, Ill., October 20th.
 Schorr, Jacob B., St. Louis, February 4th.
 Sievers, Ferdinand, Brooklyn, N. Y., May 27th.
 Spencer, Robert R., Seattle, Wash., January 4th.
 Stangen, Franz, Berlin, Germany, November 24th.
 Straubmüller, Joseph, Philadelphia, October 11th.
 Streit, Emil J., Buffalo, N. Y., October 7th.
 Stroh, Bernard, Detroit, Mich., April 4th.
 Stroh, George, Detroit, Mich., May 12th.
 Taber, M. Emmet, Buffalo, January 22nd.
 Theurer, John A., Sacramento, Cal., November 24th.
 Tracy, Robert J., New York, October 7th.
 Volz, George F., San Francisco, Cal., March 6th.
 Voss, Augustus, Detroit, Mich., November 25th.
 Wachter, Edward A. F., Troy, N. Y., August 11th.
 Wagner, Lena Lauterbach, Hartford, Conn., Jan 11th.
 Wahl, John, Monroe, Mich., January 29th.
 Wallach, Emilio, San Francisco, Cal., February 11th.
 Weber, August, Cedarburg, Wis., May 26th.
 Wetterer, Alphonse S., Cincinnati, October 4th.
 White, John A., Sr., Pittsfield, Mass., December 17th.
 White, Thomas J., Springfield, Ohio, December 3rd.
 Winkel, August, Pekin, Ill., March 9th.
 Woerz, Ernest G. W., New York, May 9th.
 Wolf, Emil A., Davenport, Iowa, September 15th.
 Wolf, Otto C., Philadelphia, December 19th.
 Wyatt, Francis, New York, February 27th.
 Zahm, Adolph J., Denver, Colo., September 28th.

LIGHT BEER FOR BASEBALL PLAYERS. When C. H. Eb-
 betts, of the Brooklyn National League Baseball Club, ac-
 cepted an invitation to a dinner on behalf of his team, he
 wrote: "I accept with pleasure for my team. We would
 request a simple dinner with light beer and no other stimu-
 lant. This is our idea of the proper drink for athletes in
 training."

WHO INVENTED REFORMERS? "Sunday was intended as a
 day of worship, rest and recreation. A space was devoted
 to worship of the Creator. A space was devoted to rest.
 And a space was devoted to recreation after the six days of
 toil. Our fathers like to see Sunday come around. But
 when the Reformers get through tinkering with Sunday
 they will fix things so people will hate to see the day come
 around."—(Luke McLuke, Cincinnati "Enquirer.")

WHAT TO TEACH OUR CHILDREN. "'Uncle Sam' is un-
 alterably in favor of temperance, but we want to see it prac-
 ticed in a manner which will be a credit to us as a people and
 a nation, and not enforced by fanatical laws, which will for-
 ever be a blur on our vaunted liberty and civilization. Let
 us teach our sons to respect their personality, as we teach
 our daughters to value the sacredness of their virtue. Incul-
 cate the necessary stamina in the young men, which will en-
 able them to drink with moderation, if they drink at all."—
 ("Uncle Sam," Dayton, Ohio.)

Among the Brewmasters.

ALBANY. The members of the Albany District of the
 Master Brewers' Association of the United States have de-
 cided to do their utmost to live up to all the new resolutions
 adopted at the Buffalo convention, and they have invited
 President Wm. F. Carthaus to visit them in the near future
 to address them upon the subjects in which the entire mem-
 bership are interested. Determined efforts are being made
 to secure new members.

BUFFALO. The Buffalo District is in full accord with
 the various decisions of the convention, and the members
 expect national president Wm. F. Carthaus to visit them
 at their annual meeting this month. To six charitable insti-
 tutions and social organizations the District has donated
 \$1,000 from the surplus of their convention fund, the sev-
 eral sums so donated ranging between \$100 and \$500.

CHICAGO. The Chicago District has elected the following
 officers: President, Carl Ebner; vice-president, Emanuel
 Guehring; treasurer, John Hoerber; secretary, George
 Frank. Colleague Frank Kloer has been admitted to mem-
 bership and Wm. Schwarz was dropped from the roll for
 non-payment of dues.

CLEVELAND. The Cleveland District considers the action
 taken by the Buffalo convention to be progressive and tend-
 ing to greatly advance the interests of the association. The
 committee making the arrangements for the District's an-
 nual ball is composed of colleagues A. Graf, Fr. Knopp, J.
 Pavlick and J. F. Haller.

LOUISVILLE. The Louisville District has extended invi-
 tations to all colleagues in the vicinity to attend the meeting
 at which national president Wm. F. Carthaus is expected
 to address them.

MILWAUKEE. The members of the Milwaukee District
 recently discussed several questions respecting raw rosin
 and foreign substances in bottle beer. Colleague Frank
 Feiner, of the Berlin Brewing Co., Berlin, Wis., has been
 admitted to membership. A bowling match was greatly
 enjoyed at the Millioki Club.

NEW ORLEANS. The New Orleans District has made ar-
 rangements for a meeting to be addressed by national presi-
 dent Wm. F. Carthaus. The officers have been re-elected
 as follows: President, Henry Dihlmann; vice-president,
 George Waffenschmidt; treasurer, John Rettenmeier; sec-
 retary, Fritz Baldenhofer; delegate, Henry Reininger.

NEW YORK. The New York District held its monthly
 meeting December 9th, President Robert Weigel presiding.
 Owing to inclement weather conditions the attendance was
 not up to average. The December copy of "Communica-
 tions" was taken up and items of exceptional interest thor-
 oughly discussed. As has been the custom for years, it was
 resolved to hold a banquet and ball this winter, for which
 purpose an arrangement committee, consisting of the col-
 leagues Gress, Balz, Koenig, Kaerger, Nuber, Schmieder
 and Rickers was appointed. The function will be held Feb-
 ruary 16th, 1917, at 7.30 P. M., at Liederkrantz Hall, 58th
 Street, near Park Avenue, New York. Our treasurer, col-
 league John Knoll, who last month on the event of his birth-
 day was the recipient of a handsome chest of silver, pre-
 sented to him by the District as a token of esteem and ap-
 preciation for the many years of service he has rendered
 the District as treasurer, expressed his sincere thanks for
 the surprise his colleagues furnished him.

JOHN KOENIG, JR., Secretary.

PHILADELPHIA. The members of the Philadelphia Dis-
 trict have organized a touring club, with the object of hav-
 ing all brewmasters in the District and its vicinity attend

this year's national convention at New Orleans, La.; shares are issued to members of the club at \$10 each per month, all profits and interests to be equally divided among the shareholders at the end of twelve months. Colleague A. von Wening, of Chas. D. Kaier Co., Ltd., Mahanoy City, Pa., has been admitted to membership. Many members have joined the New Orleans touring club, organized by members of the Pittsburgh District.

PITTSBURGH. Secretary John Dries having accepted another position, colleague Carl Zimmermann has been elected secretary of the Pittsburgh District. Colleagues A. Henius, Klusmann and Wieland are making arrangements, as a committee, for the District's annual ball, which is to be held January 23rd, in the home of the German Club, 222 Craft Avenue, Pittsburgh, Pa. The officers elected two weeks ago, are: President, Fred. G. Klusmann; vice-president, Arthur Henius; treasurer, Charles Zimmermann; trustees, Martin Nusskern, John Biesinger, and ex-president Louis Meyer, who was also elected honorary president.

SAN FRANCISCO. The members of the San Francisco District are making arrangements for the meeting at which National President Wm. F. Carthaus is to address them. Arrangements have also been made by the Technical Committee for scientific lectures to be delivered at the District's regular meetings.

—The Rock Island Brewing Co., Rock Island, Ill., are considering a proposition to raise their prices.

—Detroit brewers have come to the conclusion that they must make sharp increases in the price of their products.

—From many parts of the countries it is reported that the retailers are raising their price per pint of beer from 10 to 15 cents.

—The Forest Park Brewing Co., St. Louis, was adjudicated bankrupt, December 18th, and its creditors are to meet to-morrow.

—Milwaukee breweries have decided to raise their price between 25 cents and \$1 per barrel, depending upon the individual action of each brewery.

—The brewers of Toledo have served notice upon their retail customers that hereafter beer will cost a dollar more a barrel, making the price \$9 a barrel.

—Owing to higher prices for malt and other materials, the breweries of Evansville, Ind., have announced that the price of beer has been advanced 50 cents on the barrel.

—The S. S. Liebmann & Sons Brewing Co., Brooklyn, N. Y., are negotiating with the Leonhard Eppig Brewing Co., Brooklyn, in regard to taking over the latter's property.

—Brewers of Manitowoc, Sheboygan, Brown and Calumet counties, Wis., at a conference held November 27th at Manitowoc, have agreed to raise their prices to the retailers.

—Burglars broke into the office of the Muskegon Brewing Co., Muskegon, Mich., during the night of November 19th, but they were frightened away before they could open the safe.

—Reports that the plant of the Becker Brewing & Malt-ing Co., Ogden City, Utah, is to be moved to Elko, Nev., because Utah is going "dry," are denied by officials of the brewery.

—The American Brewing Co., New Orleans, La., had a tastefully arranged exhibit at the recent Produce Exhibition held in that city, the principal exhibit being a giant Regal-Lager bottle.

—Cincinnati brewers have stated that they will soon be compelled to raise their prices, brewing materials and labor advancing too rapidly to make brewing profitable at the present price of the barrel.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

FIRM CHANGES

MISSOURI—St. Louis Wilhelm Griesser, Receiver for Mutual Brewing Co., succeeds Mutual Brewing Co.

PENNSYLVANIA—Cresson Samuel A. Shoemaker, Receiver for the Cresson Springs Brewery Co., succeeds Cresson Springs Brewery Co.

" —Spangler Rex Brewing Co. succeeds Spangler Brewing Co.

WISCONSIN—Platteville The List Brewing Co. (a corporation) succeeds The List Brewing Co.

BREWERIES CLOSED

CONNECTICUT—New Haven ... Ed. W. Blakeslee.

UTAH—Salt Lake City Utah Brewing Co.

VIRGINIA—Norfolk Consumers Brewing Co.

" —Richmond Home Brewing Co.

" —Richmond Rosenegk Brewing Co.

WISCONSIN—Menomonee Joseph Niedermair's Brewery.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1916 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, alphabetically arranged, with postal addresses, corrected to January 15, 1916, also in all other American countries where breweries exist.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries and firm changes recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

—The Ontario Brewing Co., Inc., Oswego, N. Y., having closed its plant on Saturday, November 18th, most of its customers are now being supplied by the Haberle-Crystal Spring Brewing Co., Syracuse, N. Y.

—Officers of several Detroit brewing companies who have investigated the proposition of turning their plants into alcoholic distilleries have declared the scheme to be unprofitable and visionary, at least as far as the near future is concerned.

—The Consumers' Brewing Co., Norfolk, Va., forced out of business by Prohibition, have reorganized and will henceforth be known as the Artic Fruit Juice Co. The officers of the brewing company have been re-elected to carry on the new business.

—It is reported that the St. Louis Brewing Association is about to close its Excelsior plant, the manager of which, Paul Schauss, is said to have declared: "The small brewer cannot exist longer. He is crushed out by the high wages of union help and strong competition."

—The safe of the Cleveland & Sandusky Brewing Co., Cleveland, Ohio, was loaded with nitroglycerin during the night of November 26th, but the "yeggs" who had undertaken the job abandoned their attempt when the watchman appeared, their booty consisting only in \$26 in cash, a match box and a chain worth \$50.

—Edward Duffy, Joseph N. Ulman and Albert J. Fleischman have been appointed receivers by Circuit Judge Dawkins for the Standard Brewing Co., Baltimore, Md., two creditors having filed claims aggregating about \$9,000. The company's officers state that their assets are sufficient to straighten out matters at an early date.

POLITICAL INSANITY. "Temperance is a Christian virtue. Prohibition is political insanity. Every argument that proves temperance to be right, demonstrates that prohibition is wrong."—"Hotel Gazette."

Arizona "Intelligence" Analysed.

By E. H. RYDALL, Los Angeles, Cal.

The ordinary reflective citizen, upon hearing that the State of Arizona has gone dry, must be deeply affected. To think that a whole State, without noticing the infallible records of the past and the experience of those States of the Union that have picked up Prohibition only to drop it again, should vote in this extraordinary manner. But, let us analyse the vote and investigate Arizona.

25,887 voted for the prohibition amendment, and 22,743 against; about fifty fifty, about half the people; in former times the majorities had to be two-thirds. So that, even according to the vote, about half the people are in favor and half against; this indicates a close shave and should dictate some respect for the feelings of the other half, if it has feelings.

But what is Arizona? A population in the whole State of about a third more than the city of Los Angeles! Truly a great State, but great in what—distances? Uncounted areas of immense size decorated with sage grass, greasewood and horned toads; fertile pastures with thousands of ostriches; uncounted mountain heights in which the mining colonies burrow like so many rats. Nothing in the State can vote except men, and there are only about seven hundred thousand people in all Arizona put together, and the high price of copper keeps a lot of them there. Railway stations have two roofs on; and there are big smelters and other evidences of heat.

Now the consumption of paper marks the progress of civilization. How many newspapers do these inhabitants of Arizona support? About sixty. How many do the people of California support? About eight hundred. What must we think of a whole State only able to support about sixty newspapers? Now the progress of Republicanism shows the intelligence of communities; how many Republican papers are there published in the State of Arizona? Fourteen! Suffering Saints!

I was talking with a man in the Chamber of Commerce Building; he has a friend in one of the mining districts in Arizona, and the report comes that they are having a "rough house" so to speak in that district on account of Prohibition. Juice comes in from Los Angeles by the dozen; the miners will pay large prices for bottles of quarts and pints; but it is illegal according to the majority of about two hundred out of twenty-five thousand to sell the stuff; but the temptation for profit is too great, so a blind porcus is born every few minutes; then follows arrest, punishment, hatred, malice, disturbance, feuds, revenge and a whole lot of evil passions, all brought on by Prohibition.

I wrote to three of the leading editors of the papers in Arizona asking their opinion as to the effects of prohibition laws on the communities in Arizona. No answer from any of them has been received, and probably never will.

Therefore, it is eminently fit, proper and discreet that a digest should be made of this Arizona status and people properly informed as to the status of the case; as to the population of the State; the number of newspapers; the number of Republican newspapers as indicating the intelligence of the communities, and the difference between the number of people voting for Prohibition and those voting against it. In this way the innocent stranger may be properly corrected, for surely his original idea is that Arizona is a vast State and that consequently it has a great number of people. The facts are as stated, that the inhabitants of Los Angeles and a few bucolic towns in its vicinity could be substituted for the entire population of Arizona. And this doubtless for the benefit of Arizona, for the imagination

of the peregrinating stranger has hitherto been afflicted with pictures of wild cowboys, lassoing dressmakers and girls fresh from New York, as observed in the moving-picture theatres: and it may be questioned by the philosopher whether such people are qualified to vote as to what is best for them, and that the better way would be to elect a number of intelligent patricians and let these decide what is best for the varied mining and agricultural districts of this interesting State.

The "Billy" Sunday Pest.

Some pests are periodical. Others are of uncertain occurrence. Some are confined to localities, in the soil of which they thrive. Others go about on the wings of the wind, afflicting such sections as they find pleasing to them.

Of the last described type is the "evangelist" of the "Billy" Sunday order. Such a "worker in the vineyard" is often guilty of deportment which would cause the prosecution of another man. Experience has shown that they cheapen religion, and because of its being held lightly great moral harm ensues.

A large section of every community is impressionable, and yields to the sensational when solid logic would have no effect. In this element is the fertile field for the spectacular religious agitator.

The "evangelist" of the Sunday order is a menace to true religion because he dispels the reverence in which religion is held generally. Often he uses speech which is vulgar, blasphemous and almost obscene. Instead of feeling shame that he cannot drive home a point in decent language, he glories in shocking phrases. And running through it all is buffoonery that has no place in a meeting the ostensible object of which is the inculcation of reverence for the Deity.

Such a pest as this appears where the prospects for a good money harvest are brightest. Sometimes the regular ministers of the Gospel assist them in their operations. Always there is a large percentage of ordained ministers who refuse to countenance "Billy" Sunday methods, and frown upon them. In nine of ten cases it is found that the ministers who back up Sunday are less founded in faith than they are in a greed for worldly gain or notoriety.

THE WISE ADVERTISER. "Don't stop your advt. after a couple of insertions because you didn't get results. That's like planting corn one day, digging up the seed the next, and still expecting a harvest. Give it time to grow. Advertising does not make sales as a rule, but it does create a prejudice in the mind of the prospective buyer in your favor. It leads the horse to the water, but it's up to you to make him drink. And remember that your salesmen must carry arguments, not conversation."—(John A. Hill.)

TREMENDOUSLY IMPRACTICABLE AND SHAMELESSLY DISHONEST. "We have been impelled, on several occasions, to make the deliberate, unprejudiced statement that Prohibitionists are tremendously impracticable or shamelessly dishonest, because they have made no effort to reduce the consumption of intoxicating liquors. The net result of more than half a century of agitation has been to destroy the licensed and law-regulated dispensary and turn the liquor traffic over to 'boot-leggers' and 'blind-tigers.' States have lost a substantial revenue, the consumption of liquor has increased, and drunkenness is more prevalent than ever. Prohibition does not prohibit! The acts as they are presented by a recognized advocate of Prohibition proves this beyond quibble. And the same truth holds good as respects all other Commonwealths where sumptuary regulations have been invoked but are rarely enforced."—(Altoona [Pa.] Times.)

Internal Revenue and Custom Decisions.

Temperance Beer—Packages—Commissioner of Internal Revenue, W. H. Osborn, in reply to the request of explaining a former decision reading: "The temperance beverage when removed from the brewery premises must be contained in packages unlike those ordinarily used for containing fermented liquor," stated on December 8th; "that the purpose of the provision above quoted is to thoroughly and permanently distinguish the packages used or that may be used for containing the taxable produce of the brewery from those used or that may be used for containing the nontaxable beverages containing less than half of 1 per cent. of alcohol by volume produced on brewery premises. Accordingly, this office holds that for the purpose of containing such nontaxable beverages, metal packages, whiskey or vinegar barrels, or remodeled beer packages differing in size and shape from the regular statutory packages for containing fermented liquors may be employed. It is also held that objection will not be made to the use for this purpose of regular beer cooperage, provided same is equipped on both heads with a substantial plate of iron or steel securely and permanently attached thereto, and painted in a solid color with oil and lead, with lettering in a contrasting color of the same materials conspicuously placed thereon reading as follows: "Nontaxable, less than half per cent. alcohol," the word "Nontaxable," to be not less than 1½ inches in height and of proportionate width; the remaining words to be not less than one-half inch in height and of proportionate width. In addition to the distinctive construction of the heads above required, the hoops of the packages must be painted white in oil and lead.

Gauge of Beer—In a case involving the question of beer wantage or outage, *U. S. v. Lüchow*, and *vice versa*, the U. S. Court of Customs Appeals has decided that in importations of Wurzbürger and Pilsner beer the importer made an honest effort to estimate the amount of wantage or outage, finding 2.96 per cent. for the Wurzbürger and 3.51 per cent. for the Pilsner. By making a justifiable criticism of the importer's method, the Board of United States General Appraisers decided that the proper allowance should be 1 per cent. By giving due weight to the method used and conclusion reached by the manufacturer, corroborative of the method and conclusion of the importer, the court decided that the allowance should be 2 per cent.

Bottles—Assistant Secretary of the Treasury Andrew I. Peters has decided that bottles printed or sand-blasted with the name of manufacturer, country of production, or trademark and bottles with printed seal on glass superimposed upon the bottles after molding and before cooling are dutiable at the rate of 45 per cent. ad valorem rather than at 30 per cent. ad valorem.

THE ONLY REAL ABSTAINERS. "Prohibition of the liquor traffic is an attempt to force uniformity of habits and tastes upon individuals who vary in personal characteristics to an infinite degree. Prohibition campaigns always savor of religious revivals. To many Prohibition is a religion and its enforcement is as contrary to the spirit of the constitution as a legally established church would be. The only countries and peoples that have ever abolished the use of fermented and alcoholic liquors as beverages are Mohammedan. Abstinence from such beverages is a part of the law of the Prophet as laid down in the Koran and true believers in it are the only real abstainers as a class or as a nation."—(New York "Commercial.")

Label Legend Lapses.

Under the above caption the U. S. Department of Agriculture has made the following ruling:

The following legend, so familiar in the past on food and drug packages, "Guaranteed by Manufacturer, under the Food and Drugs Act, June 30, 1906, Serial Number 265, 424" is disappearing from labels. A method for guaranteeing foods and drugs which will be less misleading to the public has been provided by the officials in charge of the enforcement of the Food and Drugs Act. Under the new plan manufacturers may guarantee their products on the invoice or bill of sale, or by certain other methods, but according to a food inspection decision which became effective on November 1, 1916, they may not make any statement regarding a guaranty or serial number on the labels of packages of foods or drugs which enter interstate or foreign commerce. However, labels containing the guaranty legend and serial number which were printed prior to May 5, 1914, the date on which the first notice to discontinue the guaranty legend and serial number was issued, may be used until May 1, 1918, in order to prevent the loss that otherwise would occur from the destruction of such labels.

The New Way to Guarantee—

The manufacturer, wholesaler, or other person residing in the United States and shipping foods or drugs into interstate commerce, according to the amended regulation, may print or stamp his guarantee on the invoice, bill of sale, or on any commercial paper that contains a list of the items of foods or drugs which he intends to guarantee. The Department of Agriculture does not prescribe the exact form that the guaranty shall take, but is of the opinion that the following wording will be satisfactory:

"I (We), the undersigned, do hereby guarantee that the articles of food (and drugs) listed herein are not adulterated or misbranded within the meaning of the Federal Food and Drugs Act, June 30, 1906, as amended."

This statement should be followed by the signature, which may be printed or stamped if the invoice or other document is transmitted by the guarantor direct to the dealer, and the address of the guarantor.

LARGEST "PER CENT." IN ALASKA. "It is not uncommon in some places in Alaska, where there are no saloons, to see a man go into a trading post or general merchandise store, say that he wants something to drink and ask, 'What have you that contains the largest per cent.?' Meaning the percentage of alcohol and pointing to some medicine, perfume, toilet water or flavoring extract on the shelf. In towns large enough to have a saloon the saloons are patronized."—("Medical Record.")

THE AMERICAN SALOON, its methods of doing business generally considered, is the friend of the prohibition movement. It serves intemperance and whatever serves intemperance serves prohibition. The American saloon is designed to furnish a shot of booze, and in this inelegant statement of its function is found the whole issue against the liquor business. The use of alcohol has persisted because it has served a social purpose. The American saloon does not serve the purposes of sociability, but of intoxication. A narrow room, a bar, a brass rail, few if any chairs and a procession of men getting a little liquor—this is the saloon. The thing would be about the same if the bartenders were using hypodermic syringes and, as the procession of men passed along with bared arms, were injecting morphine into them. Temperance and the American saloon idea are inherently inconsistent."—(Chicago "Tribune.")

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

23069—An export house on the Pacific Coast has inquiries from Russia for soda-water bottling machinery and cap-sealing machinery.

23082—Supplementing foreign trade opportunity No. 22340, a manufacturers' agent in Argentina writes that he more particularly wishes to represent American manufacturers and exporters of bottles for wine, whiskey, beer, etc.

23144—A firm in New York City has an inquiry from Greece for beer bottles having porcelain stopper and rubber ring; also for news printing paper, size $37\frac{1}{4}$ by 26 inches, weight 32 pounds per ream of 500 sheets. Samples are desired.

23231—A man in Portugal desires to purchase machinery for a brewery and malt house. Prices should be quoted f. o. b. American port, indicating, if possible, the freight charges. Payment will be made against documents in New York. Correspondence may be in English. Reference.

23243—A man in Canada would like to receive catalogues and price lists of machinery and supplies for making non-alcoholic beverages. He also wishes liquid carbonic acid gas. Quotations should be made f. o. b. factory. Payment will be made in cash. Reference.

Argentine Bottle Industry and Trade.—By Consul William Dawson, Jr., Rosario. Before the war the Argentine glass-bottle industry was, on the whole, hardly able to compete in price and quality with foreign manufactures. As an example, ordinary dark wine or beer bottles, for which the demand is, of course, largest, containing from two-thirds to three-quarters of a liter (1 liter = 1.056 quarts), were sold by Argentine factories at about 50 cents a dozen, whereas a local importer states that he has bought German bottles of the same type and superior in quality delivered at Rosario and with duty paid for from 41 to 46 cents per dozen. While Argentine bottles were sold without packing, German containers came packed in straw, the packing having a local market value of about $6\frac{1}{2}$ cents per dozen.

While the demand for containers of all kinds has greatly fallen off as a result of local market conditions, this does not suffice to explain the large decrease in imports, which is due in large part to the cutting off of former sources of supply and shipping difficulties. Provided American manufacturers can deliver a good grade of bottle well packed at a price sufficiently attractive to compensate the facilities offered by a close range trade with Argentine factories, American bottles can find a market here. Present high freights may make this difficult. Undoubtedly the quickest and most satisfactory way of getting a start in the field would be to send out a representative to study the market and meet importers personally. Indeed it may be doubted if an extensive permanent business can be established in any other way.

American exporters must not demand cash in advance or against documents in New York. It appears that Rosario consumers buy from Argentine glass factories on a cash basis, and under such circumstances importers should not object to paying cash on arrival of goods against delivery of the documents at Rosario. They are apt, however, to reserve the right to inspect the shipment before accepting the documents.

Bottles must be securely packed. German manufacturers shipped bottles in individual straw cases securely packed in canvas bags containing usually a gross of bottles. Local importers consider straw cases greatly superior to corrugated cardboard, which is apt to lose all elasticity in the course of a long voyage with frequent handling.

A list of possible importers of bottles at Rosario is transmitted (a copy of which can be obtained from the Bureau of Foreign and Domestic Commerce or its district or co-operative offices by referring to file No. 81917). The list includes breweries, manufacturers of soda water, liquors, etc., and importers of supplies.

The concerns mentioned as possible importers of bottles might be addressed by exporters of bottling machinery and supplies. Machinery is used by breweries and manufacturers of liquors and other beverages, particularly for corking, although it is also used for filling and other operations. The larger breweries are especially well equipped. Machinery has been imported from a number of countries. At present, owing to business depression, there appears to be practically no interest in new equipment.

Catalogues and correspondence intended for Argentina should be in the Spanish language.

American Beer on Chinese Market.—By Consul General Thomas Sammons, Shanghai. Several years ago, before domestic brews were introduced, there was a good demand for American beers on the Shanghai market, Pabst, Schlitz and Rainier being the favorites. At that time they were sold for \$20 to \$24 Mexican per case or cask containing 10 dozen pints, which at the present rates of exchange would roughly be \$10 to \$12 gold. These beers must now face the competition of very good beers brewed in Shanghai and Tsingtau, as well as those imported from Japan, and which are sold in this market to the consumer at \$4.25 to \$6 gold, delivered, and all breakage made good. These prices refer to cases containing 6 dozen pints or 4 dozen quarts. Before the war beer imported from Germany had a very large sale on this market and was sold at prices ranging from \$6 to \$12 gold. At the present time British Pilsener beer and ale sell for \$8 to \$12 gold per case of 6 dozen pints. The import tariff on beer is about \$0.075 gold per 2 dozen pints or 1 dozen quarts, and is the same no matter what packing is used.

The preferred packing would seem to be cases, strongly made, wired, and sealed (to prevent pilfering), containing 6 dozen pints or 4 dozen quarts, although casks containing 10 dozen pints is the recognized way of packing American beer for this market. It is customary to wrap each bottle in corrugated paper, the spaces between bottles being filled in with fine straw. However, in all packing the point to bear in mind is that the packing should be as secure as possible without thereby increasing the cost too much, as the sale of almost all goods in the China market hangs more upon considerations of price than of quality.

With reference to labels, any label that is suitable for the American trade would be suitable for this market. It should include, of course, the name of the local firm intrusted with the distribution of the goods.

As regards color of beverage, there seems to be little or no demand for dark beers upon this market.

Merchants here receive 60 to 90 days' clear credit from date of arrival of cargo in Shanghai, and some British firms have been granted as much as four months, though there is a steady tendency toward shorter terms. The first or trial shipment should really be on consignment, subsequent to be based on the demand created.

It is customary to give an agency for the goods to some foreign wine and spirit dealer who has connections in the

various outports. There is no American liquor merchant in Shanghai. The question of commission is one that should be settled between agent and principal according to the merits of the case. In every instance a suitable allowance should be given the agent for publicity purposes. The cast to the agent should be figured on the lowest possible basis, in order to compete with the beers now on the market. In calculating the cost price of export articles care should be taken to figure the bare cost of manufacturing, and not ask the agent here to pay also for the cost of publicity and delivery in the home market, which in no way further the sale of goods in this field.

In introducing a new beer, as well as in maintaining sales thereafter, it is always advisable, and to a certain extent necessary, to use one or several publicity methods. Newspaper advertising, first in Shanghai, to be followed later by insertions in leading Tientsin and Hankow papers, is a minimum requirement. Further publicity can be gained at reasonable cost by the free distribution of advertising novelties, handbills and calendars, and also by the display of posters on walls and signboards, in street cars, and on slides in motion-picture houses. Needless to say, any and all advertising should be done under the advice and supervision of the local agent, who alone is capable of using correct methods. A duty of 5.25 per cent. ad valorem is assessed on all imported advertising matter, though it is possible to send small lots, say under \$5 in value, by mail, in which case it would probably be passed duty-free.

There might be said to be three general methods of introducing American beers into China. It has been customary, as already stated, to place an agency with experienced wine and spirit merchants in the treaty ports. The advantage of distributing goods through the merchants is that they specialize on a particular line. The disadvantage lies in the fact that there is no American concern of this kind and the natural tendency, of course, is for these dealers to push the goods of their respective countries.

On the other hand, there are in Shanghai and other ports a number of American firms or "hongs" doing a general import and export business on a very large scale and handling goods requiring special management in special departments under the supervision of experts. These American "hongs" have established connections all over China and are able to place at the disposal of the manufacturer in the United States an efficient sales organization, capable of launching on this market any new product if the right backing is received from the manufacturer.

Working through these American "hongs," two methods might be followed with equal advantage: (1) Placing the agency with the firm which has an expert already in its service, or (2) placing the agency with a firm which will provide an office for the United States manufacturer's paid representative and place at his disposal the sales force and the knowledge accumulated through previous experience, thus insuring a still better supervision of the manufacturer's interests.

(A list of Shanghai liquor dealers and general import houses may be had upon application to the Bureau of Foreign and Domestic Commerce or its district and cooperative offices. Refer to file No. 81687.)

Opportunities to Increase American Trade in Nicaragua.—Although Germany was unable during 1915 to make shipments of enameled ironware, and the supply from England was negligible, the imports of this class of goods from the United States were less than in 1914. England has previously been the chief source of supply for the common soaps, which constitute the greater portion of the imports of this article.

Reception at New Office of Pilsener Brewing Co., Cleveland, Ohio.

The ladies and gentlemen attending the 56th Annual Convention of the United States Brewers' Association held at Cleveland, Ohio, from November 21st to 23rd, 1916, were invited by James C. Wolf, manager of the Pilsener Brewing Co., to attend a reception given at the new office building. This was held Thursday, November 23rd, from 4 until 10 P. M. in honor of John M. Leicht, now of the Wiedenmayer Brewery, Newark, N. J., but formerly he was a Cleveland brewer.

Transportation was arranged by special electric cars and private automobiles, among which were machines of Wm. Diehl, of the Cleveland Brewers Supply Co.; Dan Loew, of Loew Manufacturing Company, and White Automobile Company cars. The visitors had the opportunity of inspecting one of the most modern bottling plants equipped with machinery furnished by the Barry-Wehmiller Company of St. Louis, Mo. The plant was operating, thus showing the perfect and complete process of bottling.

The ladies and their escorts were seated in a neatly equipped dining-room, finished in white, in the basement of the building. During the week this room is used by all the employes. Other gentlemen were seated in the new grill room across the hall from the dining-room. These two rooms have a seating capacity for five hundred people.

Taussig's fine orchestra furnished popular music. The cabaret entertainers from the Hippodrome Inn, composed of three ladies and six gentlemen, afforded the guests good entertainment. During this time the visitors heartily enjoyed a hot "Dutch Lunch" with a plentiful supply of "P. O. C."—"The Beer that Builds," followed by "P. O. C." cigars.

Then the guests proceeded to the assembly room on the second floor of the bottling plant. Here a moving-picture show was given, first the views of scenes showing the stockholders and employes at the semi-annual celebration held in June throughout their automobile ride in parks of the city. Second was given the film picture of "Hoyt's—The Temperance Town." Third were given views of the Cleveland brewers and their ladies' dinner party at Cleveland Athletic Club in honor of the oldest brewer, Mr. Simon Fishel, president of the Cleveland & Sandusky Brewing Co. Fourth were shown views of Hippodrome Inn cabaret entertainers and the dinner party of Mr. and Mrs. John M. Leicht, also a view of Mr. Leicht's former brewery and fine residence at Cleveland. Fifth were shown photographs of Colonel Gustav Pabst, Percy Andrae, Hugh F. Fox, C. W. Feigen-span, Charles A. Otis, Vaclav Snajdr, Carl Anders, then came the government group: President Woodrow Wilson, Secretary of War Newton D. Baker, Governor-Elect James M. Cox, Mayor Harry L. Davis.

"WILLIAM J. BRYAN may consider it an obligation, in order to serve the Anti-Saloon League or to earn a fancy salary, that he trick the Democratic party into becoming an auxiliary to the Prohibition party. But when this same Bryan tries to foist upon the credulity of thinking people that he has so suddenly come to a belief that the indulgence in alcoholic beverages is immoral, he fails to give credit to the natural wonder why Bryan, as a former Congressman and posing statesman, and Bryan as a three-time candidate for President, never made the same discovery of liquor iniquities in his more rational days. The underlying motive of Mr. Bryan, cash and notoriety, looms up quite conspicuously."—"Bulletin," Pennsylvania State Brewers' Association.)

Book Review.

THE MANUAL OF BRITISH AND FOREIGN BREWERY COMPANIES, 1916. Published by The Country Brewers' Gazette, Ltd., 2 Devonshire Sq., London, E. C., England. Price Five Shillings net.

The 26th annual edition of this very interesting and useful guide through the British brewing world, is as ever a compendium of joint-stock brewery enterprise. In the form which it assumes no alteration has been made, as that has been unanimously and warmly approved by both press and public since its inception.

Its list of breweries contains the most complete and up-to-date details of all joint-stock concerns, possessing any interest to the British investor.

The compilers have exercised their ever scrupulous care to make the information presented as comprehensive, accurate and reliable as possible, the brewery companies themselves having cooperated with the editors in their customary willingness and promptitude in supplying all requisite data.

No other country possesses such detailed information about its brewing industry as Great Britain, and brewers and supplymen in countries outside of England who expect to deal with their British colleagues and competitors will find it to be of eminent advantage to procure a copy of *The Manual*.

ANOTHER LIE NAILED. "We don't believe this stuff about 'As goes Maine, so goes the Union.' Were it true the Union would have gone dry 40 years ago."—(Chicago "Post.")

BREWING IN AUSTRALIA. In 1905 the 42 breweries of New South Wales produced 13,873,259 gallons of beer, using 458,371 bushels of malt, 558,661 pounds of hops, 3,370 tons of sugar and 6,209 centals of other brewing materials, while in 1915 the 27 breweries of the same colony produced 24,434,147 gallons of beer, using 838,148 bushels of malt, 893,050 pounds of hops, 5,192 tons of sugar and 6,044 centals of other material. During the same time the horse-power employed was increased from 1,089 to 3,965.

The output of the 69 breweries in Victoria in 1893 amounted to 14,018,369 gallons of beer, in which 624,298 bushels of malt, 657,643 pounds of hops, 90,375 cwt. of sugar and no other brewing materials were used. In 1915 Victoria had 22 breweries, producing 20,339,924 gallons of beer, using 600,333 bushels of malt, 661,299 pounds of hops, 111,363 cwt. of sugar and about 50,000 pounds of rice and other adjuncts.

BREAKAGES OF BOTTLES. The breakage of bottles may be checked to a certain degree by the use of up-to-date bottle conveying machinery, which minimizes the necessity of handling the old-fashioned wooden crate, in which the bottles are carried by hand, being a fruitful source of breakages. The percentage of breakages will be largely influenced by the type of bottling machine in use, the automatic rotary machine being the best for minimizing breakages. The most economical form of labor is undoubtedly piece work; boys and girls will work much better under this system and do not require the same amount of supervision, always a difficult matter in a bottling store, where the foreman has his attention taken up, to a great degree, with the chilling and filtering of the beer. Taken all round, the successful management of the bottling department calls for untiring effort, coupled with a large amount of attention to various minor details which have a large influence on the profits and the production.

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,207,177. Process of making soluble starch. Julius Kantowicz, Breslau, Germany.
- 1,207,379. Bottle-case. Frank Distler, O'Fallon, Ill.
- 1,207,592. Bottle rinsing and conveying machine. Charles Alvin Miller, Bainbridge, Ga., assignor to Miller Manufacturing Company, Bainbridge, Ga.
- 1,207,778. Barrel-hoist. James A. McMaster, Kittanning, Pa.
- 1,207,842. Grain-tank. John A. Bergren, Lake Park, Minn.
- 1,207,866. Bottle-washing machine. William R. Coppage, Washington, D. C.
- 1,209,191. Bottle-washing machine. George P. Miller, Govans, Md.
- 1,209,192. Bottle-corking machine. George P. Miller, Govans, Md.
- 1,209,490. Apparatus for impregnating liquids with carbonic acid or other gases. Anders Andersen Pindstofte, Copenhagen, Denmark.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for *THE BREWERS' JOURNAL*, by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15, South Street, Finsbury, London, Eng., and 10, Gray's Inn Place, W. C. London, England.

Specifications Published

1915.

- 14,330. Kuhn. Process for the preparation of an extract of hops.
- 14,681. Bayne. Spring valves for use outside barrels and other vessels.

1916

- 101,034. E. J. Falkiner. Apparatus for filling receptacles with measured quantities of liquids.
- 101,588. S. Kaye. Machines for filling and sealing bottles.
- 101,606. P. J. Flood. Combined bungs and taps.

For copies of published specifications of Foreign Patents (25 cents each) address Messrs. Redfern & Co., 15 South street, Finsbury, London, England.

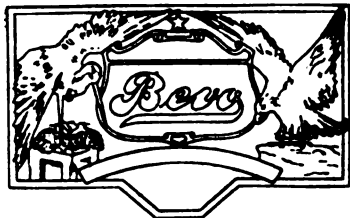
REPROACH TO CHRISTIAN CIVILIZATION. "The Anti-Saloon League has been turned into a political blackmailing organization which sucks its life-blood from the churches, and is characterized by blind bigotry and is conducted by dishonest and disreputable political methods which are not only a disgrace to the cause of temperance but a reproach to Christian civilization. How long! Oh, how long! will the churches continue to be the dupes of dishonest fakers who accomplish no results for the benefit of the temperance cause, and who only fill their own pocketbooks and butter their own bread?"—(Lyons [N. Y.] "Republican.")

Substitute for English Body Sugar.

Perhaps never in the history of the brewing industry and certainly not for years, has the subject of production costs been given such serious consideration by brewers generally than at present. Various substitute materials are now being rigidly investigated by brewers. For instance, while hundreds of brewers have used body sugars for many years, many others did not. But now high prices of barley and malt compel them to. The English originated body sugar, but the improved quality of the American product practically eliminated the imported before the war began, and since that time hardly a pound of the English material has found its way into American breweries. The original American product, Malto-Dextrine, has been made in New York for about ten years by the North Kensington Refinery, and the output increased from about a carload per month at the end of the first year, to a carload a day a year ago, and to nearly two carloads per day under the present abnormal conditions. The manufacturers claim that Malto-Dextrine is 97% pure extract, of which 64% is dextrine and other unfermentables. They explain all details, which may be had for the asking in an interesting booklet.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 98,869. Anheuser-Busch Brewing Association, St. Louis, Mo. Filed Oct. 25, 1916.

Particular description of goods.—A Non-Intoxicating Malt Beverage.

Claims use since Apr. 25, 1916.



Ser. No. 98,676. Theo. Hamm Brewing Company, St. Paul, Minn. Filed Oct. 14, 1916.

Particular description of goods.—A Non-Alcoholic Cereal Beverage put up in Bottles and in Kegs. Claims use since Jan. 1, 1916.



Ser. No. 99,281. The Peoples Brewing Co., Oshkosh, Wis. Filed Nov. 13, 1916.

Particular description of goods.—Beer.

Claims use since about the 21st day of June, 1913.

The following Trade Marks have been definitely Registered:

114,086. Beer. Burkhardt Brewing Company, Boston, Mass. Filed August 28, 1916. Serial No. 97,656. Published September 26, 1916. Registration granted, November 28, 1916.

114,104. Malt non-intoxicating beverage. The Monumental Brewing Co., Baltimore, Md. Filed August 23, 1916. Serial No. 97,585. Published September 26, 1916. Registration granted, November 28, 1916.

114,109. Beer. Old Dutch Brew Company, San Francisco, Cal. Filed March 20, 1916. Serial No. 93,723. Published September 26, 1916. Registration granted, November 28, 1916.

114,204. Certain non-alcoholic beverage. Leo Wallerstein, New York. Filed August 10, 1916. Serial No. 97,261. Published September 26, 1916. Registration granted, December 5, 1916.

114,513. Malt tonic. Massachusetts Breweries Company, Alexandria, Va., and Boston, Mass. Filed May 23, 1916. Serial No. 95,385. Published October 17, 1916. Registration granted, December 19, 1916.

FIRES. One of the cold storage warehouses of the Minneapolis Brewing Co., Minneapolis, Minn., was partly destroyed by fire December 5th; damage about \$5,000.

The stables and barns of the Standard Brewing Co., Cleveland, Ohio, burned down December 2nd; loss about \$3,500.

There was a fire in the plant of the Terre Haute Brewing Co., Terre Haute, Ind., December 6th, but it did not do much damage.

The depot at Boltonville, Wis., of the Charles Hamm Brewing Co., Random Lake, Wis., was destroyed by fire, December 6th.

Damage estimated at about \$14,000 was done to the plant of the Willow Springs Brewing Co., Inc., Omaha, Neb., December 19th.

The Charleroi plant of the Independent Brewing Co., Pittsburgh, was damaged by fire, December 14th, to the extent of about \$20,000, defective insulation of electric wires having caused the ignition.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, December 29th, 1916.

Barley. The U. S. Government crop estimates, published December 15th, 1916, give this year's production of Barley as 180,927,000 bushels, as compared with 228,851,000 bushels in 1915; farm value in 1916 of \$159,534,000, and in 1915, \$118,172,000. The ten years' average of production of Barley from 1910 to 1914 was 186,208,000 bushels.

To-day the market is advancing. Barley is stronger and prices higher in all trading centers, although the supply on hand is small. Quotations are nominal. Very little good Malting Barley in sight.

CHICAGO, December 26th: Our correspondent writes: "Quotations on Barley are lower than they were a month ago. This is not due to increased receipts, because offerings have continued to be very moderate. Probably the largest factor in the decline has been the railroad situation, the Eastern roads, particularly, having being so congested that a good many embargoes have been placed against grain shipments East,—in fact, embargoes are effective in Chicago to-day, which handicap buyers, because it is not possible to interchange between the Western roads and some of the Eastern roads. We quote low grade Malting at 98c. to \$1.06 (the low figure for very dirty); fair to good, \$1.07 to \$1.11; good to choice, \$1.12 to \$1.18; choice to fancy, \$1.19 and \$1.20,—with a possible premium for something unusually nice."

Malt. There is as usual a lull in malt buying during the holidays, but it looks as though prices will be higher after the first of the year, on account of scarcity of good Malting Barley. Prices of Standard Malt \$1.38@1.39; Bottle Beer Malt \$1.46@1.47.

From CHICAGO we have these advices, dated December 26th: "The Malt market is dull on account of the holidays. Quotations: Standard Malt \$1.31@1.34; Bottle Beer Malt, \$1.38@1.41; Fancy, \$1.44@1.46.

Corn Goods. Grits are quoted at \$2.50; Meal, \$2.49; Corn Syrup, \$3.21 in barrels; corn sugar in bags, \$2.21@2.23.

In CHICAGO, December 26th, Grits sold at \$2.33@2.35; Meal, \$2.32@2.34.

Hops. The U. S. Crop Estimates for Hops, published December 15th, 1916, gives a total of 50,537,000 pounds at a farm value of 12 cents per pound; in 1915 the total Hop crop amounted to 52,986,000 pounds, at a farm value of 11.7 cents.

During December the Hop market was very quiet, as far as purchases and sales of hops are concerned, growers in the U. S. not having bought very heavily. The high cost of malt and other by-products may be partly responsible for their holding back in the purchase of hops which may be required for spring and summer use. Prices in consequence of this have declined from 1c. to 2c. per lb. It is estimated that two-thirds of the crop in California is sold, and a good share also of the Oregon and Washington crop, while in N. Y. State it is next to impossible to fill an order for even a carload, since the growers are virtually sold out. The imports of hops from Europe for the first four months of the season amounted to only 50 bales of French hops; none could be sent from Austria or Germany. The exports of British Columbia hops to England were 900 bales, and 1,300 bales of American hops were shipped to England during September and October, no doubt being purchases made prior to the embargo having taken effect. Outside of this, about 1,300 bales of American hops were shipped, principally to South America, a small quantity being sent to Cuba, France, South Africa, Italy, Greece and Spain. In consequence of the prices now prevailing, many growers on the Coast speak about plowing up their hop yards, devoting their energies to better paying products. This may have the effect of improving conditions, and brewers may be compelled to pay more for the hops which they require next summer. We quote: 1916 Pacific coast hops, 12@15c.; 1916 N. Y. State hops, 46@51c.; 1915 Pacific coast hops, 9@12c.; 1914 States and Pacifics, 6@10c.

Link-Belt Company Blows In New Furnace.

The fifth furnace at the Belmont plant of the Link-Belt Company, Indianapolis, was blown in the middle of December, adding materially to the capacity for producing malleable Link-Belt. Extensive building operations at the Belmont works have been completed, and the manufacturing activities reorganized to keep pace with the increasing demand for Link-Belt for all conveying, elevating and power transmission purposes.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

White Company's Brewery Motor Trucks.

The year 1916 set a new high record for the total number of motor trucks purchased by brewers, one manufacturer, The White

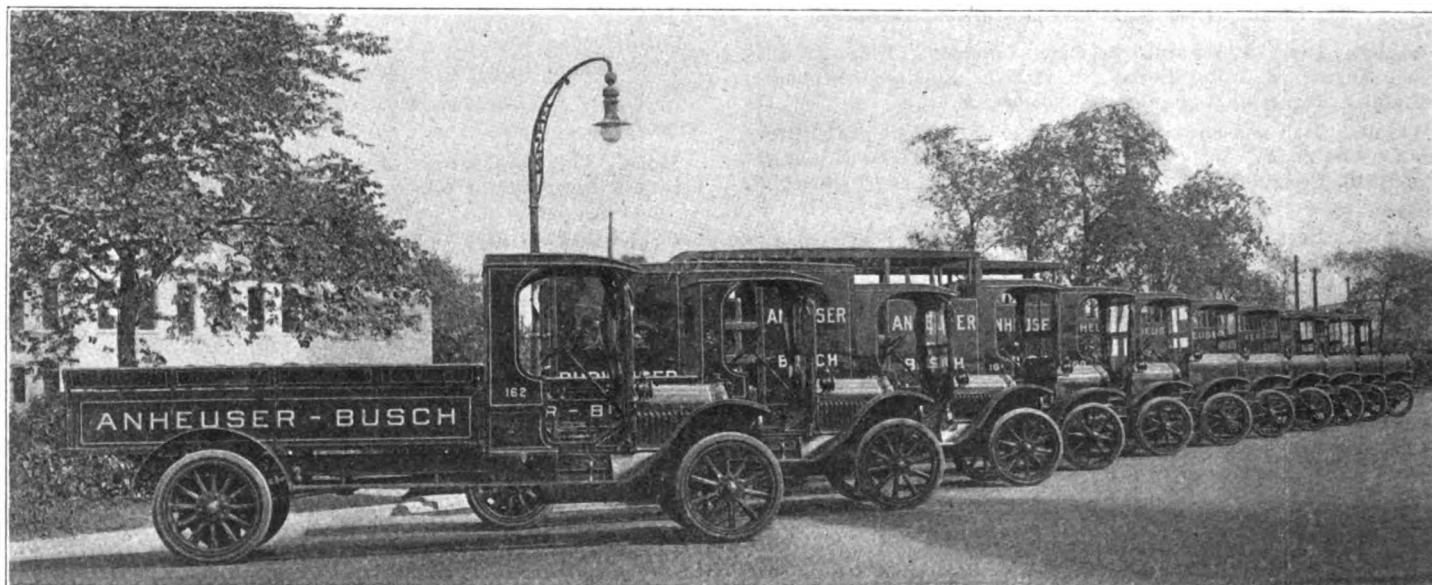


Company, of Cleveland, Ohio, reporting a 400 per cent. increase in sales in this particular field. While many of these sales were repeat

The extraordinary work capacity of the machine forms a basis for its economy. In brewery service it is not an uncommon thing for one truck to replace from four to six teams, accomplishing the same work in a much shorter time and at a great saving in cost. While a team may travel 12 or 15 miles a day, a truck can cover from 60 to 125 miles, depending on the nature of the roads and the facilities for loading and unloading.

Trucks can also successfully compete with steam and electric railroads, showing great savings, due largely to the elimination of unnecessary handling. Hauls of from 100 to 150 miles have been accomplished more economically with trucks than by railroad, while on deliveries of from 8 to 20 miles the saving is even more noticeable.

A 1½-2-ton White truck owned by Arnholt & Schaefer, Philadelphia brewers, delivers retail to the suburbs and registers a wonderful mileage record. The truck averages 80 miles a day. One day last summer one of the three-quarter-ton Whites owned by this firm made eight trips in ten hours over a nine-mile route and delivered 200 cases of beer. A 5-ton White ran three years before it required any overhauling, although it had been in continuous service and running up a big daily mileage.



orders from brewers who had already used White equipment in their delivery service, a large number were received from others who have never tested the efficiency of motor haulage.

There are many White trucks in the service of prominent brewers which have covered 125,000 miles and are still giving excellent service at a very low cost of maintenance.

Zahm Mfg. Co.'s New Plant.

The Zahm Manufacturing Co., Buffalo, N. Y., manufacturers of the Zahm Beer-Sterilizing Apparatus, which is patented in the United States and abroad, have completed their new factory at 74 East Jewett Avenue, Buffalo, N. Y., where also their main office is now located.

Large Number of New Installations by York Mfg. Co.

The York Mfg. Co., York, Pa., since their last report to this trade journal, rendered October 20th, 1916, have made ninety-one installations of their refrigerating machinery in various industrial establishments, factories, markets, cold storage buildings, bottling works, public institutions, private houses, general stores, dairies, etc., etc. Installations made in breweries will be found by the reader in another column reserved for reports of brewers, brewmasters, suppliers, manufacturers of brewery machines, apparatus, etc.

Baltimore Brewery to be sold at Auction.

The Receivers for the Standard Brewery Co., Baltimore, Md., announce that at their direction the assets, lands, buildings, equipment, saloon and other properties are to be sold at public auction, Wednesday, January 17th, 1917, at 11 A. M., at the office of the brewery. Additional details the reader will find in our advertising columns.

New Crown Cork Branch Homes.

The Crown Cork and Seal Company of Baltimore announce that from to-day a Cleveland Branch has its doors open to the trade at 1225 West Ninth Street, Cleveland, and at the same time a Branch is ready for business at 311 Milwaukee street, Milwaukee.

There are now twenty-three Branch offices of the Crown Cork and Seal Company in the United States, so located as to serve each and every bottler with greatest promptness, efficiency and safety.

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

Established in 1876 by A. E. J. TOVEY, Honorary Member of the United States Brewers' Association.

Grand Prize, Paris Exposition, 1900.

Medal and Diploma, Antwerp Exposition, 1889.

Honorable Mention, Paris Exposition, 1878.

**Main Offices: IRVING BUILDING, No. 1 HUDSON STREET,
Corner of Chambers Street, New York; Rooms 20, 21 & 29.**

Cable Address: "Paraclete, New York."

Western Office: Room 1313, People's Life Building, Randolph and 5th Ave., CHICAGO, ILL.

EUROPEAN OFFICES: } **GREAT BRITAIN AND IRELAND: Dale, Reynolds & Co., 46 Cannon St., LONDON.**
 } **GERMANY: Saarbach's News Exchange, 1 Clara Street, MAYENCE.**

SPECIAL CORRESPONDENTS IN ALL THE BREWING CENTRES THROUGHOUT THE WORLD.

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Tovey's Official Brewers' and Maltsters' Directory, 1917.

Comprehensive, complete, and yet brief, Tovey's Official Brewers' and Maltsters' Directory, popular and much-called for by the brewing and allied industries, appears again for the year 1917 with the present number, February, 1917, of THE BREWERS' JOURNAL; and it will be received by all who are entitled to it, because they pay for it, our subscribers and advertisers. No outsider can get it.

Our friends all know the "Red Little Book," and many carry it in their pocket, to be consulted whenever the owner wants any information relating to the breweries on this great continent and the dependencies of the United States—because it is a faithful friend, a reliable guide and adviser to all who are doing business with brewers, brewmasters, maltsters, dealers in brewing materials, machinery and all the other multifarious supplies the brewer and maltster requires to successfully carry on his trade.

The contents of Tovey's Directory are the condensed statistics obtained from official reports of the authorities in Washington, United States consuls residing abroad, foreign governments, and other reliable sources. It gives the addresses of all breweries in North and South America, Hawaii, Philippine Islands, and Porto Rico; also the addresses of the various Brewers', Brewmasters', and Maltsters' organizations in the United States and Canada, as well as statistical figures relating to the output of beer in the United States and all other countries where more than 1,000,000 barrels of beer are produced.

The Directory is convenient in form and, therefore, handy for easy consultation.

It goes from this office with the best wishes to our friends and clients, to whom we shall be obliged if they will keep the Directory in a safe place and tell all those who would like to have a copy that they may obtain it by subscribing to our trade journal at the rate of five dollars per year.

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

The Immersion Refractometer in Determination of Small Amounts of Alcohol in Hopped Beverages.

By A. Fonyo, Chief Chemist, Wm. J. Lemp Brg. Co.

The Association of Official Agricultural Chemists in their recent journal (Vol. II, No. 2, Part II) gave two methods for the determination of alcohol in wine, beer and distilled liquors. In one method the specific gravity of the distillate of liquid is determined and in the other the refractometer reading of the distillate; the corresponding percentage of alcohol is obtained from tables. The first method is more generally used.

Mr. William F. Carthaus in his recent lecture in Buffalo pointed out that the specific gravity is influenced by the volatiles hop ingredients, which reduce the specific gravity of the distillate. In strongly hopped beverages this reduction is considerable, and the result is an erroneous alcohol indication.

The writer has investigated the question, whether the use of the immersion refractometer would eliminate this error, and found that the refractometer does not indicate the presence of the volatile hop ingredients in the distillate of a hopped beverage.

The use of the immersion refractometer in a brewers' laboratory is not new. It has been used for many years for the rapid determination of real extract and alcohol in beer. The following is its principle:

When a ray of light passes from a transparent object of lesser density into one of greater density, its direction in the second medium differs from that of the incident ray, it being bent or refracted. If the ray of light traversing in the air falls on glass, it refracts. Passing from glass to water or to water containing sugar or alcohol, the ray will be again refracted. With the concentration of solutions, the degree of refraction varies. Now by determining the refractions of the ray in different alcoholic solutions, the concentration of which are already known, a key will be obtained through which the alcohol content in any other solution may be determined from the refraction of the ray.

There are different kinds of refractometers for the determination of refractivity of a substance. For the present experiments Zeiss' immersion refractometer constructed by Pulfrich was used. This apparatus consists of a water bath, which has a window at the bottom. Ten glass beakers can be placed in the bath for the reception of solutions to be examined. Underneath the window there is a mirror which reflects the light into the apparatus. The light is thrown from the mirror through the beaker and the solution into the prisma of the refractometer submerged in the solution. The rays of light in the prisma will be refracted in proportion to the concentration of the solution. The refracted rays pass through the objective lense, which combines the rays on a scale placed inside the refractometer between the ocular and objective lenses. The observation is made through the ocular. On the scale there are two fields: a light one and a dark one, separated by a dividing line, which is so marked that the reading of the scale is made very easy and simple. The scale is read where the dividing line falls, and the per-

centage of alcohol corresponding to the scale reading is given in tables. A uniform temperature has to be maintained constantly, which is being done with heating coils and water pressure regulator. From the latter the water runs through a heated coil into the water bath of the refractometer, which is provided with an over-flow. Still more convenient is the electrically controlled constant temperature water bath, the construction of which is described in circular No. 72 of the U. S. Chemistry Bureau.

In order to determine whether and in what manner the volatile hop ingredients of the distillate of a hopped beverage influence its refractivity, the following tests were made:

100 cc. unhopped wort taken from kettle, added 50 cc. water and distilled over 100 cc.

100 cc. hopped wort, added 50 cc. water and distilled over 100 cc.

In both cases specific gravity of distillate were determined, and the refractometer readings at 20° C. While some difference was found in the specific gravity, the refractometer readings were the same in the distillates of the hopped and unhopped worts. To hopped wort was added a known amount of alcohol, so as to make a wort containing from 0.05% to 0.5% alcohol by volume. Distillation was made as in the regular method of alcohol determination, and the specific gravity and the refractometer readings of distillates were determined. The specific gravity always indicated more alcohol than was added. The refractometer readings at 20° C. were the same in distillates of water, unhopped wort, hopped wort and hopped wort containing 0.05% alcohol, *i. e.*, 14.5, which, according to the tables of the Association of Official Agricultural Chemists, corresponds to 0.08% alcohol by volume. 0.1% alcoholic solution gave a higher refractometer reading than water. The refractometer is not sensitive against alcoholic solution containing less than 0.1% alcohol. The results of my experiments are shown in the accompanying tables.

The above refractometer readings are the averages of several determinations. Great care must be taken to obtain an exact temperature. One degree C. difference in temperature causes about 0.2% difference in alcohol determination. To reduce the possible errors in determination of small amounts of alcohol, it is advisable to make a ten-times concentrated alcoholic distillate, for instance from 500 cc. liquid distill over 150 cc., from this 150 cc. distill 50 cc., this will contain nearly all the alcohol that was originally in 500 cc. If this concentrating is carried out the way Bacon advised in U. S. Chemistry Bureau Circular No. 74, the 50 cc. distillate will contain about 95% of the total alcohol of the 500 cc. liquid. The refractometer reading is made in the 50 cc. concentrated distillate. In case the wort contained 0.1% alcohol, the refractometer reading of the ten-times concentrated solution indicated 0.94% alcohol or tenth part of this in the original liquid corresponds to 0.004% alcohol, practically no difference from the real alcohol content. Similar results in table below:

The concentrated distillate of the hopped wort without alcohol gave a refractometer reading identical with the scale

reading of the not concentrated distillate or of the distilled water.

It is evident that the hop ingredients of the distillate of a beverage do not influence the refractometer reading, and because the use of refractometer is very convenient and simple, the determination of alcohol in hopped beverages with the immersion refractometer is preferable to the specific gravity method. Although the refractometer does not

register alcohol in amounts less than 0.1%, greater accuracy is seldom required in practical analytical work.

The small amount of alcohol which is not indicated by the refractometer is, from a practical standpoint, insignificant, and any such beverage can be considered as non-alcoholic in its character.—("Communications," Master Brewers' Association of the United States.)

TABLE NO. 1

Distillate of	Spec. Grav. of Distillate	Per cent. Alcohol indicated by Spec. Grav.		Refractometer Scale Reading at 20° C	Per cent. Alcohol indicated by Refr. Read.	
		By Vol.	By Weight		By Vol.	By Weight
Water	1.00000	....	....	14.5	0.08	0.06
Unhopped Wort.....	1.00000	....	....	14.5	0.08	0.06
Hopped Wort.....	0.99995	0.04	0.03	14.5	0.08	0.06
Hopped Wort containing 0.05% alc. by vol.	0.99982	0.12	0.10	14.5	0.08	0.06
" " " 0.10% " " "	0.99977	0.15	0.12	14.6	0.16	0.13
" " " 0.15% " " "	0.99973	0.18	0.15	14.6	0.16	0.13
" " " 0.20% " " "	0.99960	0.26	0.21	14.6	0.16	0.13
" " " 0.25% " " "	0.99957	0.28	0.22	14.7	0.25	0.20
" " " 0.30% " " "	0.99951	0.32	0.27	14.8	0.34	0.27
" " " 0.35% " " "	0.99940	0.40	0.32	14.8	0.34	0.27
" " " 0.40% " " "	0.99938	0.41	0.33	14.9	0.43	0.34
" " " 0.45% " " "	0.99930	0.46	0.37	14.9	0.43	0.34
" " " 0.50% " " "	0.99920	0.53	0.42	15.0	0.52	0.41

TABLE NO. 2

	Simple Distillate		Ten times concentrated distillate		
	Refr. Scale Reading at 20° C	Per cent. Alcohol by Vol.	Refr. Scale Reading at 20° C	Per cent. Alcohol by Vol.	Alcohol cal- culated to original concentr.
Hopped Wort.....	14.5	0.08	14.5	0.08	....
Hopped Wort containing 0.05% alc. by vol.	14.5	0.08	14.9	0.43	0.04
" " " 0.10% " " "	14.6	0.16	15.5	0.94	0.09
" " " 0.15% " " "	14.6	0.16	16.0	1.36	0.14
" " " 0.20% " " "	14.6	0.16	16.6	1.81	0.18
" " " 0.25% " " "	14.7	0.25	17.4	2.41	0.24
" " " 0.30% " " "	14.8	0.34	18.0	2.85	0.28
" " " 0.35% " " "	14.8	0.34	18.7	3.37	0.34
" " " 0.40% " " "	14.9	0.43	19.3	3.81	0.38
" " " 0.45% " " "	14.9	0.43	20.0	4.32	0.43
" " " 0.50% " " "	15.0	0.52	20.7	4.83	0.48

ENDOMYCES LINDNERI. Saito has isolated this new Endomyces from the yeast used in the preparation of Chinese millet beer. On solid media the fungus produces aerial hyphæ, with constricted conidia; and streak cultures on gelatin form a thick chalky-white coating, the gelatin liquefying in a few days. On wort agar-agar the aerial hyphæ are fewer, the film turns brown, and innumerable spores are formed. In beer wort a thick film, resembling cotton wool, is formed. The conidia are septate and branched, whilst those on the aerial hyphæ are round to oval. In adhesion cultures, yeast-like cells are formed in the mycelium, and gradually occupy the whole stratum of liquid. The conidia readily germinate to form mycelia, and the asci, which resemble those of Endomyces fibuliger, mostly contain 2-4 spores. In twelve days the fungus attenuates 12 per cent. wort down to 4.5° Ball., the fermented liquid smelling like fresh apples and having a bitter taste. Glucose, fructose,

saccharose, mannose and dextrin are strongly fermented, raffinose, xylose, a-methyl glucoside slightly, whilst galactose, inulin, rhamnose, sorbose and arabinose are unaffected.—("Zeitschrift für Gährungsphysiologie.")

RAPIDITY WITH WHICH ALCOHOL AND SOME SUGARS MAY SERVE AS NUTRIMENT. From changes produced by the various compounds in the respiratory quotient it is concluded that alcohol begins to be burned within 5 to 11 minutes after taking on an empty stomach; sucrose, levulose and lactose begin to be burned as soon, if not sooner, while dextrose and maltose are utilized less rapidly, approximately 20 to 30 minutes elapsing before their combustion plays an important part in metabolism. Levulose and sometimes galactose, show a tendency or preference to change to fat in the body, while dextrose tends to change to glycogen and to be stored as such.—(H. L. Higgins, "Am. J. Physiol.")

Potato Starch as a Partial Substitute for Malt.*

By V. KOUDELKA.

Among the malt adjuncts to which the Austrian brewing industry has been obliged to resort, cane sugar was the first to come under consideration. It gave very satisfactory results, and, from the standpoint of stability, purity, and even taste, the present "war-sugar-beers" are almost equal to the former all-malt beers. Sugar, however, is also scarce, and the Government permits only an addition of 30 per cent. This condition, and the very scanty quantity of malt allotted, therefore compelled the brewers to seek another adjunct, and attention is now being given to potato starch, or potato starch flour.

Potato starch is obtained from cleaned and grated potatoes by a washing process, whereby the starch is separated from the fibre particles and other components of the potatoes. The washed starch is cleaned and assorted by various processes into prime starch, "seconds" and "thirds," or "sludge starch." To make the dry starch, the washed raw starch is mixed with water to a milky consistency, and is then centrifuged and dried until it contains only about 20 per cent. moisture, being then ground and sifted.

Potato starch nearly always contains some acid, which finds its way into the finished product in the natural way or may be the result of artificially added inorganic acids. The organic acids cannot be entirely washed out, and even during the process of manufacture organic acids are liable to be formed by bacterial fermentation. When damaged or rotten potatoes are used, the starch factories frequently add either sulphurous or sulphuric acid, which, if improperly washed out, is traceable in the finished product. Good potato starch or prime meal should be technically free of acid, that is, not more than 5ccm. of $n/10$ KOH should be required for the neutralization of 100 g. of starch. Inorganic acids should not be present at all.

According to König, the chemical composition of commercial potato starch is as follows:—Water 17.33 per cent.; protein, 0.43 per cent.; nitrogen-free extractive substances, 81.77 per cent.; ash, 0.35 per cent.; raw fibre, 0.08 per cent.; raw fat, 0.04 per cent.

At 46.2° C. potato starch begins to swell noticeably, at 58.7° C. it starts to become pasty, and is completely gelatinized almost immediately at a temperature of 62.5°. According to Lintner, 100 parts of potato starch figured on dry basis produce under the action of diastase at 50° C. 0.13 per cent., at 55° C. 5.03 per cent., at 60° C. 52.68 per cent., and at 65° C. 90.34 per cent. of starch conversion products.

These data show in the first place that it is absolutely necessary that the potato starch be mixed with cold water, for with warm water it tends to form lumps, which are very difficult to break up by mechanical stirring, and resist complete gelatinization even at the later stages of mashing, their extract being therefore entirely lost. In the second place, it is necessary to employ temperatures at which the starch is most completely converted, *i. e.*, about 65° C., at which temperature the starch gelatinizes almost immediately.

The operations in the brewhouse will, therefore, have to be so arranged that the mixture of cold water and starch is either treated as a separate mash—which method would seem preferable for large plants where considerable quantities of starch are used—or, in small breweries, by adding the cold mixture direct to the initial

mash, so that it will permit it to be modified and converted with the later.

The potato starch may also be mixed with cold water in the mash-tun and the malt added later. For this method, however, a propeller that works well is essential. In breweries where the mash-tun also serves for draining the wort this method is advisable, as the starch readily settles while the mash is kept on rest, and is apt to get below the false bottom, and from whence it can only with difficulty be brought out again by the stirring apparatus, and thereby escapes conversion during the mashing process.

Should it be decided to boil the potato starch separately in the form of a raw grain-mash, the method of working would be as follows: The potato starch is thoroughly mixed with cold water in the mash-tun, the stirring apparatus being worked rapidly, and then a quantity of malt-grist equal to about 20-30 per cent. of the quantity of starch is added. A proportionate quantity of malt-mash, that has in the meantime been prepared in the mash-tun, could also be used instead of the malt-grist. The raw grain mash is then heated to gelatinization temperature (65° C.), at which, however, no rest is needed, because the paste forms almost immediately; it would rather be advisable, in view of the simultaneous use of sugar, to bring the temperature as quickly as possible to 70-71° C., at which, while gradually raising to 75° C., the conversion and saccharification of the starch take place. This requires more or less time according to the quantity of starch added. According to whether this raw grain-mash is to be used in place of hot liquid or as an initial mash, it is brought to boiling and added to the mash, or is boiled for a further 20-25 minutes in order to get the full yield from the malt added.

When the starch is added direct to the initial mash the method of working depends upon the local conditions. The starch may either be mixed with cold water in the mash-tun, and, after the temperature of the malt mash has been raised to the required degree by the addition of hot water, the first mash is drawn and added to the raw grain mash in the mash-tun, or else the starch is mixed with cold water in a separate vessel and added to the first mash. The first mash is then treated and saccharified, as above.

These methods have proved successful in experiments both in the laboratory and in practical brewing. It should be noted that when potato starch is used—*viz.*, on account of the smaller quantity of malt, there is a thinner layer of grains in the draining vat.

When using malt-adjuncts the proteins of the wort are derived exclusively from the malt. It will, therefore, be advisable to conduct the mashing process at temperatures which favor the modification of the abuminoids, so that the greatest possible amount of these important constituents will be brought into the wort and subsequently into the beer.

SOME AMERICAN SALOONS. "The neighborhood saloon where respectable and solid citizens may go to sit, talk and drink their beer may conform to the rational uses of alcohol, but some American saloons, their methods of doing business generally considered, are the friends of the prohibition movement. They serve intemperance, and whatever serves intemperance serves prohibition. The American saloon is designed to furnish a shot of booze, and in this inelegant statement of its function is found the whole issue against the liquor business."—(Chicago "Tribune.")

* "Allgemeine Zeitschrift für Bierbrauerei u. Malzfabrikation."

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

December 15th—January 15th.

The samples examined during this period numbered 945 and are classified as follows:

Barleys	7
Malts	185
Malt Adjuncts.....	41
Colorants	17
Hops	18
Spent Grains.....	3
Waters	15
Worts	48
Yeast	193
Beers and Ales.....	331
Temperance Beverages.....	12
Fuels	21
Miscellaneous	54

Barleys. 945

Two (2) samples were California barley, showing a germinative capacity of 100%; the bushel weight of these two was 47 lbs. and 47½ lbs. respectively. Three (3) samples of Choice Wisconsin barley were of excellent quality, having bushel weights of 47-48½ lbs. and a germinative capacity of 97%-99%. One (1) sample of Dakota and one of Minnesota were light barleys (44-45 lbs. bushel weight) with a germinative capacity of only 92%-93%.

Malts.

Of the 182 samples Barley Malt analyzed, 48 were malted from California barley; they showed the usual well modified mealbody, and yielded high percentages of extract; the slight opalescence of their worts can be easily overcome in practice by a judicious blending and proper mashing operations. The average moisture in the total malts was found to be 4.22% with a minimum of 2.15% and a maximum at 8.35%. The extract yielded averaged 70.2% on air-dry samples and 73.3% calculated on the dry substance.

The highest yield on dry substance (79.4%) was obtained from an English Malt; while the lowest extract found was 71.1%. In 14 samples, the moisture content was above 5% and only 4 samples showed an insufficient modification of the meal body. One sample of Caramel Malt and one sample of Roasted Malt were entirely satisfactory; while one Caramel Malt contained an excessive amount of moisture, 7.85%.

Malt Adjuncts.

The Malt Adjuncts comprise the following samples:

Corn Grits.....	18
Corn Meal.....	11
Refined Grits.....	4
Rice	2
Mazam	3
Sugars, Syrups.....	3

Three (3) samples of Corn Grits contained excessive amounts of moisture, reading 22% in one case and two (2) samples contained too much oil, 2.65%; the remaining raw cereals and meal products were of satisfactory quality and brewing value.

Colorants.

All samples of this nature were satisfactory for their respective purposes. Their content of fermentable constituents was determined in several of the samples submitted, which were evidently intended for use in the manufacture of low alcoholic beverages.

Hops.

17 samples of 1916 Pacific Hops were examined: 5 of them contained a rather large number of mouldy cones, while the remaining 12 samples were of very satisfactory quality and brewing value.

One sample of "Fuggles" 1916 crop showed good qualities in every respect and was considered an excellent substitute for English Hops of the East Kent type.

Spent Grains.

One sample of Dried Grains was entirely satisfactory in its chemical composition. 2 samples of Wet Grains showed a minimum of water soluble extract and unconverted starch indicating carefully conducted mashing operations and malt of good quality.

Waters.

The total of 15 samples of water were submitted to the usual biological tests. Six of the samples were also analyzed as to the nature and amount of their mineral contents and their suitability for brewing or boiler feeding purposes.

Worts.

Of the 48 samples analyzed, 40 were Lager Beer worts, 7 Ale worts and 1 wort intended for the production of a low alcoholic beverage. All were of satisfactory chemical composition for their respective purposes.

Yeasts.

58 samples of Ale yeast were examined: 6 of these showed excessive contamination by lactic acid ferments. The remaining 51 samples of brewery yeasts were in satisfactory condition, judged from the standpoint of practice. Seventeen samples of Lager yeast were infected above the permissible limit, chiefly by *Sarcina* and *Saccharobacillus Pastorianus*. Five samples from our Pure Yeast Department were entirely free from any infection and in an excellent state of health and purity. 113 samples of brewing yeasts were in satisfactory condition generally.

Ales and Beers.

138 samples of Ale were examined in the chemical as well as biological laboratories. 9 of these samples showed infection by lactic and acetic ferments. 6 samples were effectively pasteurized; 67 samples were subjected to a complete chemical analysis. The average original gravity of these samples was 13.9° B. and the alcohol content was found to average 4.62% by weight or 5.80% by volume.

190 samples of Lager Beer were received: of this total 12 were found to be infected with *Sarcina*, 15 samples were effectively pasteurized. The remaining 163 samples taken from various stages of manufacture were biologically sound. A complete chemical analysis was made of 60 samples, showing an average original gravity of 12.3° B. with an alcohol content of 3.76% by weight or 4.72% by volume.

Temperance Beverages.

12 samples of low alcoholic beverages were analyzed as to their chemical composition and also from the biological standpoint. 10 of the samples were effectively pasteurized. The average original gravity of these beverages was 6.7° B. and the amount of absolute alcohol was 0.48 by weight, corresponding to 0.59 by volume, while the lowest alcohol by volume was 0.27%.

Coals.

Only 6 of the samples received were considered of satis-

factory fuel value; the remaining 15 contained excessive amounts of ash. One sample also contained too much sulphur.

Miscellaneous.

These samples comprise the following materials and products:

Lubricants	12
Filtermass	6
Soaking Solution.....	6
Saccharometers	6
Water Hardness.....	4
Cleansers	6
Malt Sprouts.....	3
Varnish	2
Disinfectants	4
Shellac, Pitch, Vitriol, Lupuline, Boiler Compound	1 each

Chilled and Filtered Beer.

The production of a satisfactory chilled and filtered beer is not the easy matter which one would expect, so many of these beers lacking flavor and palateness. The dietetic value of a chilled and filtered beer is greater than those bottled in the ordinary manner, and if only they possessed more character there would be a greater public demand.

To think that a chilled and filtered beer can be brewed in the same manner as an ordinary running beer is a mistake, as the filtering process seems to take out so much of the flavor that special means must be taken to see that the beer in question has a decided and permanent flavor which cannot be removed during the process.

To attain this end a well-cured malt must be used, thus ensuring the flavors imparted by kiln drying. To use malt which produces a cold straw-like flavor is only adding to the trouble, besides increasing the thinness on palate.

These beers should not be over-boiled, a delicate flavor being preferable to any strong flavor such as might be imparted by caramelization of the wort. The fermentation should be rapid rather than slow, a more characteristic flavor being produced by this method of fermentation.

Filtered beers require less hops than ordinary bottled beers, but the hops which are used must be of good quality; all rank, harsh-flavored hops should be avoided.

The gravity of the beer must be kept up, as it is only by this means that the necessary fulness can be obtained, any attempts to produce fulness by slow attenuation and high finals interfering with the flavor. The gas collected from fermentations is preferable to manufactured gas. Many other points might be enumerated, but these are sufficient to show that the production of a successful chilled and filtered beer is not without its difficulties.—(London "Brewers' Journal.")

Jurists are at present discussing the momentous question whether or not the U. S. Supreme Court erred, as it did according to ex-President Taft and other learned judges and lawyers, when it affirmed the constitutionality of the Webb-Kenyon law. Let them discuss, agree or disagree, the last and decisive word will be spoken by the whole American people, as soon as we shall have succeeded in opening their eyes as to the dangers threatening their liberty and property at the hands of a few selfish theologians and their voting outfit of uninformed and misguided victims.

Acceleration of Fermentation by Certain Materials.*

By H. WÜSTENFELD.

Moufang has stated that dead yeast cells and certain other materials accelerate fermentation by living yeast, and, as in his experiments the dead yeast was first extracted with hot water, he concluded that the acceleration was due not to a purely chemical action of substances dissolved from the dead cells, but probably to some obscure catalytic action or to an emanation from the dead cells. The author criticises these suggestions.

When yeast dies the cell wall loses its capacity of selective permeability, and allows a much more unrestricted diffusion of dissolved substances into and out of the cell than is the case with living yeast. This change is made use of in the preparation of yeast maceration juice by von Lebedeff's method. It is possible, therefore, that although in Moufang's experiments the dead yeast contained no ready-formed soluble substances when added to the fermenting liquid, enzymes from the latter may have diffused into the dead cells and produced soluble nutritive matters capable of stimulating fermentation.

It appears much more probable, however, that the acceleration of fermentation observed by Moufang is due mainly to a purely mechanical cause. It is well known that if solid matters are introduced into a liquid supersaturated with a gas they facilitate the escape of the excess of dissolved gas.

Delbrück has studied this action in its bearing on fermentation. The carbon dioxide produced by fermenting yeast tends to remain dissolved in the liquid, which eventually becomes supersaturated with it. This accumulation of carbon dioxide has a depressing effect on the fermentative activity of the yeast, and any means of facilitating the escape of dissolved gas from the liquid increases the rate of fermentation.

In distillery mashes the presence of the grains has this effect, and gives rise to a much more rapid fermentation than would take place if the wort were clear. In the brewery a similar action is brought about to some extent by the chips in the chip-cask, and probably by suspended matters in wort during fermentation.

The phenomenon observed by Moufang is doubtless due to the same cause. The solid particles prevent supersaturation of the liquid with carbon dioxide, which would tend to check fermentation, and the more rapid evolution of gas gives rise to increased circulation of the liquid, so that the supply of nutritive matters and oxygen to the yeast is accelerated.

It is simply blasphemy to assert that God is on the side of the self-appointed and anointed Prohibition saints. Everyone of the bloody belligerents in Europe makes the same arrogant assertion. The Ruler of the Universe has more to do than meddle with the brutal originators of strife and destruction among mankind.

IF BREWERS ARE WISE. "If the brewery interests, the liquor interests, are wise, they will pay attention to the present trend of public opinion, and divorce the comparatively harmless beer interests from the mind-wrecking, home-wrecking whiskey interests. Beer has never wrecked a man's mind, beer has never filled State prisons and insane asylums, beer has never made widows and orphans."—(Hudson [N. J.] "Dispatch.")

* "Wochenschrift für Brauerei."

Scientific Research in Relation to the Industries.

From a paper read at a Joint Meeting of the Franklin Institute and the Philadelphia Section, American Institute of Electrical Engineers,

By DR. CHARLES P. STEINMETZ.

When with the advance of industry a more rapid extension of our scientific knowledge was demanded, than given by the educational research institutions, scientific research laboratories were established in the industries. Some of them very soon showed their ability of producing scientific work of high character.

However, these scientific research laboratories of the industry represent only a part, often the minor part of the research work done within the industry, and in many places throughout the industrial organization opportunity is afforded for the right men to carry out scientific research. Thus in the materials testing laboratories of our industrial corporations, in their standardizing laboratories, their apparatus testing departments, development sections and laboratories, etc., research work is being carried out, and as a rule is encouraged by the corporations.

When speaking of industrial research laboratories, we must not forget the private testing laboratories, development laboratories, etc., which have been established and which to the smaller industrial organization take the same position, and do the same work, as their own laboratories to the great industrial corporations.

Theoretically, here is a limitation imposed on scientific research work in industrial establishments: It should be of such character, that it may lead to results which are industrially useful. In reality however, this is no limitation at all but there is no scientific investigation, however remote from industrial requirements, which might not possibly lead to industrially useful developments: and obviously no immediate or direct usefulness is expected: any investigation offering a definite prospect of industrial utility, is not scientific research, but is industrial development or design.

Some research work can be carried out more efficiently by educational institutions, others by the industry. In general, for industrial research, better facilities in materials and in power are available, but high class skilled labor, of investigators and research men, such as available in university research by the graduate students, is expensive in the industry. Thus researches requiring little in facilities, but a large amount of time and attention of research men, are especially adapted to educational laboratories, while investigations requiring large amounts of material or of power rather than time of the investigators, are specifically adapted to the industry, and often beyond the facilities of the educational institution. Efficiency thus should require a division of research between educational and industrial laboratories in accordance with their facilities, and where this is done, the results are splendid.

Unfortunately, this limitation of research work in accordance with the available facilities is not always realized, and especially educational institutions not infrequently attempt research work, for which industrial laboratories are far better fitted, while research work for which the educational institution is well fitted, which the industry needs but can not economically undertake, is left undone.

As regards to the quality of the scientific research work done in industrial organizations compared with that in educational establishments, there is no material difference,

but the work done in the industry, just as that done in universities, varies from scientific research of the highest quality, down to investigations which are of little, if any value, investigations crude and inaccurate or directly erroneous in premises, in method and in results and their interpretation, or investigations, which while correctly conceived and correctly made, are useless, because essential conditions have not been controlled or recorded. Still worse are those pseudo scientific investigations occasionally met, which own their conception to the desire of self-advertisement or are made for commercial or legal purposes, such as, for instance, to give the appearance of a scientific standing to some theory which some inventor had recorded in his patents. Such work—met occasionally, though less and less frequently—in industrial as well as in educational institutions, is the one which tends to discredit scientific research in the eyes of the layman, who can not discriminate between science and pseudo science.

The essential difference between industrial and educational research however is met in their method of publication: the publication mediums of scientific research carried on in educational institutions are the scientific publications published more or less under the direction or supervision of universities, while the publication mediums of the scientific research carried on in the industry are the technical or engineering papers, and only occasionally an abstract reaches the scientific publications. Unfortunately a large number of the scientists still look on publications in the technical press as unscientific, take no cognizance of it, do not recognize it in scientific abstracts, reviews, etc., and as the result, a large and steadily increasing part of the scientific research of the country is practically lost to the scientists, is not available or easily accessible, by not being recorded, abstracted or indexed in the records of scientific progress. Amongst the worst offenders in this unjustified exclusiveness are the physicists, while the chemists make a commendable exception: In the "chemical abstracts" published by the American Chemical Society, the results of industrial research as well as those of the chemical university laboratories are recognized, and these abstracts are therefore comprehensive and valuable, which cannot be said of the abstracts of some other sciences. Possibly the reason is, because applied chemistry is chemistry just as well as theoretical chemistry, while applied physics goes under the name of engineering, and the average theoretical physicist is rather inclined not to recognize engineering as scientific.

Scientific research of the highest class is carried out to-day in our nation in educational institutions as well as in industrial organizations and private testing laboratories, and the scientific research work in the latter is increasing at a far greater rate than that in the former. The publication mediums of scientific research of industrial organizations are the engineering publications and transactions, and the failure, in many branches of science, of recognizing the engineering publications in the records of science, thus makes the records of science incomplete, and increasingly so, therefore seriously retards the progress of science, and with it that of applied science, that is, engineering, and as engineering is the foundation of our civilization, it constitutes a serious menace to our nation's progress.

It is therefore important that those scientists, who are engaged in keeping the records of science and making the results of scientific research available and easily accessi-

ble, should recognize all sources and records of scientific research, including those of applied science, that is, the engineering publications, and should undertake the work reviewing the technical press as well as the purely scientific publications, judging and selecting from the former those publications which are of scientific value, and recognize them. Only then will our records of science be complete and thereby valuable.—("Journal, Franklin Institute.")

AUTOMATIC APPARATUS FOR THE ESTIMATION OF MOISTURE. By P. A. Willing. The apparatus (Korant) comprises a cylindrical drying oven within which a dish containing the material under test is suspended from a wire. The wire passes through an outlet in the roof of the oven and is attached to the end of a weighing beam outside the oven. This beam is suitably pivoted and has attached to it a pointer which travels over a scale in the form of an arc of a circle. When the dish inside the oven contains 10 grams of material the pointer is at zero, and as the material loses weight the pointer travels over the scale, which is graduated to show the percentage of moisture lost by the substance. When the pointer remains stationary for five minutes the drying is considered complete. Some figures quoted indicate that, with the oven at 120° C., the apparatus gives results within 0.5 per cent. of the correct values for materials such as ground barley, potato-starch, etc.—(Wochenschrift für Brauerei.)

DRIED BREWERS' YEAST is one of the latest suggestions for enlarging the daily bill of fare of American live stock. As a by-product of the brewing industry there is produced in the United States about 65,000,000 pounds dry yeast a year. By the addition of some cheap sugar it is possible to double this quantity without much labor or expense. The product carries about 50% protein, 30% fat-forming materials and 10% fat and ash, and is said to be about 90% digestible. Little definite experimental data are available except from German sources. A few American farmers have fed it successfully. Some of the American experiment stations have used it a little. The principal objection is that stock do not seem to relish it if fed in amounts even as high as 10% of the ration. The general conclusion from available German reports is that dried brewers' yeast is not relished by cows and must be fed with caution, while for hogs its value is very close to that of meat meal, but it must likewise be fed with caution.—("Farm and Home.")

BÁKHAR, THE INDIAN RICE-BEER FERMENT. By C. M. Hutchinson and C. S. Ram Ayyar. Bákhar (murcha, ranu, or u-t-iat) is an artificial ferment prepared from rice, powdered roots, and other parts of certain plants, by Indian natives, and used in the production of Hindu rice-beer (pachwai), and of the rice spirit distilled therefrom. It contains many varieties of mould fungi capable of saccharifying starch, of which the most active is *Aspergillus oryzae*, and several sorts of yeasts capable of producing alcohol. The saccharifying power of bákhar is markedly less than that of Japanese koji, which is made from a practically pure culture of *Aspergillus oryzae*. The vegetable matter added when the beer is prepared stimulates the growth of the yeasts, and prevents the development of inimical bacteria, but it adds nothing to the flavor or aroma of the beverage. The failure of Indian rice-beer is due more to the absence of good types of *Saccharomycetes* than of efficient saccharifying agents; hence the brewer is recommended to inoculate the rice, already saccharified with bákhar, with active wash from his own vats, or to use a separate supply of yeast from a trustworthy source.—("Memoirs of Dept. of Agriculture, India.")

Prevention of Corrosion in Pipes.

Casual observation will show marked differences in the degree of corrosion of pipe in service. For instance, hot water heating systems and sprinkler systems show virtually no deterioration in service after twenty years, while low-pressure steam returns sometimes give trouble after 15 years' service or less. Galvanized pipe in hot water supply systems, where the water is heated under pressure, lasts from about five years upwards, depending on the temperature and quality of the water and volume of flow. The last named condition is so severe on iron and steel pipe that brass pipe must sometimes be used, at a cost approximately 10 times that of galvanized pipe.

Some years ago, when steel pipe was comparatively unknown, and not fully developed, it was natural to question this material; but comparisons of modern wrought iron and steel pipe in the same lines of service have shown that where corrosion is found, one material suffers, on the average, as much as the other.

The inside of the pipe is subject to peculiar conditions not to be compared with the external corrosion. It is evident that the water alone is not responsible for the results observed, but rather something brought in with the water. Hot water heating lines have started to rust and then the action has apparently stopped, while in hot water supply lines the action is so continuous and rapid that, if the pipe does not fail by leaking, it may be plugged tight with the reddish hydroxide of iron. The only way to account for this accumulation of oxide of iron is from the oxygen in solution in the cold feed water, amounting to 9 to 17 cubic inches per cubic foot, according to the temperature and quality of the water. This very small percentage of oxygen is apparently the measure of the destructive power of the water and accounts for the fact that a limited volume of water has no serious action on iron, whereas, when this volume of water is renewed continually, especially when heated, the results are liable to be disastrous.

Corrosion of low-pressure steam lines will be found to depend principally upon the amount of oxygen which finds access to the system. The return lines naturally suffer the most and are usually the first to show failure. Condensed water, when freed from oxygen in solution, is harmless, and will not even tarnish bright iron after months of exposure; but this water, on account of its great purity, has greater capacity for solution of oxygen than the average natural water, and is, therefore, apt to be corrosive when aerated. This may be prevented in large measure by using an open feed water heater and keeping the water over 185° F.

In some cases the surface of the pipe may be protected with a film of oil deposited from the steam. In one instance it was found that mineral lubricating oil, when dropped into a pipe carrying steam under pressure, at the rate of two drops a minute, was found condensed in a uniform film in the pipe about 160 feet from the lubricator. The de-aeration of water through plants designed for that purpose should, at moderate expense, increase the life of some piping systems four or five times.—("Practical Engineer.")

KOREA BEER IMPORTS. The imports of beer into Chosen, Korea, have decreased from a value of \$222,382 in 1914 to \$207,891 in 1915. During the latter year the imports of beer from Japan were valued at \$205,410, from the United States at \$2,158, and from Great Britain at \$323.

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

C. H. F. The best way in which to answer you question is to deal with it broadly and on general lines. Let a strong, perfectly healthy and highly nitrogenous, but somewhat slow and sluggish yeast, be transplanted from all-malt wort into worts that contain much fermentable added sugar, but comparatively little nitrogen; the yeast will exhibit very vigorous and extremely healthy development and it will soon lose its sluggish character. Let the conditions of this experiment be reversed and concurrent opposite results will be obtained. If the fermenting wort be aerated, there will be an increase in the multiplication of the yeast and a decrease in the percentage of nitrogen in the crop of yeast produced.

C. J. W. We are glad of this opportunity to state in reply to your inquiry that, while we have always been strong advocates for the use of suitable quantities of malt adjuncts on perfectly defensible, legitimate, and scientific grounds, we are against their use in any excessive quantities. In the case of raw grain, especially, there is liability to defective gelatinization of the raw starches and a tendency towards agglutination of the mash particles with consequent "set" mashes, or very faulty drainage. This is also accompanied by an inevitable lowering of the food value of the pabulum and a subsequent degeneration of the yeast. It almost invariably occurs that the difficulty between good and poor beers may be traced chiefly to the selection and the blending of the materials; the proportions in which the malt and adjuncts are used and the methods of brewing which are applied to them.

H. R. It would be very difficult to explain to you in this column all the necessary details that would enable you to form conclusive opinions in locating the brewing losses; but some of them may, and doubtless do, occur in the brew-house and are due to faulty manipulation of the brewing materials. A far greater part of the loss occurs after the beer has reached the fermenting vats and while it is on its way through the brewery from one vessel to another towards its final destination—the trade packages and loading platform. If you will allow us to make a suggestion—it is that you call in the assistance of an expert brewery chemist, who will save you an immense amount of unnecessary work, hasten the arrival of exact results, and thereby effect material financial savings.

O. G. S. Both your samples of beer have a distinctly harsh, after-bitter taste and both exhibit also a rather objectionable odor. If the information you give us concerning the materials you have been using embody actual facts, we cannot ascribe the bad qualities of the beer either to the malt or the malt adjuncts, or to the hops. Under the forcing test, both these samples develop copious growths of wild yeasts and it is to the action of these organisms that we attribute the defective qualities of your products. It seems to us a matter of great difficulty to remedy such a condition as this by correspondence and it would certainly take up too much time. We, therefore,

recommend you to engage the services of an expert brewing technologist, preferably one that has a laboratory in your vicinity. In any event we shall be glad to hear from you again and to give you any assistance in our power.

H. J. P. We have already endeavored to explain on several occasions that this column is not intended for the purpose of carrying on a continued controversy on any subject; it is devoted to the benefits of subscribers who desire to obtain our unbiased opinion on technical matters connected with brewing, and we of course can only give such opinions as are dictated by our own understanding and point of view. Having made this statement, we refer you to our former answer to your original question and maintain that there are still a number of brewers who are not familiar with the meaning of analytical terms and who invariably request their consulting chemist to make such comments on the character and general qualities of materials and products submitted to him for analysis as his experience and general knowledge may warrant.

C. W. L. Your experience with the sugar kräusen is quite common. It would have been better if you had added the yeast at 50° F. and mixed it with the beer in the chip cask after about 12 hours, taking care to keep it thoroughly stirred up in order to avoid settlement of the yeast. It is most probable that your heavy kräusen solution settled on the bottom of the chip cask and did not mix with the ruh beer, so that the yeast did not do any work from lack of food.

In reply to your second question, we should commence cold, go up to 48 R. in about 1 hour, keep at that temperature for about 30 minutes, and then cool back by displacement of hot by cold water.

F. H. W. We cannot advise you to change the nature of your brewing materials and we most emphatically protest against your suggestion of lowering your present original gravities. It is no doubt true that the present state of affairs is very aggravating, but you have at least the satisfaction of knowing that all your colleagues throughout the country are in exactly the same unfortunate situation as yourselves. Now is the time for you to give some heed to the advice we have so often given in this column: look after the smaller details of your brewing processes; try to save what you have heretofore wasted; try to obtain more yield out of your materials; go more thoroughly into your labor bills, and especially your selling expenses. In other words, investigate and try to adopt efficient business methods which have long since been generally accepted in the operation of all other large industries.

R. N. W. The whole question depends not so much on the amount as upon the nature of your species of *Sarcina* with which your beers continue to be infected. You should have your entire plant thoroughly looked over by a fermentation expert, who should take samples from all possible points and submit them to biological examination. In the meantime, we recommend a change of yeast; scrupulous cleanliness; prevention of dust; the immediate removal of spent grains and manure heaps, and the use of only first-class brewing materials. Do not keep your beer for any length of time in the ruh cellars; let them be brought into the chip cask storage with a good proportion (say 20%) of strongly hopped kräusen; work out quickly and use all the necessary care in your finishing process, especially in the filtering and racking operations. The most objectionable characteristic of your beer at the present moment is, in our opinion, its distinctly abnormal, skunky odor and its lack of stability.

— THE —

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Webb Kenyon: Ouch!

The Supreme Court of the United States, by a vote of 7 against 2, has affirmed the constitutionality of the Webb-Kenyon law by which the few pastors and agitators who bulldozed Congress into passing it over the veto of President Taft hope to enforce Prohibition in the States so far "conquered" by them.

This is as it ought to be.

State legislatures pass laws, and Congress passes other laws to enable State administrations to enforce the laws handed over to them for that very purpose. If the men, who produce beverages of which they know that the masses of the people want to drink them, had exerted their political influence and persuasion in favor of passing State laws for the protection of their industries as well as for complying with the desires and tastes of the masses of the people, they would certainly expect Congress to see to it that these laws were not nullified by the intrigues of persons whose vanishing moral and economic power drives them to desperately attempt to guard their individual interests.

However, in the case of this Webb-Kenyon law by which the untrammelled trade in certain commodities is to be prevented, it appears that its originators have made a miscalculation. The argument advanced by the Prohibitionists is that alcoholic drinks are detrimental to the physical, economic and mental welfare of the masses. Therefore, the manufacture and sale of such drinks should be prevented. Very well. Now let them enforce the Webb-Kenyon law. And what will be the result? The people who are prevented from obtaining spirits, wine and beer will soon demand that the disagreeable law be repealed. And this will be done by Congress. The people will elect men of whom they know that they will vote for a repeal. That is the long and short of the whole affair.

Aside from all this is the fact that the distilling trade will suffer more through the enforcement of the Webb-Kenyon law than the brewing industry because bottled spirits could be sent into "dry" territory far more easily than bottled beer, not to speak of beer in casks. The "dry" States are steeped in whiskey shipped by distillers, wholesalers and mail order houses, while beer is very hard to get there. The profits of the average brewer are not sufficient to induce him to send his product to places over two-hundred miles distant from his brewery and, therefore, he limits his trade to a radius within that distance. The brewing industry, therefore, has adapted itself to a local trade and it prospers as long as it is not destroyed by laws against brewing and selling beers, in all other respects relying upon the sanity and intelligence of the masses of the American people who, as soon as they have been reached by the brewers' campaign of enlightenment, education and organization, to protect their interests and their enjoyment of life, will ultimately sweep away all obstacles thrown upon the path of their lives as citizens of a country, which their ancestors colonized and made inhabitable through their labor and the institutions of a republic, organized for the purpose of being free and happy human beings for all time to come.

If the Webb-Kenyon law is strictly enforced by the Federal authorities, we are going to have a few hundred thousand kitchen distilleries and miniature breweries in the homes of Americans who do not wish to abstain from consuming beverages containing alcohol.

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

No Use Trying.

While there is life, there is hope. The Prohibition party still lives, as attested by the vote of 225,101 cast for their last year's presidential candidate. So they keep on hoping. That is to say the few pastors and lopsided politicians, who hope to boost themselves into the government of the United States by trying to make the people of this country believe that it and they will go to the dogs unless they vote the Prohibition ticket.

But they hope in vain. They might know from history that the men who ever advocated political, social, economic, or even religious reforms, never profited themselves by doing so. The founder of the Christian religion, according to the writers of the Hebrew bible, was crucified. And so were many of his disciples and followers. Those who came after them were the real beneficiaries of the fine precepts of the Christian pioneers. But they had thrown those precepts over board and exerted a reign of personal power for their private interests. The men who advocated the Reformation did not profit by their martyrdom. They remained poor and obscure, while the emperors, kings and electors who emancipated themselves from the domination of the Roman Pope reaped the harvest sprung from the seeds the reformers had sown. All of our early inventors and discoverers of new processes have remained poor, while the ones possessing the economic power to exploit the new inventions and discoveries reveled in wealth and luxury. And so it happens in our days to the social reformers who, upon the strength of their arguments advocating universal co-operation, expected to build up an all-sweeping political party, are now witnessing a universal scramble by already existing political organizations to avail themselves of the new doctrine in order to maintain their own supremacy. The early social teachers are brushed aside and their memory will soon be forgotten.

The Prohibitionists do not fare any better. The Anti-Saloon League is superseding them. As a political party the Prohibitionists have never accomplished anything. If some States have adopted Prohibition, it has not benefited the theologians and political "outs" who first advocated Prohibition. The professional "ins" are in the saddle in Kansas, Maine, North Dakota and every other State that now has Prohibition amendments tacked to its constitution.

For this reason it will be in vain that the leaders of the Prohibition party gathered in Chicago last month to devise means and ways how to make their political machinery work toward yielding individual profits to its constructors. They have adopted a cumbersome set of rules and regulations how to carry on their propaganda and thereby induce the masses of the people to vote for the Prohibition ticket, but there will be no change. The agitators are back numbers, moss is growing on their backs. They will never overthrow the machines of the

Democratic or the Republican party, nor will they succeed in compelling either of these parties to adopt the Prohibition program. If there is to be national Prohibition in this country, which we do not believe that it will, it will not come through the machinery of the present political Prohibition party.

Just now the professional Prohibitionists are intoxicated with the "power" they believe to possess. But when they shall attempt to apply it to the American people in general, the masses will wake up to the realization that the present-day paid and amateur "reformer," working for personal gain under the cloak of religious and moral uplift, is threatening their personal liberty, and then the great and final reckoning will stop the ravages of the fanatics forever and a day.

After the recent election campaign it was reported from Battle Creek, Mich., that a member of the trade, Leopold Warstein, had contributed \$50 to the Calhoun Dry Association, to make Michigan "dry." We do not know Mr. Warstein. May be he sells whiskey and hopes to increase his sales if Michigan should become a Prohibition State. At any rate, the trade should take Mr. Warstein in hand and get rid of him. Anyone who assists the enemy is a traitor to the trade and he should not be tolerated in its ranks.

The United States Supreme Court's ruling that the Webb-Kenyon law is constitutional, should make all attempts to pass a nation-wide Prohibition bill entirely superfluous. At least any intelligent and half-ways decent member of Congress ought to comprehend this, aside from the fact that it would be outrageous to make the great populous States "dry" at the behest of those having small, rural and parson-led populations, and at that by an undemocratic, unfair process, through the votes of legislative and cowardly politicians who fear to lose their seats unless they obey the bulldozing dictates of their local "reverends" and their credulous, and therefore, easily misled followers.

Eleven persons were fined \$1,876.99 each by Supreme Court Justice Cohalan in New York City three weeks ago for alleged violation of the excise law, detectives of the State Department of Excise having testified that in each of the respective saloons they bought a glass of beer on a certain Sunday. The law should be upheld. If that is possible. But why punish only a few poor devils who, to make a living for their families, sell a few glasses of beer during forbidden hours? For, it is a fact that the people fined by Judge Cohalan, were all poor little saloonkeepers and among them were four women, presumably widows. We very seldom hear of wealthy and politically influential persons being convicted of, and punished for violating any laws, excise or any other.

Lynching in 1916.

According to statistics collected by the Tuskegee Institute, Tuskegee, Ala., fifty-four persons were lynched in the United States last year, among them fifty colored people, while during the preceding year the number of murders perpetrated by lynching mobs was sixty-seven. The lynching last year was done in Alabama, Arkansas, Florida, Georgia, Kansas, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee and Texas.

Of these fourteen States, ten are Prohibition territory and for this reason we have heard and seen people and newspapers denounce Prohibition as being the cause of mob law. The denouncers should stand corrected. It is not Prohibition that makes men commit murder. Lynching is done in parts of this country where education and enlightenment have not yet succeeded in fostering civilization and all other notions of humane conduct. And it is just in such communities that the false teachings of prevaricating theologians and wily, jobless politicians fall upon fertile soil. The more backward, uninformed and, therefore, brutal a population be, the readier it gulps down anything anybody who seems to be a little better instructed may be teaching in public.

Lynching is no more brought about by Prohibition than the crimes of which some of our uninformed contemporaries insist that they were not caused by drinking. Crimes are the consequence of inherited, ungovernable temper and bestiality, and drunkenness goes with criminality, but it does not cause the latter.

Knock-Down Argument for Rittenhouse.

We herewith thank the New York "Evening Post" for rapping Mr. E. E. Rittenhouse over the knuckles for saying at a recent meeting of the Association of Life Insurance Presidents in New York: "The average American has ignored the fact that the injurious effects of alcohol, nicotine, caffeine, and similar "bracers" differ only in degree from those of opium, morphine, cocaine, heroin, and other powerful and deadly narcotics. He has, therefore, increased his annual consumption of alcoholic drinks from 6.4 to 19.8 gallons (per capita) since 1860." To which the "Evening Post" made the pert and telling rejoinder: "Now, Mr. Rittenhouse must know that in 1860 beer-drinking was almost unknown in this country, outside of a small fraction of the population, while now it constitutes an overwhelmingly large proportion of the total consumption; and yet he gives no warning whatever to his audience that the tripled consumption of *alcoholic drinks* does not mean a tripled consumption of *alcohol*. Whether much beer is worse for the kidneys than a little whiskey, we cannot undertake to say; but that a little whiskey is capable of doing far more general harm than a considerable amount of beer is quite certain. What sort of intelligence does a person assume in his audience if he expects it to be impressed with a statement so completely ignoring a vital element in the case?"

"Nuf said"—we need only add that, so far, Mr. Rittenhouse has kept mum. May be he *cannot* demolish the "Evening Post's" magnificent argument?

As the Webb-Kenyon law now has been declared constitutional, a lot of hypocrisy will henceforth be squeezed out of the professional Prohibition business.

Another Source of Merriment "Gone Dry."

Poor little Ferguson! He is down and out, and with him that amusing little Prohibition squawker, "The Vindicator," of Franklin, in darkest Venango County, Pa. They have squawked their last: "With this number, 'The Vindicator' terminates its existence and the unexpired subscriptions of this paper will be completed by the 'National Enquirer,' published at Indianapolis by the Enquirer Publishing Company, with the Hon. J. Frank Hanly as editor-in-chief and the Hon. Oliver W. Stewart as associate editor. This action is taken by the publishers of 'The Vindicator' after long and mature deliberation and because of their profound conviction that the present situation in regard to Prohibition papers can be continued only with the gravest loss to all concerned, including the Prohibition party as a whole."

Thus Ferguson on December 29th, 1916. We shall miss him sorely, because we have lost a source of merriment which, every week, for a number of years, has afforded us a few moments of relaxation from arduous toil when we had the pleasure of reading the funny stuff which the late "editor" used to scatter through the ever decreasing number of pages of the wonderful "Vindicator" that failed to vindicate. R. I. P. "Let her rip," as the unacademic Irishman translated the familiar inscription upon the tombstone of the wife of one of his friends.

This is not the first time that poor little Ferguson has written the obituary of a Prohibition paper. He has buried every one of those with which he was connected. But this time it will probably be the last time that he will have a chance to be an "editor."

"The Vindicator" and Ferguson were dropped by the Prohibitionists, "for the good of the cause." Ferguson was too vitriolic, too coarse, too ignorant, too vindictive. No "organ" of any political organization can live if its editor is brutal, stubborn, uneducated, reckless in assertion and weak in defense. Vituperation in place of argument does not result in the making of converts to any cause and of this the Prohibitionists became aware the longer they supported "The Vindicator."

As to its successor, the "National Enquirer," to the subscription list of which the "10,000" readers of "The Vindicator" have been added, thus "about doubling" the "Enquirer's" list, we bespeak for it the benevolent interest which we bear toward all publications the object of which is the destruction of the American brewing industry, for the benefit of a few desperate theologians, down-and-out politicians, and their uninformed dupes. We know that their object will not be attained. The national and popular beverage of the American people is beer, and they will have it, as the Germans, English, Hollanders, Danes, Belgians and Frenchmen will have their beer, whether or not law-making and time-serving politicians are passing laws and ordinances designed to prevent the masses from obtaining the beverage that their palate prefers.

Drunkenness, desertion and unemployment are trivial elements in producing poverty, by comparison with sickness as the principal cause of misery in New York City. This is reported by the Manhattan Association for Improving the Condition of the Poor, whose agents, careful and impartial investigators, are thus proving that the prohibition agitators, who for selfish reasons attribute the phenomenon of poverty principally to "drink," are liars.

Alcohol to Beat the Egg Trust?

Professor Raymond Peal, of the Maine State Agricultural Experimental Station has made a series of experiments for the purpose of ascertaining the effects of alcohol upon the animal organism and the results recently published by him indicate that the animals with which he had experimented, gained in vitality, quality and weight. From this it may be inferred that, if human beings whose bodies are composed of the same substances as the bodies of animals, would only use alcohol in a rational manner, they also would thereby gain, physically and otherwise.

So much for the general deductions drawn from Professor Pearl's experiments.

Another deduction may lead us to means and ways of reducing the much-complained-of high cost of living at least in so far as the cost of eggs is concerned. If people, living in a big city—and for all that even in many remote country districts—want real fresh eggs, they have to pay 70-80 cents a dozen. Refrigerated eggs cost 50-60 a dozen. Why? Because some men have bought millions and millions of cases of eggs when they were cheap, held them until hens stopped laying and then asked outrageous prices for their stored-up commodity.

If Professor Pearl's experiments should, sooner or later, find practical application, we may, some time, have hens that will lay eggs not only all the year round, but proportionately many more eggs than the hens to which Professor Pearl's methods are not being applied.

And what did the Professor do? He simply fed alcohol to a large number of chickens. Not liquid alcohol. He let the birds breathe a certain amount of alcohol vapors with which he filled his chicken coop. In all other respects the Professor's chickens were treated and fed like all other chickens. And the result was that the alcoholic chickens were more tenacious of life by 5 per cent. than ordinary chickens; they were superior in every way to chickens that never smelt alcohol; they were heavier and larger and they laid more eggs, laying regularly, in winter and in summer.

The Professor experimented with numerous generations of chickens, all raised with an addition of evaporated alcohol and every new generation excelled the preceding one in quality, quantity of output and resistance to the effects of alcohol.

The Professor's explanation of the phenomenon observed by him? Why it simply is this: The germ cells of which the animal body is composed become more vigorous, healthy and active when its metabolism is accelerated and invigorated by moderately dosing it with alcohol.

And now let the Prohibitionists rant and rave and call Professor Pearl a "liar" and an "impostor." What else can they do when discussing the results obtained from his scientific research?

Since the Webb-Kenyon law is henceforth to be enforced in the "dry" States, the latter have no longer an excuse for trying to force the big industrial "wet" States into the Prohibition column.

Michigan should not be permitted to go "dry" next year. There is time enough to have the fool vote by which the breweries of that State are to be destroyed, reconsidered. If the trade is really determined to assert itself in Michigan, the result will be to keep matters in that important State in statu quo.

Who Wants to Get Rich Quick?

The "North American Wine and Spirit Journal," published in Boston, recently said: "Greedy, despicable retailers have, with the connivance of greedy, get-rich-quick brewers who have financed them, lent themselves to the perpetration of frauds upon the consuming public, and this has entailed serious losses upon not only upright brewers of good materials but upon honest retailers who handle high class goods as well". If this is so, brother, why not mention the names of the alleged sinners. And it might also be instructive to learn whether or not there are some "greedy, get-rich-quick" distillers who, hoping to profit thereby, do all they can to advance the cause of Prohibition?

We have often heard it being whispered about that many whiskey people are contributing large sums of money to the Prohibitionists' campaign funds. Perhaps our Boston Wine and Spirit contemporary is better informed upon the subject than we are?

As far as the brewers are concerned, we know not one of them employing "greedy get-rich-quick" methods.

The cause awaits a statesman.—*Prohibition organ.*

There are no statesmen nowadays. And if there were any, not one of them would make a fool of himself by heading the Prohibition party!

Boston has been kept in the "wet" column by the efforts of the trade in spite of "Billy" Sunday's rantings and thunderings. Is New York City to follow suit? You all know that "Billy" will be trying to do to New York what he could not do to Boston. He is to open his foul mouth in the Metropolis next April.

Senator Reed recently pictured conditions in Kansas as there being "more drunks to the square inch in that State than in a State where booze is licensed." We knew this for some time. But will Kansas *now* be good, when we have the Webb-Kenyon law in full blast? Or will the wily Kansan find means and ways to smuggle in his "booze" anyhow?

Keep your eye on that new-fangled "Non-Partisan" Farmers' League which, originating in "dry" North Dakota, is about to sweep over the Western States to compel them to institute State Socialism for the benefit of its members and, incidentally, make the States which they have selected as their victims, as "dry" as North Dakota itself!

Is the Secretary of the United States Treasury prepared to appoint an army of spies and eavesdroppers whom he would need to enforce the Webb-Kenyon law? And are the members of Congress ready to appropriate the millions of dollars which would be required to pay those spies and eavesdroppers for sticking their noses into everybody's business?

In view of the results of the elections on November 7th, 1916, and the decision of the United States Supreme Court upholding the constitutionality of the Webb-Kenyon law, redoubled efforts should be made by the trade to obtain laws through the enactment of which persons whose property or occupation has been injured or taken from them by Prohibition laws, should be compensated by the State or community causing such injury or destruction.

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

WASHINGTON, D. C. As was predicted and fully expected, the Senate, by a vote of 55 to 32, passed the Sheppard bill for prohibition in the District of Columbia. From and after November 1st, 1917, the saloons of the District will be closed if the Sheppard bill is adopted by the House, which is not at all likely.

In the Senate the Sheppard bill was the subject of a stormy debate. It culminated when, for the second time, the amendment of Senator Underwood, of Alabama, providing for a referendum of the question to the residents of Washington, was lost by a tie vote. Senator Underwood's amendment received 43 votes and there were 43 votes against it, which meant that it was lost. The proponents of the Underwood referendum were grievously disappointed by the absence of Vice-President Marshall, who, in the event of the tie, had a right to vote. It is certain that Mr. Marshall would have voted for the referendum, as he had expressed himself in favor of it. The Sheppard bill does not prevent bringing liquor into the District of Columbia for personal use, but the sale or gift of any liquor is liable to punishment by a fine of from \$300 to \$10,000, and imprisonment of not less than thirty days nor more than a year. Provision is made for shipment of alcoholic beverages into the District, providing the consignee duly registers and receipts for the same with a District functionary.

At this writing the Sheppard bill is in the hands of the House committee on the District of Columbia, where it is likely to stay.

The first thing which knocked the breath out of the prohibition enthusiasts was the fact that some person had made a bad blunder, and the bill came to the House with a wrong date—1916 instead of 1917.

The next day after the bill was referred to the House committee on the District of Columbia, Congressman Cary, of Milwaukee, introduced a resolution providing for an advisory referendum to the voters of the District. While eight questions affecting the District are named as proper for residents of the District to pass upon by ballot, the real purpose of the measure is to get a vote on "Do you favor prohibition of the liquor traffic in the District of Columbia?"

Representative Cary says he is prepared to fight the Sheppard bill tooth and nail unless it carries a referendum. "It is outrageous to cram this legislation down the throats of the people without giving them a chance to say whether they want it," he said. "It merely shows how weak the cause of the prohibitionists is, and how certain they are that the majority of the people would reject prohibition." All residents of the District over 21, without regard to sex, are qualified to vote on the following questions: Do you recommend that Congress grant to the District of Columbia a model charter establishing the right of suffrage in said District? Do you desire that the District shall be represented in Congress by a delegate? Do you favor government ownership of telephone in the District? Do you favor prohibition of the liquor traffic in the District of Columbia? Do you favor equal suffrage for men and women of the District? Do you favor the initiative and referendum

for the District? Do you favor public ownership of street car lines in the District?

A careful poll of the House District of Columbia committee showed that the majority is radically opposed to the Sheppard bill as it stands. There is a considerable sentiment in the committee for a referendum. The referendum advocates, in conjunction with those opposed to prohibition in the District, are practically sure to be in control of the committee, and they will either have the referendum or sidetrack the bill. Chairman Ben Johnson, of Kentucky, is not personally in favor of prohibition in the District or anywhere else. He announces that before the bill leaves the committee, he will insist upon hearings. The belief is growing in the committee that both sides should be called upon to present arguments, and that it would be absolutely unfair to vote on the bill without an attempt to gain an idea of local sentiment regarding a saloonless city. The prohibitionists are naturally much agitated over the proposal to hold hearings. They have rightly figured out that this would not only end the chances of the bill becoming law, but would positively keep it in committee so long that it could not be acted on by the House before the 4th of March. It is certain, however, that several members of the committee will insist that no summary action be taken in that committee without giving the people of Washington an opportunity to be heard.

Aside from the District of Columbia measure, the Senate, on January 15, passed the Bankhead bill, intended to close the mails to liquor advertising, when such advertising is to go into dry states. Practically, it is expected to shut liquor advertising out of prohibition states. While the Senate was acting on the Bankhead bill, the House post office committee favorably reported on the Randall bill, which contains provisions similar to the Bankhead bill. This bill, however, was immediately killed by a point of order.

Senator Sheppard has announced that it will be useless to bring up the constitutional amendment for national prohibition at this session, as the vote on the District of Columbia bill shows it could not possibly get the two-thirds vote necessary to submit it to the states.

It is almost a certainty that should any prohibition bill pass Congress (either District of Columbia or national), President Wilson will veto it. Here are his sentiments: "I am a thorough believer in local self-government, and believe that every self-governing community which constitutes a social unit should have the right to control the matter of regulating or withholding licenses."

On January 23rd the House Committee on Territories reported favorably the Wickersham bill by which it is intended to make Alaska and Hawaii "bone-dry."

On January 8th, the United States Supreme Court rendered a decision upholding the constitutionality of the Webb-Kenyon law, prohibiting the shipment in interstate traffic of liquor in violation of the laws of states where liquor is forbidden to be brought in. The case came up on

the refusal of the Western Maryland Railroad and the American Express Company to accept for shipment into West Virginia certain liquor shipments. The decision of the court was not unanimous, Justices Holmes, Vandevanter and McReynolds dissenting.

Secretary of the Treasury McAdoo has suggested that the national deficit be covered, in part, by an additional Internal Revenue tax of 25 cents per barrel of beer, which would yield \$14,000,000 per year, and by 15 cents more on each gallon of spirits, which would aggregate about \$20,000,000.

Commissioner of Internal Revenue Osborn, to whom it was suggested that the U. S. Supreme Court ought to prevent him from issuing licenses to dealers in "dry" territory, has published a letter in which he states that the government does not issue licenses to break any State laws, as the so-called "licenses" issued by him are not licenses at all, but merely receipts, acknowledging the payment of an occupation tax, and the act of Congress under which they are issued explicitly provided that such a payment shall not be held to exempt any person from prosecution under State laws, and does not authorize either the commencement or the continuance of any trade or business prohibited by State or municipal laws. He says, furthermore, that in "dry" territory this occupation tax is collected from only those who are specifically excepted from the operation of the local prohibition law and those who are lawbreakers. As regards the latter, the Commissioner's explanation is that, the name and address of every person paying this tax being conspicuously posted in the office of the local Collector, and as everybody who chooses can ask for and get a copy of these names and addresses, if they are not so obtained and if they are not used by the local prosecution officials, it is only because there does not exist in the community concerned the degree of support for the prohibiting law that is required for effective enforcement.

It is rumored that Commissioner Osborn intends to resign after March 4th next.

JUNEAU, ALASKA. The Alaska Legislature, which is to meet March 4th, will have to discuss the question whether it has power to enact a law to put into effect Prohibition, adopted by Referendum and to become operative January 1st, 1918. Constitutional lawyers contend that only Congress is competent to pass upon the question.

LITTLE ROCK, ARK. Both houses of the Arkansas Legislature have passed a bill prohibiting the shipment of "liquor" into this State, except for medical and Sacramental purposes.

SACRAMENTO, CAL. There are bills before the California Legislature contemplating the creation of a commission which is to be empowered to revoke "liquor" licenses.

BRIDGEPORT, CONN. State-wide Prohibition bills have been introduced in both houses of the Connecticut Legislature; also bills to raise "liquor" licenses to \$600 and \$1,000.

DOVER, DEL. Governor John G. Townsend, Jr., in his inaugural address, has advised the Delaware Legislature to pass bills for rigidly enforcing Local Option.

ATLANTA, GA. Senator Wohlwender, of Muscogee, has introduced a bill in the Georgia Senate to tax every "liquor" shipment into this State five dollars. He says he wants to test the sincerity of the Prohibitionists.

SPRINGFIELD, ILL. Governor Frank O. Lowden may be trusted to veto State-wide Prohibition for Illinois, as contemplated by various bills now before the Legislature of this State.

INDIANAPOLIS, IND. The "Dry Federation of Indiana" has State-wide Prohibition bills before the Indiana Legislature. They want the measure to become operative on September 1st, 1918, even druggists to be prevented to sell "liquor." Governor James P. Goodrich has not mentioned Prohibition in his message to the Legislature, but Wm. J. Bryan has addressed the members, exhorting them to make the citizens of the Hoosier State swallow his quack nostrum.

By a vote of 70 to 28, on January 25th, the House passed a bill prohibiting the sale, manufacture, distribution or advertisement of liquor in the State after January 1st, 1918.

DES MOINES, IOWA. Senator Whitmore has introduced a bill in the Iowa Legislature to prohibit personal shipments of liquor and barring liquor advertisements of any kind within the limits of the State. If Whitmore should be successful, Iowans will have to travel outside of the State to obtain "liquor," and not more than 2 quarts of spirits and one box of bottled beer at that. The trade had a bill presented to so amend the law that beer may be produced and shipped to consumers within the State, the same as brewers outside of Iowa are doing.

AUGUSTA, ME. As a means toward better enforcement of prohibition, Governor Carl E. Milliken in his inaugural address to the Maine Legislature has recommended the adoption of a constitutional amendment giving the Governor power to remove a sheriff for cause, after notice and hearing, and the enactment of a statute conferring the same power in the case of county attorneys.

BOSTON, MASS. Representative Bates, of Quincy, has a State-wide Prohibition bill before the Massachusetts Legislature, to make this State "dry," January 1st, 1918. On behalf of the Boston Licensing Board a bill was introduced to compel bartenders to procure a license, the Board stating: "It has been found that in many instances bartenders, in order to gain a personal following, treat customers contrary to the order of their employers. To meet this condition, the Board suggests that it might be well to license bartenders so that the real offenders may be punished."

LANSING, MICH. Several bills intended to make Prohibition effective in Michigan, to begin May 1st, 1918, are before the Legislature of this State.

ST. PAUL, MINN. Bills to provide compensation for those injured in business, or employment, by Prohibition, or Local Option, are before the Minnesota Legislature.

JACKSON, MISS. Governor Bilbo wants the Mississippi Legislature to repeal the law permitting individuals to import "liquor" for personal use in this State.

LINCOLN, NEB. The "Nebraska Dry Federation" has submitted bills to the Legislature of this State to enforce Prohibition. They provide that any peace officer in the State may arrest anyone whose breath has the odor of liquor; to prohibit Advertisements of intoxicants in any manner; prohibit the sale of flavoring extracts and "whisky tablets." It is to be made a criminal offense to tell a man where he may get a drink. Clubs, societies, organizations or any combination of persons shall not keep liquor.

It is very doubtful if the new Prohibition law can be enforced in this State, because the "wets" control the Senate and so an enforcement bill will hardly be passed this year.

TRENTON, N. J. Senator Wells has introduced the Gaunt Local Option bill in the New Jersey Senate for the third time, and it will be defeated, as were its two predecessors. Compensation bills, drawn up by counsel for the trade, will also be submitted and there is a good chance that they will be passed.

Two Local Option bills were introduced on January 22nd, and placed at the top of the Assembly's calendar.

SANTA FE, N. M. Governor De Baca has advised the New Mexico Legislature to pass a bill for submitting the Prohibition question to a referendum of the voters of this State.

ALBANY, N. Y. In his annual message to the New York Legislature Governor Whitman recommended the extension of Local Option to all cities of this State, adding, however: "The Legislature must keep in mind that any curtailment of the liquor traffic involves a reduction of the revenues of the State, and that in the event of the reduction of the number of licensed saloons, proper provision must be made to meet such reduction in revenues."

There is but little chance for the Prohibitionists and Anti-Saloon Leaguers to carry out the elaborate plans devised by them, as the committees to which "liquor" bills are usually referred, mostly have majorities opposed to radically changing the present laws regulating the liquor traffic. The Assembly Excise Committee is composed as follows: Murphy, of Suffolk; Wiltsie, of Cortland; Hopkins, of Westchester; Wheeler, of Ontario; Fullagar, of Yates; Witter, of Tioga; McGinnies, of Chautauqua; McNab, of Schenectady; Michael, of Schuyler; Quackenbush, of Steuben; McCue, of New York; McKeon, of Kings; McDonald, of New York.

The trade is represented at the Capitol by William H. Hirsh, counsel for the N. Y. State Brewers' Association and also for the Lager Beer Brewers' Board of Trade of New York City and vicinity, and he will cooperate with others in watching legislation and opposing all bills that may threaten the interests of the trade.

The principal Local Option bill so far introduced is that drawn by Senator William H. Hill, of Johnson City, Broome County, providing that if 25 per cent. of the voters in any Aldermanic District, 60 days before election, submit to the Secretary of State a written request for a vote on license or no license, the question shall be voted upon on Election Day, and if the majority decide against license, the question shall not be resubmitted within the next 23 months after October 1st of the year following the election. Under this bill the possession of liquor save in private houses inside of prohibition territory is made illegal. If it be sold under a physician's prescription then that prescription must be in writing for a person who is a bona fide patient of the physician.

Assemblyman E. C. Davis, of Fonda, Montgomery County, has introduced a State-wide Prohibition bill, stating: "The liquor dealers, brewers and saloon owners in my district asked me to prepare the bill. They told me that they believed prohibition was coming and that they would rather have the question settled now, allowing them two years to get out of business, than to have it dragging along for two years." As soon as this had been reported we made inquiries among Mr. Davis constituents, with the result that we could not find any one confirming his statement and Harry F. Bowler, the well-known brewer of Amsterdam wrote us:

In reply to your letter of January 12th, beg to state that the information contained in the clipping enclosed is not true in regard to any request that we made to have any such bill introduced in the Assembly. Also wish to further state that we know absolutely nothing of any such bill until we read in the different papers that such a bill had been introduced.

and W. J. Roser, vice-president of the Bierbauer Brewing Co., Canajoharie, N. Y., wrote:

In reply to your letter of the 12th regarding Assemblyman Davis's Bill would say that we have delayed answering you as

we tried to get in touch with Mr. Davis and find out where he got his authority in using the name of the brewers and liquor dealers who he claimed requested him to prepare this bill but have been unable to do so. We are not in favor of his bill and will oppose it to the best of our ability.

Other State-wide Prohibition bills providing for a constitutional amendment have been introduced by Assemblymen A. Carson, of Yates and Walter S. McNab, of Schenectady, the amendment to take effect in 1920.

On January 25th, Anderson, the Anti-Saloon League rowdy, who appears to be convinced that neither Prohibition nor Local Option will be passed this year, wrote a brutal and vitriolic letter in which he berated the lawmakers for their indifference to his insidious schemes.

Herbert L. Sisson, of Erie County, has been named by the governor to succeed the late George E. Green as State Excise Commissioner.

BISMARCK, N. D. Governor Lynn J. Frazier, who owes his election to the newly organized Farmers' Non-Partisan League, favors drastic Prohibition enforcement and all sorts of State Socialistic measures, intended to advance the interests of the farmers before those of any other class of citizens.

Governor Frazier has signed the Woman Suffrage bill, giving women in North Dakota the right to vote for all but constitutional offices after July 1st, 1917.

COLUMBUS, O. In his message to Ohio Legislature, Governor Cox has recommended that the license law be so changed as to set forward the date of issuing liquor licenses from November to May or June, and to thus remove the saloon question further from the whirlpool of politics.

OKLAHOMA CITY, OKLA. One of the newly elected members of the Oklahoma Legislature has just been convicted of bootlegging.

The House of Representatives has passed a bill making it unlawful to sell or give away cigarettes. By another bill smokers are to be made liable to arrest.

SALEM, ORE. In his message to the Oregon Legislature Governor James Withycombe has said the people of this State had decisively approved a drastic prohibition measure, and that the Legislature was in duty bound to make absolutely effective the provisions and evident intentions of that measure.

HARRISBURG, PA. Richard J. Baldwin having been elected Speaker of the House of Representatives of the Pennsylvania Legislature, the trade need not worry that its interests will be jeopardized by any newfangled fool bills to be passed in this year's session.

PIERRE, S. D. Governor Peter Norbeck has urged the South Dakota Legislature to at once pass laws to rigidly enforce Prohibition as adopted at the polls last fall, and now a bill is being discussed to "Prevent the manufacture, sale, purchase, receipt, possession, use of liquor." The bill is advocated by members of the trade because, if it were to be passed, Prohibition would become rather unpopular in South Dakota.

NASHVILLE, TENN. The Tennessee Legislature has its hands full devising plans to do away with the enormous deficit in the treasury of this State, produced by the folly of Prohibition. And in spite of all this bills have been passed prohibiting lockers and making it unlawful for any person to have intoxicating liquors intended for sale in his possession.

Governor Rye has signed four bills prohibiting Clubs from storing or dispensing "liquor"; making the smuggling into the state of "liquor" a felony; forbidding corporations

to keep "liquor" on storage for sale in the future, and making it illegal to accept orders for "liquor."

AUSTIN, TEX. Although Governor J. E. Ferguson has failed to mention Prohibition in his message to the Texas Legislature, that body has passed resolutions favoring Prohibition and Woman Suffrage.

SALT LAKE CITY, UTAH. Governor Simon Bamberger, in his message to the Utah Legislature has declared the most urgent legislation to be considered by the Assembly was the enactment of a Prohibition law.

OLYMPIA, WASH. Governor Ernest Lister has advised the State Legislature of Washington to pass an absolute Prohibition bill.

CHARLESTON, W. VA. Prohibition having bankrupted West Virginia, its legislators are now discussing a proposition to repudiate the debt of over \$12,000,000 this unfortunate State cannot pay since it fell a prey to the "reverends" and their political catspaws.

January 23rd a bill was introduced to make it a misdemeanor for any person to bring into the State more than one quart of liquor within any thirty days.

MADISON, WIS. The Wisconsin Legislature is considering a bill to compensate brewers and retailers in case this State should adopt Prohibition.

**Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc.,
Action by Civic Bodies and Others For or Against Prohibition.**

ARIZONA. Hundreds of thousands of dollars' worth of "liquor" has been stored up by people in this State to carry them over the first few months of "bone dryness" into which Arizona has now entered. Search for, and seizure of "liquor" are now a daily occurrence throughout the State, and the streets of Phoenix and other cities have been flooded with spirits and beer confiscated by the authorities and spilled into the gutters.

CALIFORNIA. The Prohibitionists are collecting funds to raise \$100,000 wherewith to pay their agitators and swamp California with lying literature during the campaign of 1917-1918.

In Eureka the "Rev." W. H. McLeod, pastor of the Eureka Baptist Church, and a fiery Prohibitionist, has skipped out, after having been charged with ravishing two girls, aged 7 and 11 years. His "brethren" excuse him, saying that a knock on the head while raiding a "blind pig" made him crazy.

COLORADO. The Denver county court, in dismissing charges against an alleged bootlegger, has held that to be valid the prosecution must allege that whiskey which a man is accused of selling or giving away had been imported into the State for the purpose of being sold or given away, and that unless there is such allegation and the State proves that the liquor was imported for this purpose, there can be no legal conviction.

GEORGIA. City Court Judge John Rourke, at Savannah, has construed the law of Georgia, limiting shipments of "liquor" that may be received for personal use, to mean that no one can receive within 30 days more than 2 quarts of whiskey or 1 gallon of wine or 48 pints of beer, and not to mean that he may receive all of these allotments or any two of them within 30 days.

"Liquor" raids are made almost daily in many Georgia cities and towns, and the confiscated "booze" is emptied into the gutters.

IDAHO. The Supreme Court of Idaho has found the Prohibition laws of this State to be conflicting and inconsistent, but held that State-wide Prohibition superseded all the other laws wherever it is inconsistent with other statutes.

Therefore, mere possession or transporting of liquor in the State of Idaho does not constitute an offense, unless it is transported for beverage purposes, even though there are other statutes which make possession or transportation in themselves offenses without the transporting being for beverage purposes.

ILLINOIS. The city council of East St. Louis has refused to raise the license for saloons. At a former meeting the vote against an ordinance raising the license to \$1,000 was voted down. Mayor Mollman has closed a number of saloons which were operated by foreigners. The Sunday closing law is being enforced since January 10th and the trade is satisfied as people now provide themselves with drink on Saturdays.

In "dry" Waukegan the tax rate is over \$1 higher now than last year.

INDIANA. Everything that can possibly be done to fight State-wide Prohibition in Indiana is now being done by the trade while the Legislature is in Session, and Prohibition speakers are ranting and distributing "literature" in cities, towns and villages.

At Bloomington over 100 indictments have been returned against alleged bootleggers.

The pure food and drug department of the state is continuing its war on the saloon free lunch. The board announced that only five saloons out of 159 inspected were classed as being in good condition.

There is considerable indignation over Vice-President Marshall being absent from the U. S. Senate when the Shepard bill was passed by a vote of 43 to 43, as Mr. Marshall's vote against it would have defeated the vicious measure.

IOWA. Arrests for intoxication are increasing at Des Moines since that city was made "dry." The number of persons found drunk in the streets in 1916 was 3,472 as against 2,956 in 1915.

In Lee county 66 persons have been indicted for violation of the Prohibition law and large amounts of "liquor" were destroyed. The kegs burned in the streets of Keokuk and Fort Madison were valued at \$250.

KANSAS. The U. S. Supreme Court has decided that it has no jurisdiction to hear an appeal from a conviction of violating the Kansas Prohibition law, making a second conviction of violating it in that State a felony.

The Kansas Supreme Court has thus defined the difference between "bootlegger" and "jointist": "A 'bootlegger' is a person who sells intoxicating liquor on the sly, but when a person establishes himself in a definite place of business, where by skilful legerdemain he can sell or pretend to sell the innocent juice of the apple as well as beer, both 'near' and 'far,' and other intoxicants, he is a 'jointist' and no longer in the class of 'bootleggerism.'"

Governor Kapper and other Prohibition politicians, seeing that Prohibition does not prohibit in Kansas, have joined the Anti-Saloon League, and yet they have been saying all this time that "the children in Kansas do not know what a saloon looks like!"

At Independence deputy sheriffs, January 15th, destroyed about \$8,000 worth of "liquor" and saloon fixtures.

KENTUCKY. Delegations from the Prohibition party, Anti-Saloon League, Y. M. C. A., C. W. T. U., Christian Endeavorers and similar organizations have met at Lexington and adopted a plan of unification and co-operation to "make the United States 'dry' in 1920," while at its annual convention held at Louisville, the National Model License League once more brought to public its scheme of "re-forming" the saloon and reducing its numbers, through-

out the country. The N. M. L. League's President, T. M. Gilmore, having challenged old "Doc" Bryan to a debate upon Prohibition, has received from that non-gentleman a coarse reply, stating that he would not debate with the representative of a "discredited private interest," whereupon Mr. Gilmore retorted: "Your naive assumption that the cause I represent is discredited and illegitimate because it has met some defeats at the polls is unjust to yourself and to every measure that you have fathered in the generation in which you have met so many rebuffs from the American people."

The annual convention of the Kentucky Labor and Anti-Prohibition League, meeting at Owensboro, January 6th, passed resolutions to create a fund from which to assist Union men thrown out of work by Prohibition.

Federal Revenue officers are scouring Central Kentucky and particularly Breathitt county for moonshiners. During the last few weeks several arrests were made and a number of illicit distilleries have been destroyed.

MAINE. Bangor and Portland have been a little "drier" of late than they generally are because sheriffs are known to be determined to enforce the Prohibition law for some time to come; also Federal officers have been making a number of raids. A few days before the unusual order of things retailers sold their stocks as fast as they could, offering seductive bargains: Beer that formerly sold for 10 to 15 cents a glass was reduced to two glasses for a nickel; gin, worth \$4 a gallon, could be taken away for \$1; wines that sold for \$2 and \$3 a quart went for 75 cents to \$1.

MARYLAND. Since Baltimore voted once more to remain wet, the members of the organized trade have strictly obeyed all rules and regulations provided in the law, among which are these newly adopted by the Board of License Commissioners: "All outer and inner doors of saloons shall be closed and locked not later than 12.15 a. m., and shall remain closed until 5 a. m.; on Sunday saloons may only be entered between 9 a. m. and noon for cleaning, icing and coaling the stoves, and then only by the licensee or his employé, and at least one door or window, opening on the street, including both the upper and lower sashes, shall be of transparent glass and unobstructed so as to permit a complete view of the interior during prohibited hours. Where part of the premises is occupied for residential purposes, separate entrances must be provided for the house and the barroom."

Officers of the Tidewater and Old Dominion Distributing Co., Inc., have been arrested by Federal officers who charge them with having shipped misbranded liquor packages out of Maryland and with selling "liquor" wholesale without the proper license, and with conspiracy. A negro, who is alleged to have hauled the barrels, also is under arrest.

MINNESOTA. Counsel for the trade have discovered official documents in Washington, D. C., showing that Chisholm and Hibbing are not within the territory embraced by the Indian treaty of 1855, under the provision of which saloons in those two towns have been closed.

NEW JERSEY. Representatives of the trade have conferred with the authorities at Newark and several other large New Jersey cities agreeing to see to it that the excise laws are strictly enforced and undesirable elements driven from the trade; free lunch is to be abandoned by members of the retailers' associations, who also have taken steps to show moving pictures demonstrating the evils of Prohibition.

Newark has lost seventeen saloons last year and in Bergen County nearly 100 hotelmen and saloon-keepers have been indicted for alleged violation of the "Bishops' law."

Sheriff Kinkead, of Hudson County, continues his agitation for the elimination of spirits from the trade, and the "Hudson Dispatch," which seconds his motion, has published a series of articles, insisting that "the sooner the brewers change their tactics and divorce their interests from whiskey interests, the sooner they will be able to see Local Option on the decline instead of increasing in strength." Chief of Police John A. McAulay, of West Hoboken, is of the same opinion; he says: "If prohibition laws would allow wines and beers, then that would be a fine step in the right direction, and then the laws would be enforced. You would also eliminate strong alcoholic drink, which is a curse to humanity."

Paterson druggists who are compelled by the local health officers to sell soda water, etc., in "individual cups," now demand that saloon-keepers be required to obey that rule also. An effort to record clerical and lay deputies attending the Episcopal Synod of New York and New Jersey sitting in Atlantic City, in favor of voluntarily abstaining from the use of liquor, was made January 11th. Discussion of the subject followed an unsuccessful attempt to sidetrack local option and secure indorsement for prohibition. Rev. Charles H. Hutchison of East Orange declared there is no prohibition sentiment in either New York or New Jersey, but there is a growing sentiment for local option.

The Manufacturers' and Merchants' Association of New Jersey, from its headquarters at 776 Broad Street, Newark, last month continued its campaign of agitation by issuing a number of new pamphlets, among them these, entitled "Poor John"—meaning "Barleycorn"—; "Within the Law," and "Is Union of Church and State Coming?"

NEW MEXICO. The decent and intelligent people of New Mexico are indignant over the action of the Supreme Court Justices of this State in joining the Santa Fe County Prohibition Organization.

NEW YORK. Over 600 saloons had to close in the State of New York as a result of the recent Local Option elections.

The New York State Brewers' Association has issued a circular calling attention to a recent declaration of the medical faculty of Johns Hopkins University saying that its members oppose the Prohibition of beer and light wines, because these beverages may be enjoyed by everyone without any detriment to health.

Supreme Court Justice Cohalan, of New York City, has fined eleven saloon-keepers, among them four women, an aggregate of nearly \$20,000 for selling one glass of beer each on a certain Sunday. Most people consider this to be an outrage without parallel in the history of excise law administration.

In his annual report General Director Bailey B. Burritt, of the Association for Improving the condition of the Poor, says that most of the destitution in New York City is due to sickness, or death, or loss of the wage earner of the family, and not to alcohol, as mendaciously asserted by leather-lunged and foul-mouthed Prohibition agitators.

When the Parkhurst Society published its annual report last week, containing the usual complaint that saloons in the Metropolis are open on Sundays, Mayor Mitchel declared he would not countenance any attempt to close the saloons, as that would mean a return to the old system of police graft, bribery and corruption.

Anderson, the fakir and State Superintendent of the N. Y. Anti-Saloon League, is charging Vanderbilt's N. Y. Central Railroad with illegally selling "liquor" in the "dry" regions of this State.

The German-Americans of New York City and vicinity have renewed their determined efforts to stave off Prohibition. In the Metropolis, former Sheriff William F. Grell is heading the movement.

The big structure where "Billy" Sunday's circus is to perform in New York City next April is now being erected, and "Billy's" free advertising campaign is in full blast. One Sunday several weeks ago, about 500 alleged "converts" came over from Philadelphia to shout Billy's praise in some hundred Protestant churches and many similar devices are being employed to make the circus pay. The Catholic clergy decently keep aloof from the farcical enterprise, many of them even advising their congregations not to join in the rumpus. One priest, Rev. Joseph H. McMahon, pastor of Our Lady of Lourdes Church, New York, before the Catholic Library Association, January 17th, delivered an address, in which he said of Sunday: "He denies the teaching of Christ, that is why we deny him. He has never built up Christianity; his work is always destructive. In his copyrighted sermons he has declared that it would be a good thing if God would wipe out the newly converted by pestilence—that the only safety for the converted lay in their instant wiping out. His preaching is the preaching of cruelty, and his revivals are undoubtedly followed in many cases by dementia in the converts. In his sermons there is not a single word of encouragement to labor, not a word against the encroachments of capital. There is simply the hateful doctrine that religion is a club over the head of labor to keep it in its place. There are good grounds for asserting that capitalists are speaking through Sunday; that they see in him an instrument to keep the workers from rising."

John Ruskin, a Prohibition agitator of Richmond Hill, is under indictment for having defrauded a woman, who helped him in his "work," of \$300.

NORTH DAKOTA. Drunkenness and violation of the State Prohibition law of North Dakota greatly increased last year in this State.

OHIO. The "Wet" and "Dry" campaign is waxing hot in Ohio, the "dry" having made plans for an agitation tour for the notorious Hobson, of Alabama, ex-Governor and "reformed" drunkard Patterson, of Tennessee, and similar "worthies." But you may be assured that the trade will not be caught napping. It never was, so far, in this State.

Recent Local Option elections resulted as follows: "Wet," Marietta, Washington County; Osborn, Green County—"Dry," Cannelville, Muskingum County; Lithopolis, Fairfield County; Port Washington, Tuscarawas County; Sabina, Clinton County; Wharton, Wyandot County.

In Cincinnati the organized trade is making an effort to stamp out "treating."

Matt Glaser, an Anti-Saloon League politician of Cincinnati, has been convicted of subornation of perjury and election frauds.

OKLAHOMA. South Coffeyville is a center for the importation of "liquor" into Oklahoma. The importers and those whom they supply are well known to the State and Federal authorities who do not move a finger to interfere with their illegal traffic.

"Billy" Sunday has been requested to come with his Prohibition circus to Tulsa, whose parsons complain that the place is steeped in whiskey.

OREGON. The Mayor of Astoria, Ore., recently said: "If a man is arrested for intoxication, and the officer doesn't take him home to his family, but takes him to jail, then the officer had better look for another job there and then."

The Portland Circuit Court has decided that Oregon has no authority to limit or prohibit citizens from manufacturing or importing alcoholic beverages for personal use.

PENNSYLVANIA. The trial for alleged "corrupt" election practices of the 72 Pennsylvania breweries, inaugurated by some sorehead politicians last year, has been laid over for the May term of the Federal Court in Pittsburgh.

There is a powerful movement in Philadelphia to take the judges of the local courts out of politics, because they frequently interfere with the trade, not because that would be just and right, but because the judges want to "hold down" their jobs indefinitely.

The January Bulletin of the Pennsylvania State Brewers' Association, circulated as a digest of information from their publicity and educational department, contained a number of highly interesting and enlightening articles, among them:

"'No License' Judge Enlightened in His Own Court"; "Prohibition History Proves it Sorry Experience"; "Popular Vote Against a 'Dry' Law"; "Bryan and His 'Dry' Schemes"; "Prohibitionist Raps 'Dry' Paper"; "Drunk Is No Excuse for Crime."

SOUTH CAROLINA. Express companies and mail-order houses are shipping immense quantities of "booze" into South Carolina. The Christmas and New Year's business was valued at several millions of dollars.

TENNESSEE. Chancellors Haskell and Fentris, of Memphis, have held that a club, although organized for the primary purpose of dispensing liquors to its members, is not necessarily unlawful.

TEXAS. The State authorities of Texas have confiscated the charter of the Lone Star Brewing Co., San Antonio, of the American Brewing Association, Houston, and several other Texas brewery companies, for alleged contributions to the campaign fund of candidates opposing Prohibition, but they have all been reorganized and they are doing business just as formerly.

Austin and Travis county defeated Prohibition by a majority of 567 votes.

UTAH. "Dry" territory in Utah shows three times as many arrests for juvenile intoxication as does "wet." So says the governor of this State.

At Ogden most of the retail and wholesale "liquor" licenses have been renewed, among them that of the Becker Brewing & Malting Co.

The municipality of Salt Lake City are puzzled how to find \$500,000 which they will lose when Prohibition is to be made legal next August.

WASHINGTON. The Supreme Court of this State has confirmed the judgment of a Tacoma writer who was convicted of having libeled the memory of George Washington by stating that the "father of this country" was a distiller and drinker of whiskey. It's a pity that the Washington courts cannot get back at the old Hebrew writers who report in their Bible all about the doings of the venerable Noah, David, Solomon and other ancient and highly pious Jews—because, as Mark Twain would say—"he is dead."

Sheriff Lee Barnes of Walla Walla has forbidden dispensers of soft drinks to mix Jamaica ginger with the beverages they sell to unsophisticated mortals.

The Washington State Supreme Court has ruled that "near beer" may be manufactured and sold in this State.

WEST VIRGINIA. The Prohibition law of West Virginia will be more stringently enforced than ever before, as a result of the decision of the Supreme Court on January

8th, according to a statement issued by Fred O. Blue, State Tax Commissioner, who says:

"For two years and a half this State has been restrained by reason of the pending suits and the questions involved therein. From this time on more vigorous efforts will be made, and it is now up to the Legislature to enact laws as will fully carry into effect the wishes of the people of this State, as expressed by them in the ratification of the Prohibition amendment in 1912. This decision will mark a change in the legislation of all States. No longer can the Legislature of any State refuse to legislate upon the ground that such legislation may involve Federal objections, for the reason that all of these objections are now swept away."

The office of the Grafton brewery has been turned into a court-room by the newly elected C. E. De Moss.

WISCONSIN. Superior will vote on license April 3rd, the issue being brought upon the initiative of the saloon men. Plans for decreasing the number of saloons from 160 to less than half that total and more than doubling the \$500 license fee are being formulated for the ordinance to be initiated.

Rhineland is also convulsed by a "dry" and "wet" campaign.

From L. E. McKinnon, general manager of the Northern Brewing Co., Superior, we have the following: "Our city having voted 'no license' at the spring election on April 5th, 1916, our City became 'dry' on July 1st, last, since which time our brewery has been closed and boarded up, and the crew discharged. However, we are going to have a vote on the question again on the coming April 3rd, and we feel satisfied that our city is going to go 'wet' again, as the people are disgusted with the present conditions, both business and moral, and in view of the fact that we will only have about 80 saloons instead of 147 as we had before going 'dry' the sentiment has changed considerably. Should we go back to the 'wet' régime, our Brewery will open up directly after April 3rd, in order to take care of business on July 1st, when retail licenses will be granted."

The Wisconsin Brewers' Association has formulated plans for "cleaning up the saloon."

CANADA. Carrying water on both shoulders the government of Nova Scotia, to oblige the Antis, has passed Prohibition laws and now, to oblige those opposed to them, does not enforce them.

Premier Borden, driven hard by the teetotalers, has promised them to consider absolute Prohibition to be enacted and enforced now and for three years after the European war is over.

Vancouver, B. C., is to become "dry" on July 1st, 1917.

ARGENTINE REPUBLIC. A Prohibition League has been formed at Buenos Ayres to secure laws restricting the sale, manufacture, and introduction from abroad of spirituous liquors.

AUSTRALIA. In the Legislative Assembly of West Australia a bill proposing a liquor referendum has been defeated on second reading by a vote of 24 against 18.

"IT PAYS TO ADVERTISE. Advertising standardizes merchandise. It increases production and pays for itself out of reduced operating costs. It guarantees a certain take-up for output. When times are hard retailers are conservative and invest with caution. Money is safest placed in wares of reputation. Therefore the last line of business to suffer from depression is the advertised line. The cost of publicity is far less than the leakages and losses of hit-and-miss business—the consumer does not pay for advertising."—(Herbert Kaufman.)

Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....
November	4,386,268	4,474,950	88,682	.....
December	4,299,591	4,487,910	188,319	.....

Total 30,710,756 33,291,831 2,730,904 149,829

Net increase for the first six months of the fiscal year 1916-1917 2,581,075

NEW YEAR'S GREETINGS have been received at this office from many good friends and business men who read and make use of the columns of THE BREWERS' JOURNAL. To all and every one of them their thanks and heart-felt appreciation are herewith extended by the management and editorial staff.

REFERRING TO PROHIBITION LEADERS, Monsignor Russell, Bishop of Charleston, S. C., says: "I am always afraid of that class of people who are better 'than thou.' I fear the man who convinces himself that his views are necessarily the views of Almighty God. I fear saints in politics. I sometimes feel that I would like very much to be able to revise the 'Litany of Saints.' After 'All ye Saints of Heaven, intercede for us,' I would like to insert, 'From the saints on earth, O Lord, deliver us.'"

GERMAN-AMERICANS' DUTY IN REGARD TO PROHIBITION: "A purely negative attitude towards this growing issue is not compatible with the duties of American citizenship. In consideration of the existing views of a certain stratum of the American populace and in recognition of the extraordinary conditions prevailing on account of the presence in our midst of a large and, to some extent, morally still immature negro contingent, a positive, constructive program must be evolved, which shall make for temperance among all through the elimination of the debasing features of our present day saloon life and, last but not least, of the obnoxiously popular treating system. The German Wirthaus with its Gemütlichkeit and the system evolved in England by the Public House Trust may serve to give us valuable hints in this field."—(J. Mattern, New York.)

The National President of the Ancient Order of Hibernians has issued a decree telling its members that they must strictly obey their constitution to which, in 1912, the following amendments had been tacked: "1. It shall be unlawful for any Divisions to meet for any purpose in a place with a barroom connected therewith; 2. It shall be unlawful to operate or permit the operation of a bar in connection, etc., with any club house, gymnasium, etc., conducted by the Order." If the Hibernians, who evidently have continued to meet in prohibited quarters henceforth strictly obey their constitution, they will have to meet where the cup that cheers may be found not too far distant from their thenceforth to-be-cherless meeting places.

—The biennial convention of the International Union of United Brewery Workers is to be held in Houston, Tex., August 13th, 1917.

News from the Brewing World.

**Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.**

Chicago News.

Office of THE BREWERS' JOURNAL, Room 1313, People's Life Building, Randolph and 5th Avenue,

CHICAGO, January 29th, 1917.

At the Office of the Collector of Internal Revenue for the Chicago district, the sum of \$583,377.25 was received in December, 1916, from the brewers whose plants are located in the district.

Mayor Thompson, in his desperate straights as a politician who has doomed himself to oblivion by unconquerable conceit and incredible folly, is now attacking the brewers of this city, thereby hoping to pull himself out of the bottomless mire into which he foolishly stepped when he decided to do the bidding of the Purists whom to shirk he had promised the Liberals who had elected him.

In order to make a grand-stand play he, with comically affected indignation, "charged" the Chicago brewers with owning the licenses of almost all the saloons in the city, a fact that is known for years and which no one has ever denied. And then he tried to identify the brewers with what he calls the "whiskey ring." This he apparently did to once more make himself "solid" with the saloon men to whom he intimated that he would "rescue them from the hands of the brewers," by enforcing a provision of the municipal code prohibiting the issuance of licenses to corporations and to have an ordinance passed providing that licenses shall be issued only to individuals in actual control of their saloon leases, fixtures, etc.

The Chicago Brewers' Protective Association promptly parried the mayor's intended blow by asking him to be more explicit in his charges. They wanted to know who are the persons composing the "whiskey-ring," and who has corrupted the Chicago police and the Illinois Legislature, as the mayor had insinuated? They also had this to say: "With reference to your charge involving 'tampering' with the legislature, we must emphatically deny the consistency of your premises. The Anti-Saloon League maintains a lobby at Springfield for the purpose of promoting prohibition legislation. (This is the organization that has frequently charged you with being parties in the matter of enforcing liquor laws.) So that you may be properly informed as to our attitude in the matter of saloon regulation and law enforcement, we wish to inform you that we are as much opposed to the vicious saloon as you are. We are in full sympathy with any movement intended to divorce the saloon from politics and to divorce politics from the saloon. Irrespective of your personal attitude on the license question, we believe that the people of Chicago are entitled to demand the best sort of regulation possible, under existing laws. We have previously affirmed our belief in this policy through an official statement made in the Chicago commission on the liquor problem appointed by you, on order of the city council, which is evidenced by the report of that commission, just made public. The foregoing is the attitude of those who are engaged in the brewing business of this city, and any inference to the contrary is unfair and unwarranted." Of course, Mr. Thompson did not comply with this request, but he denounced the brewers as being

behind crooked saloon-keepers and those who organized the "wet" parade following the Mayor's order that the Sunday closing law should be enforced.

But this was not all. Through the instrumentality of the trade, Chief of Police Healey was indicted and arrested for having carried on a sordid system of blackmail and graft worse than any ever exposed in any other American city, and several of Healey's subordinates and go-betweens were also indicted.

For Mayor Thompson, who had often declared that Healey was "the best chief of Police Chicago ever had," all this was like nothing. He denounced the indictments to be a put-up job and that they were largely obtained through the false testimony of a perjured saloon-keeper.

Even the Commission which the Mayor himself had appointed to propose regulations for the city's saloons "went back" on him, as its report is backed by the Chicago Brewers' Protective Association, and it failed to propose anything which Mr. Thompson might use to restore his lost political prestige. Briefly the report proposes that there shall be in saloons: No Dice Shaking, Gambling, Treating, Screens, Brewery Signs; Divorce liquor business from pernicious politics; Exercise more care as to character of licenses; For violation of ordinances, third offense, permanent revocation of license; Where saloons are being operated by others than real owners, revoke licenses; Cancel all licenses not issued; See that licenses are paid year in advance; License bartenders.

The Mayor almost raved when he had read this report and very soon after this he proposed that the Legislature pass a law providing that violators of the Sunday closing law may be sent to the penitentiary, and of the City Council he asked that the annual saloon license fee be graded from \$1,000 to \$1,500. The Council's License Committee promptly shelved the proposition.

The property of the Anheuser-Busch Brewing Association on Harrison street, east of Canal, has been purchased by the Union Station Company for \$600,000, and the bottling house of the defunct Chicago Heights Brewery Co. is being remodelled for its purposes by the newly incorporated Economy Scale Remover Co.

The former secretary-treasurer of the Conrad Seipp Brewing Co., R. J. Evans, is now superintendent of a malted milk company in Racine, Wis.

The national committee of the Prohibition party held a meeting here two weeks ago at which the more progressive members were badly defeated when they proposed a new name and abandonment of antiquated and orthodox political methods.

LESS BEER IN BARBADOS. The Island of Barbados, West Indies, in 1914 imported beer valued at \$75,231, while the imports of beer in 1915 had a value of only \$44,972.

THE STUDENT'S MANUAL OF YEAST CULTURE, by Grove Johnson, the distinguished discoverer of *Saccharomyces Thermantitonus*, may be had for \$3.00, by applying to the publication office of THE BREWERS' JOURNAL, 1 Hudson Street, New York City.

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, January 20th, 1917.

San Francisco is in the midst of a "clean-up" campaign by the newspapers; and the city's dirty linen is being washed nightly at the churches and before different women's clubs, and the pastor of one church is sunning himself in a blaze of notoriety while he tells the story of his so-called "investigations" in the up-town tenderloin; and the people in the trade who have nothing to do with conditions as they exist get blamed through the press for it all.

So much was said about the attitude of the "liquor men" that the United California Industries, the association of all "liquor" interests except wine, thought it best to issue a statement which would clearly outline their position. They went on record as having no sympathy with vice in any shape or form, and as heartily in sympathy with any lawful effort that may be made by properly constituted authorities to curb and eradicate lawlessness wherever found. They further said that they recognized that the trade has no greater enemy than the dealer who persistently violates the law. They advocated the strictest possible enforcement of all laws and ordinances governing such cases to the extent of the revocation of the licenses of offenders and drastic punishment of illicit dealers.

But they are not in favor of the revocation of any license except for cause as above indicated, unless provision be first made to compensate the holder of such license at the expense of those retaining their licenses.

Thomas Alton, who has been the representative of the brewers on the executive committee of the United California Industries since that organization was formed in 1911, resigned this month. Mr. Alton gave generously of his time and strength for the common good. He worked hard and bore the brunt of the worry and vexations of two prohibition campaigns, and it will be hard to fill his place on the committee; but he rightly feels that it is time some one else put on the harness and that he be allowed a vacation.

The brewers and wholesalers will carry on their campaigns together this year as they have done in the past.

E. Clemens Horst, the hop grower, advocates the forming of a committee of men, neither Prohibitionists nor "Wets," to investigate the so-called "harmful effects of liquor." He wants the committee to investigate and determine what liquors are responsible for crime; if the harm is done by wine, let wine be eliminated, or by "hard liquors," let them be eliminated, or if by beer, let that be done away with. He believes, however, that such an investigation would show that beer benefits the human race. He is also among the advocates of a divorce between the brewers and whiskey. His plan has many adherents among prominent men of the State.

Another plan that is being advocated by some is to have a trained efficiency expert make a survey of the "liquor" business in California, with special regard to the channels through which it reaches the public, such as the saloon, café, grocery and hotel bar, with a view to ascertaining what the public objects to in the sale of "liquors." A survey would also be made of prohibition campaigns as carried on in this State to elaborate the best possible way of educating the people to the moderate use of liquors. It is also planned to have the efficiency expert make his report to a committee of 100 men and women prominent in the State, who in turn would make a recommendation to the public at large, which it is believed would have weight with the voters.

Judge D. D. Bowman has been appointed to take the place vacated by G. M. McDowell, as executive head of the United

California Industries. Judge Bowman was connected with the office for several years and is well and favorably known throughout the State as a speaker of ability and an excellent executive. He has had much experience in organization work and will bend his energies to organizing the State into a great anti-prohibition army this year.

The increasing cost of brewing materials and the ever-increasing cost of doing business has caused the management of several large breweries to petition for articles of incorporation to be known as the California Brewing Association. The breweries that will belong to the association are: the National Brewing Co., Union Brewing & Malting Co., Claus Wreden Brewing Co., Acme Brewing Co., Broadway Brewing Co., all of San Francisco, and the Henry Weinhard Agency, of Portland, Oregon. The association will be cooperative in character and will operate as many plants of the concern as may be necessary to serve the trade. As soon as the certificate of incorporation is received from the State department, officers and directors will be elected for the new association.

Albert Boddeker, general agent for the Peter Schoenhofen Brewing Co., Chicago, was a San Francisco visitor early in January.

In an effort to close the saloons of California, the head of the Anti-Saloon League is endeavoring to bring saloons under the provisions of the "one-day-of-rest-in-seven" bill which is to be introduced in the Legislature within the next few days. The bill is aimed specifically at barber shops. Should the Anti-Saloon League be successful, it would mean that all bars in California would automatically close on Sunday. Another bill the Prohibitionists are trying to get through the Legislature is the County Option bill, which would make a county the unit in the Local Option law.

"Liquors" continue to be shipped in quantity into Oregon, where the "bone-dry" law was passed last year but which has not yet been enforced, due to a delay in getting the legal machinery into shape, and some say the law will not be effective as it provides for the importation of alcoholic beverages for sacramental and scientific purposes, and the thirsty ones argue: "What's to prevent our changing our minds after we get the liquor that we imported, say, for scientific purposes?"

George E. Snyder, a brewmaster, who claims that he made \$30,000 selling sandwiches at the St. Louis fair, lost a suit recently for \$600 against the Oakland Brewing & Malting Co. Snyder says he lost \$36,000 selling beer at the San Francisco Exposition.

"THE TRADE OF THE PROHIBITIONIST is to effect prohibition of some human comfort, amusement or pleasure. Anything will do. Just now the prohibition of alcoholic beverages is uppermost, but starts have been made in other directions, such as tobacco, dancing, theatres, games and so on. Pretty much the same set of people are after all these. Following the prohibition idea, there is no human activity that should not be prohibited."—(Arthur H. Dutton.)

THE AMERICAN SOCIETY OF REFRIGERATING ENGINEERS, at its Twelfth Annual Convention, held in New York City, elected these officers: President, N. H. Hiller, Carbondale, Pa.; Vice-presidents, Geo. E. Wells, St. Louis; Herman Dannenbaum, Philadelphia (to fill unexpired term of N. H. Hiller); Treasurer, Geo. A. Horne, New York; Directors, S. B. Carpenter, New Brunswick, N. J.; F. E. Matthews, Leonia, N. J.; Van R. H. Greene, New York; R. M. McCandlish, Kansas City, Mo.; Waldemar R. Kremer, Milwaukee; Robert R. Karl, St. Louis (to fill unexpired term of Geo. E. Wells).

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., January 12th, 1917.

During the first eight months of the financial year only about 18,000,000 barrels of beer were retained for home consumption in the United Kingdom, against nearly 21,000,000 barrels during the corresponding period of the preceding financial year and so, it seems, that the output of the British brewing industry will not exceed the quantity permitted under the Restriction Act, which is 26,000,000 barrels, for many years the lowest figure attained. Spirits have likewise decreased from 21,000,000 gallons to 14,000,000, to the great exultation of the teetotalers who would avail themselves of the present world-wide crisis to make, what in the States you call "dry," this great beer consuming nation. They are frantically exerting themselves just now to bring about Prohibition after the American pattern, pretending that their endeavors are solely intended to make the nation efficient to win the war, but actually expecting that, if they should succeed in carrying out their scheme at present, they will be able to make it permanent. They have spent, it is asserted by competent statisticians, £50,000 for advertising purposes. You ought to read their advertisements! They are exaggerations from the beginning to the end. Nothing but unsupported statements, arbitrary to a degree. The usual game: The brewing industry absorbs 300,000,000 pounds of sugar and on the 3,000,000 acres upon which barley is grown for the brewers, enough grain could be cultivated to overcome any shortage that may be caused by war conditions! And so forth and so forth. Whole pages are covered with misleading and truth-defying advertisements of this kind. In one of them the brewers were even told to brew beer simply from hops and water!

But the trade has not been slow either. Advertisements exposing the false pretenses of these fanatical agitators have been and are still being published by trade defense organizations and they are having the desired effect.

It is not expected that the scheme of the Prohibition agitators will succeed, even if the war should continue for any length of time. The fine name the agitators have chosen for the occasion is "Strength of Britain Movement." As if those fellows could be strong themselves, or make anybody else "strong"!

In the meantime the Central Board of Control extends its pernicious,—because needless, policy to numerous additional areas where licensed houses are closed and Sunday closing is enforced arbitrarily, the trade being unable to call a halt, because it all is done under the pretext that war conditions urgently require this sort of undesirable and unnecessary action. Of State purchase we no longer hear anything. Even the Prohibitionists have come to the conclusion that, even if the government were to take £250,000,000 from the people's pockets to purchase breweries, distilleries and public houses, "the liquor trade would still be with us."

While some brewery companies are doing well enough, others complain that their profits are rapidly decreasing. Let me give you two samples: I. Ind, Coope & Co., Burton and Romford, say in their last report, which covers the four years since 1912: "It is satisfactory to find that each year's profit shows an improvement as compared with the previous year, so that for the twelve months to September 1916 the total shows an increase of more than 50% as compared with the figures for 1913." And Worthington & Co., Burton-on-Trent, point out in their report "that the profits showed a decrease as compared with the previous year, and but for the exercise of the strictest economy by the management the

results would have shown a heavier fall; and in view of (1) the increase in the price of materials; (2) the drastic legislation as to closing hours for licensed premises, and other restrictions; and (3) the increase in taxation, the directors anticipate a further decrease in profits during 1916." . . . The outlook at the present time is, of course, very uncertain. It is generally assumed that further legislation adverse to the industry is likely to be brought forward, and in any case the effect of recent legislation will continue adverse, and the industry has also to face the rise in the price of its raw materials. Altogether, therefore, it seems unlikely that for the current year the profits will be as great as those for last year."

Sir John Brickwood has been elected chairman for the ensuing year of the general committee of the Brewers' Society and Mr. Edwyn F. Barclay was elected vice-chairman.

From the last annual report of the Abstainers and General Insurance Co., Ltd., London, founded in 1883 as the "Blue Ribbon Life, Accident, Mutual and Industrial Insurance Co., Ltd.," it appears that, although it was authorized to issue stock amounting to £203,125, only £97,500 had been subscribed up to December 31st, 1915, and of this only £22,500 was paid up. If Abstainers' Insurance is such a wonderful thing, as the teetotalers assert, we may well wonder why the public are so slow in acquiring the A. & G. I. Company's stock?

By Cable.—London, January 24th. In order to reduce the consumption of foodstuffs by breweries, Baron Devonport, the Food Controller, has decided that the quantity of beer to be brewed for the year beginning in April shall be restricted to 70 per cent. of the output of the previous year. This means that only 18,000,000 barrels of beer will be produced, about half the output of the year preceding the war. Baron Devonport, in explaining the object of his order, said that the restriction must not be considered a measure of temperance or of social reform. "The fact is," the Food Controller continued, "the barley, sugar, and other ingredients used in brewing are required for food. In fact, it is really a question of bread versus beer." The order of the Food Controller will withhold from brewers 286,000 tons of barley and 36,000 tons of sugar which otherwise would be used in making beer.

JAVA'S BEER IMPORTS. Java, Dutch East Indies, in 1915 imported beer valued at about \$650,000, mainly from the Netherlands. The beer imports for that year coming from the United States were valued at \$13,600, as against \$6,500 worth in the preceding year.

PERU BEER IMPORTS DECREASED. In 1914 the Republic of Peru imported beer valued at \$35,433; in 1915 the beer imports decreased to \$16,490; barley imports, during the same time, decreased from \$34,202 to \$27,120; spirits, from

MAKE THE PUBLIC UNDERSTAND YOUR RIGHTS! "Agitate and make just as much annoyance and trouble for the enemies of your constitutional rights as they make for you. Your enemies will never give any quarters. You should never ask any. Fight hard until you have arrested and changed the public sentiment being stubbornly and persistently promulgated by the Protestant clergy against your business. Every honorable method known in warfare between commercial interests should be used by you until the public understands that your rights, under the public rule, are as sacred to you as are the rights of any other man, or set of men, within the community. Therefore, PREPARE! And again, MOBILIZE YOUR FORCES, AND FIGHT."—("National Herald.")

Brewing News from the European Continent.

On January 16th it was reported from Germany that the supply of barley for malting purposes would again be cut 50 per cent. by the government. It is difficult to imagine what, after this has been done, the output of the German breweries will be during the present year. More barley than ever before is needed to feed the people because the 1916 potato crop has been far below the average.

As the exportation of beer from Bavaria has almost entirely ceased, the officers of the North German Innkeepers' Association which comprises about 500,000 members, and the owners of over 500 breweries, have sent a memorial to the War Food Distributing Office, pointing out the fact that without Bavarian beer their trade would become unprofitable and, if the government insisted upon its restrictions, those injured thereby would certainly expect to be recompensed for their losses after the war is over. It is not known, as yet, what the answer of the Food Dictator has been.

At Munich, the military authorities have issued an order to breweries, restaurants and retailers forbidding them to serve more than two liters of beer per day to any one customer, $\frac{1}{2}$ liter at breakfast and $1\frac{1}{2}$ liters at dinner. Those wanting more have to go somewhere else, and get an additional two liters, and so forth and so forth—until their Bavarian thirst has been quenched for the day.

One thing seems to be sure that it will take years after the war until the German brewing industry will be able to recover its proud position it occupied in the world before this deplorable war broke out.

The amount of beer sent to the German troops at the front has also been decreased of late. In one case, that of the 11th Army Corps, the quantity dropped from 3,603,022 hectoliters asked for by the commanding officers to 2,717,220 hectoliters.

The German Bundesrath has ordered all stores to be closed at 7 P. M., and all saloons at 10 P. M., to save fuel and light; the saloons in Berlin may keep open till 11.30 P. M.

From the reports of our correspondents at the principal hop markets it appears that, the demand being greatly decreased, prices have dropped accordingly. There is no demand at all for foreign hops.

The brewing industry of France is gaining steadily, although slowly. The taxes paid by the French breweries in November, 1916, aggregated 586,000 francs, as compared with the normal amount of 1,144,000 francs; but it was an increase of about 150,000 francs over November, 1915. The taxes paid by brewers during the first eleven months of 1916 amounted to 9,073,000 francs, as compared with 7,825,000 francs during the same period of 1915.

The movement for reducing the French beer tax 50 centimes per degree-hectoliter, as demanded by the entire trade, is gathering strength, but so far it has not yet attained its object. Since 1879 the tax averaged 2.85 per degree-hectoliter; now it is 3.20 per hectoliter and the government proposes to still raise it several points.

The number of breweries in the invaded part of Northern France, now running, is a little over 700, while the number of those closed is nearly 1,700.

The barley crop of France in 1916 amounted to 8,579,400 quintals, while in 1915 it aggregated 6,920,790 quintals, and in 1914 it was 9,758,150 quintals. The French hop crop yielded 2,249 tons in 1916, against 2,227 tons in 1915. Quotations for barley range between 38 francs and 4.50 francs per bushel; malt, 80 @ 85 francs.

At Blangy-sur Ternoise, Nord Department, a new brew-

ery company has been organized by Charles Dumon, Maurice Vanderhaghen and several others.

The Café Mollard, one of the principal of its kind in Paris, opposite the St. Lazare Railway terminus, has been ordered closed and the proprietor, Louis Mollard, fined more than \$40,000 for selling almost 1,000 bottles of absinthe, in violation of the law prohibiting the sale of this liquor. M. Mollard was charged with having sold absinthe at \$2 a bottle under the name "elixir."

For its army the French government has requisitioned some 200 millions of gallons of last year's wine (representing one-fifth of her own entire annual production), as well as more than 40 million gallons from Algeria, and storage has already been arranged for this enormous volume of wine, representing in value no less than \$100,000,000, by the taking over of special warehouse accommodation in every department of France. And yet it has been stated in some ignorant and prejudiced quarters that France has "gone dry" during the war!

To the roll of the Golden Book of the French Brewing Industry the name of Brévière Edouard, son of Léon Brévière, brewer at Burbure, Pas-de-Calais, has been added. Young Brévière, of the class of 1917, is in the telephone business and he has repaired a telephone line while being fired at from the trenches of the enemy.

Other new names in the Golden Book are: Frédéric Pley, brewer at Hondschoote (Nord); killed in battle at Carrière de la Chiffour (Meuse); Léon Doutremépich, partner in Doutremépich Brothers, at Arras, who received honorable mention for particular bravery exhibited in the first line of trenches.

The military authorities at Brussels have permitted the Belgian brewers to employ saccharine in the manufacture of beer, barley being very scarce and brewing sugars almost unattainable. But the saccharine must be imported from Germany and it costs 400 @ 500 marks per kilo. The price of beer in Brussels is between 20 and 27 francs per hectoliter and from 25 @ 60 centimes per liter at retail.

The brewers of Italy have emancipated themselves from the domination over their industry by German experts. Their plants were installed by German firms; they bought their machinery from Germany and Austria, also their malt and hops. Since Italy went to war, all this has been changed. Brewing machinery and materials are now being imported either from Switzerland, France or America and the German brewmasters and foremen have been replaced by Italians, Frenchmen and Swiss alumni of brewing academies in their native lands. They are now producing excellent beers, common lager as well as Munich and Pilsen types.

AUSTRALIAN BREWERIES. There were 95 breweries in 1914, the total output of which, 2,162,490 U. S. barrels, was valued at £4,107,498; value of brewing materials used, £1,534,656; total amount of wages paid, £86,175; value of land and buildings, £1,800,584; value of plant and machinery, £1,433,616; number of breweries in 1911, 121.

QUEER CREATURES. "The American who believes it his duty to regulate the affairs of his brother is a queer creature. He hails the Webb-Kenyon decision as a righteous recognition of the right of each of the country's political divisions to determine its liquor legislation for itself, and in the next breath rejoices over the action of the United States Senate in "voting the District of Columbia dry" after refusing to the residents of the District an opportunity for expression of their desires in the matter. The Senate's denial of a referendum to the people of the District is indefensible."—(N. Y. "Herald.")

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Akron Brewing Co., Akron, Ohio, are building a four-story addition to cost about \$45,000.

—American Brewing Co., Detroit, Mich., are erecting a large addition to their refrigerating plant.

—American Brewing Association, Houston, Tex., have added to their equipment a 12-ton refrigerating machine, furnished by the York Mfg. Co., York, Pa.

—Anheuser-Busch Brewing Association, St. Louis, have installed one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete, the necessary accumulators and connections for changing their 1000-ton freezing system to the York Flooded type; three 30-in. x 18-ft. ammonia receivers, two 48-in. x 10-ft. and two 30-in. x 12-ft. liquid ammonia separators, five vertical agitators and motors, two 4-in. x 8-in. x 7-in. aqua ammonia pumps, and two 16-in. x 18-ft. ammonia drier-cooler-purifiers, all furnished by the York Mfg. Co., York, Pa.

—Bernheimer & Schwartz Pilsener Brewing Co., New York, are making alterations in their four-story structure on 127th Street, West, to cost about \$5,000, at an additional cost of \$5,000, alterations are being made on the company's four-story building at 51 and 53 Lawrence Street, New York.

—Calumet Brewing Co., Chilton, Wis., have fitted up a new racking room and installed in it 1,440 lineal feet of 1¼-inch brine pipe, arranged in four separate coils. The piping was supplied by the Vilter Mfg. Co., Milwaukee.

—Columbia Brewing Co., Shenandoah, are building a substantial addition to their bottling department.

—De La Vergne Machine Co., New York, erect an addition, to cost about \$5,000.

—Dick & Bros. Quincy Brewing Co., Quincy, Ill., are building a commodious garage for their fleet of motor trucks.

—Fergus Brewing Co., Fergus Falls, Minn., are enlarging their power and refrigerating plants.

—Finke-Uhen Brewing Co., Burlington, Wis., have rebuilt their malt house and started operations last month.

—Fischbach Brewing Co., St. Charles, Mo., are now operating the new cold storage plant they recently added to their brewery.

—Fort Pitt Brewing Co., Sharpsburg, Pa., are building a three-story bottling house, 66x84 feet, to cost about \$35,000.

—Goenner & Co. City Brewery, Johnstown, Pa., have made improvements in their refrigerating plant, including installation of ten coils atmospheric ammonia condenser, furnished by the Vilter Mfg. Co., Milwaukee.

—Grand Island Brewing Co., Grand Island, Neb., are considering plans to produce "near beer" after May 1st, 1917.

—Griesedieck Bros. Brewery Co., St. Louis, are erecting an additional stock house which is to cost about \$36,000.

—Haberle-Crystal Spring Brewing Co., Syracuse, N. Y., have acquired the Joshua Chauncey bottling plant

at Oswego, which is being remodeled and enlarged to serve as a local distribution depot.

—James Hanley Brewing Co., Providence, R. I., erect a new 2-story building at 23 Canal Street, Providence.

—Hellmann Brewing Co., Waterbury, Conn., erect a one-story brick addition, 40x43 feet.

—Houston Ice & Brewing Co., Houston, Tex., recently installed in its plant one 20-ton and one 12-ton enclosed type refrigerating machines, furnished by the York Mfg. Co., York, Pa.

—Independent Brewing Co., Detroit, Mich., are considering plant for operating their brewery as an ice plant, long before prohibition is to become operative in Michigan.

—Indianapolis Brewing Co., Indianapolis, are remodeling and enlarging their plant.

—Jetter Brewing Co., South Omaha, Neb., are making changes in their plant with a view to producing non-alcoholic beverages on a large scale.

—C. Kern Brewing Co., Port Huron, Mich., are considering a proposition to convert their brewery into a manufacturing plant.

—Lembeck & Betz Eagle Brewing Co., Jersey City, N. J., recently installed one 30-in. x 8-ft., one 82-in. x 8-ft. and one 30-in. x 10-ft. vertical ammonia drier-cooler-purifier, furnished by the York Mfg. Co., York, Pa.

—Mattabessett Brewing Co., recently organized, erect a plant at the foot of Ferry Street, Middletown, Conn., the main building to be 90x92 feet, three stories high, built of brick, with buff brick trim, reinforced concrete floors, elevator, tar and gravel roofing, etc.

—Pittsburgh Brewing Co., Pittsburgh, are erecting a new \$25,000 stock house for their Eberhardt & Ober Brewery at Allegheny, Pa.

—A. Schreiber Brewing Co., Buffalo, N. Y., are erecting a new bottling house, two stories high, 25x152 feet, to cost \$20,000, not including machinery equipment.

—Peter Schoenhofen Brewing Co., Chicago, have established another shipping station at Elgin, Ill.

—Seattle Brewing & Malting Co., Seattle, Wash., are installing machinery and equipment in their big plant for the manufacture of denatured alcohol.

—Jos. Stoeckle Brewing Co., Wilmington, Del., are erecting a new and larger engine house; ground dimensions, 48x105 feet.

—Texas Brewing Co., Fort Worth, Tex., erect a car icing plant; capacity of icing twelve refrigerator cars at one time; equipment including ice crushers, ice hoisting and conveying machinery; total cost about \$8,000.

—Bertha Uhl's Brewery, Bethlehem, Pa., E. E. Markley, manager, has had improvements made in its refrigerating plant, including three additional coils counter-current ammonia condensers, each coil 20 pipes high and 20 feet long, all furnished by the Vilter Mfg. Co., Milwaukee.

—United Breweries Co., Chicago, erect a new storage depot on Chestnut Street, Bloomington, Ill.

—Weidemann Brewery Co., New Haven, Conn., erect a large garage.

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW CORPORATIONS. White Eagle Brewing Co., Boston, Mass.; capital, \$100,000. Incorporators: John Granskie, Helen Granskie.

Producers' Brewing Co., Chicago; capital, \$100,000. Incorporators, Paul E. Lavery, G. D. McDonald, F. O. Mason.

Officers have been elected in the following brewery companies as follows:

Abner-Drury Brewing Co., Washington, D. C.: President, Peter A. Drury; vice-president, Frederick Eichelberger; secretary and treasurer, Paul Eschner; brewmaster, Karl Egolf; additional director, Michael J. Keane.

Acme Brewing Co., San Francisco, Cal.: President, treasurer, general manager and brewmaster, J. P. Rettenmayer; vice-president, C. O. Swanberg; secretary, E. E. Frederick; additional director, H. L. Hirsch.

Akron Brewing Co., Akron, O.: President and manager, Louis P. Dettling; vice-president, Jacob M. Gayer; treasurer, Jacob Dettling; secretary, W. H. Carter. The brewmaster is Walter Grauer.

Alliance Brewing Co., Alliance, Ohio: President, Peter Samman; vice-president and general manager, J. C. Klingler; treasurer and secretary, Samuel Burgert; additional director, William S. Greer. The brewmaster is Max Lechner.

American Brewing Association, Unincorporated, Houston, Tex.: President, H. Prince; vice-president, W. J. Althans; secretary and treasurer, J. H. Lilienthal; trustees, Louis A. Adoue and Henry S. Fox, Jr. The brewmaster is Charles Daab.

American Brewing Co., Detroit, Mich.: President, William Zimmermann; vice-president, Leo Taube; treasurer, Fred C. Stange; secretary and general manager, Arthur S. Feters; brewmaster, Oscar Lamsens.

American Brewing Co., Rochester, N. Y.: President and general manager, Frederick C. Loebs; vice-president, George J. Wunder; treasurer and brewmaster, Edward W. Loebs; secretary, Carl H. Loebs; additional director, Fred Hollender.

Appleton Brewing & Malting Co., Appleton, Wis.: President and general manager, Nicholas Dohr; vice-president, August Knueppel, secretary-treasurer, superintendent and brewmaster, John Haug; additional director, G. J. Walter. Arnholt & Schaefer Brewing Co., Philadelphia: President, Charles Schaffhauser; vice-president, M. J. Schaffhauser; treasurer, J. Henry Schaefer; secretary, Fred J. Kolbe; general manager, Otto Schaffhauser; brewmaster, Jos. Hoenigman.

Ashland Brewing Co., Ashland, Pa.: President, Anton Loeper; treasurer, Peter Loeper; secretary, George Fluehr; superintendent and brewmaster, Carl Wolf.

Ashland Brewing Co., Ashland, Wis.: President, Edward Bekken; vice-president, Paul Binsfield; secretary and treasurer, T. B. Culver; brewmaster, Joseph Wertin.

Auto City Brewing Co., Detroit, Mich.: President, Stanislaus Chronowski; vice-president, treasurer and general manager, Joseph Chronowski; secretary and brewmaster, Charles Huhn.

Banner Brewing Co., Saginaw, Mich.: President, O. R. Krause; vice-president, C. W. F. Wartenberg; secretary-

treasurer and general manager, J. B. Baum. The brewmaster is Edward Ambis.

Bavarian Brewing Co., Covington, Ky.: President, Wm. Riedlin, Sr.; vice-president, Wm. Riedlin, Jr.; secretary and treasurer, J. H. Kruse; additional director, Anton Ruh. Jos. A. Ruh is the brewmaster.

Bay City Brewing Co., Bay City, Mich.: President, Walter W. Young; vice-president, William A. Young; secretary-treasurer and general manager, John Moritz; brewmaster, Leonard Mueller.

Belmont Brewing Co., Martin's Ferry, O.: President and general manager, Henry Bierberson; vice-president, August Kraatz; secretary and treasurer, H. C. Hackmann. The brewmaster is William J. Matz.

Best Brewing Co., Chicago: President and general manager, Charles Hasterlik; vice-president, Ig. Hasterlik; secretary and treasurer, Ignatz Neumann; additional directors, Sam Hasterlik and Henry Hasterlik. The brewmaster is John Kessler.

Berghoff Brewing Association, Fort Wayne, Ind.: President, Gustave A. Berghoff; vice-president and brewmaster, William Breuer; treasurer, Stephen B. Fleming; secretary, Martin C. Norton; additional directors, H. C. Paul, John R. Johnston, and Charles Weatherhogg.

Blumer Brewing Co., Monroe, Wis.: President, Adam Blumer, Sr.; vice-president and brewmaster, Adam Blumer, Jr.; secretary and treasurer, Fred J. Blumer; general manager, Jacob C. Blumer; additional director, Mrs. Adam Blumer, Sr.

Geo. A. Bohrer Brewing Co., La Fayette, Ind.: President, Geo. H. Bohrer; vice-president, Charles J. Bohrer; treasurer, Joseph Blistain; secretary, Edward F. Bohrer; brewmaster, Louis Panther, Sr.

Bosch Brewing Co., Lake Linden, Mich.: Joseph Bosch, president; M. S. Kemp, vice-president and brewmaster; A. T. Heidkamp, secretary and treasurer.

Peter Breidt City Brewery Co., Elizabeth, N. J.: President and general manager, Dennis F. Collins; vice-president, Mrs. Louis Bredit, secretary and treasurer, Joseph H. Nolte; additional directors, Anna B. Nolte and Edward J. Bufler. The brewmaster is Frederick Hubach.

Brownsville Brewing Co., Brownsville, Pa.: President and general manager, George J. Edel; vice-president, John Monier; secretary and treasurer, Harry A. Edel; additional directors, George M. Rathmell, and A. L. Dewey. The brewmaster is Fred W. Wieland.

Burkhardt Brewing Co., Roxbury, Mass.: President and general manager, Baron F. von Scholley; vice-president, Charles W. H. Frederick; secretary and treasurer, Edward A. Burkhardt; brewmaster, Philip Kresser; sales manager, Ralph P. Bischoff.

John B. Busch Brewing Co., Washington, Mo.: President and general manager, John B. Busch; vice-president, Ulrich W. Busch; treasurer, Julius W. Busch; secretary, Walter J. Stumpe; brewmaster, Valentine Huber.

Calcutt Brewing & Malting Co., Peterboro, Ont., Canada: President and treasurer, M. J. Calcutt; vice-president and secretary, Gordon Logan; superintendent and brewmaster, David Hummel.

Calumet Brewing Co., Chilton, Wis.: President and gen-

eral manager, J. N. Landgraf; vice-president, Peter Jaeckels; secretary and treasurer, Oliver W. McCarty.

Cape Brewing & Ice Co., Cape Girardeau, Mo.: President and general manager, Max J. Koeck; vice-president and secretary, Arthur A. Vogel; treasurer, Charles H. Overstolz; additional director Mrs. L. O. Koeck and A. Zimmer; brewmaster, John Bosse.

Capitol Brewery Co., Jefferson City, Mo.: President, Jacob F. Moerschel; vice-president and secretary, Jacob W. Moerschel; treasurer, Ernst C. Moerschel; brewmaster, R. A. Mollenhauer.

Carson Brewing Co., Carson City, Nev.: President, treasurer and general manager, Max Stenz; vice-president and secretary, M. E. Stenz, Jr.; additional directors, W. Brougher, J. B. Viena, and F. Stupka. The brewmaster is Henry Kilian.

Casper Brewing Co., Inc., Casper, Wyo.: President, Hugh H. Williams; vice-president, William Hines; secretary-treasurer and general manager, M. L. Gehres.

Central Brewing Co. of New York: President, B. T. Kearns; vice-presidents, Henry Hesterberg and P. J. O'Keefe; treasurer, Peter Seery; secretary, Charles W. Knoche; superintendent and brewmaster, Felix Spitzner; additional directors, Thomas McGoldrick, John H. Feldscher, Hugh Meehan, Charles Bauer, Peter Quinn, J. Henry Timm, Philip Kelaher, Martin O'Shaughnessy, Diederich Hillman, and Edward F. Cunningham.

Central Consumers' Co., Louisville, Ky.: President and general manager, Frank Fehr; first vice-president, Frank P. Senn; second vice-president, Charles A. Weber; treasurer, George W. Kremer; secretary, Charles P. Dehler; brewmaster, Jac. Senf, Sr.; assistant brewmaster, Jac. Senf, Jr.

Chilton Malting Co., Chilton, Wis.: President and general manager, F. J. Egerer; 1st vice-president and treasurer, George J. Berger; 2nd vice-president, Emil Thiele; secretary, R. C. Hugo.

Citizens Brewing Co., Indianapolis, Ind.: President, Charles Krauss; vice-president, Chas. Kotteman; secretary and treasurer, H. Lohrman; superintendent and brewmaster, John J. Giesen; additional director, J. J. Appel.

City Brewing Co., Toledo, O.: President, treasurer and general manager, Charles K. Woolner; vice-president, I. A. Wolf; secretary, E. L. Miller; brewmaster, Joseph Herman; additional directors, Denis Weiskopf, M. J. Kaufman.

Cold Spring Brewing Co., Cold Springs, Minn.: President, John Oster; vice-president and brewmaster, Eugene Hermanuty; secretary and treasurer, Ferdinand Peters.

Columbia Brewing Co., New Orleans, La.: President, Charles Karst; vice-president, J. D. Kenney; secretary-treasurer, superintendent and brewmaster, John Rettenmeier; additional directors, Frank Monteleone, L. M. Pool, H. M. Young, Geo. Prados.

Columbia Brewing Co., Shenandoah, Pa.: President, general manager and treasurer, M. Mellet; vice-president, H. P. Mellet; secretary, M. J. Malone; additional directors, William McGuire, D. F. Malone, F. E. Mellet, J. A. Toole, J. M. Malone and B. J. Keogh. The brewmaster is August Scholl.

Columbian Brewing Co., Columbia, Pa.: President and general manager, W. L. Kendig; secretary and treasurer, J. P. Warfel; brewmaster, A. E. Leschke.

Consumers' Brewing Co. of New York, Ltd., New York: President, Diedrich Knabe; vice-president and treasurer, William P. Rinckhoff; secretary, Harry D. Meyer; additional directors, Henry W. von Glahn, Edward F. Lanekau, Gustav A. Lilienthal, John Gobber, Chris. Hinck and William Engelmann. The brewmaster is Henry Ifland.

George J. Cooke Co., Chicago: President and treasurer, George J. Cooke; secretary, James A. Flanagan. Brewmaster, Jacob Faude.

Cremo Brewing Co., New Britain, Conn.: President, John Skritulski; vice-president, Thomas B. Farrell; treasurer, Otto Leupold; secretary and general manager, William Ritter; additional directors, John Strobel, Joseph Tuttle, Charles G. Anderson, Henry Schwab and Austin Morris. The brewmaster is W. Arneth.

Crown Brewing Co., Cincinnati, O.: President, George J. Lampe; vice-president, Meyer Silverglade; secretary and treasurer, Sigmund Feld; additional directors, Frank Eckenroth and Ida Feld. The brewmaster is John Kiessling.

Cumberland Brewing Co., Cumberland, Md.: President, James Clark; 1st vice-president, M. L. Fesenmeier; 2nd vice-president, A. J. Fesenmeier, who is also superintendent and brewmaster; secretary and treasurer, John Keating; general manager, W. A. Buchholtz.

Deer Park Brew Co., Port Jervis, N. Y.: President and treasurer, George F. Ott; vice-president, Philip Haibach; secretary, W. S. Jones; brewmaster, Joseph Menges.

Diamond Brewery Co., Ltd., Port Arthur, Ontario, Can.: President, Austin Dunn; vice-president, Alex. G. Guerard; secretary-treasurer, P. W. Whalen; general manager, Allan Guerard; additional director, Hugh H. Keefer. The brewmaster is John M. Danzer.

Dick & Bros. Quincy Brewery Co., Quincy, Ill.: President, August R. Dick; treasurer and general manager, Frank Dick; secretary, Albert Dick; additional directors, J. E. Dick, Mrs. Maggie Dick and Ernst Dick. The brewmaster is John Breitstadt.

Eagle Brewing Co., Inc., Waterbury, Conn.: President, Ellen E. Hayes; vice-president, Thomas Finnegan treasurer, Thomas E. Guest; assistant treasurer, Daniel J. Leary; secretary, Michael T. Hayes; additional director, Frank Hayes.

Elgin Eagle Brewing Co., Elgin, Ill.: President, Louis J. Althen; general manager, Hugo D. Roweis; superintendent, Emil Althen; treasurer, Louis Althen; secretary, Edward C. Althen; brewmaster, Joseph Hattl.

Eberle Brewing Co., Jackson, Mich.: President, general manager and treasurer, Carl Eberle; vice-president and brewmaster, Carl Eberle, Jr.; secretary, Sophie Eberle.

Escanaba Brewing Co., Escanaba, Mich.: President and general manager, Nicholas H. Walch; vice-president, Victor K. Blomstrom; secretary-treasurer, John N. Semer. The brewmaster is Charles C. Mueller.

Eureka Brewing Co., Smithton, Pa.: President and general manager, M. J. Rorke; vice-president, W. B. Jones; secretary and treasurer, James B. McDermitt; brewmaster, Leopold Schuler.

Farmers' Brewing Co., Shawano, Wis.: President, John Popp; vice-president, Fred Kuhn; secretary, J. C. Luebke; treasurer and manager, Conrad Volland; brewmaster, Ulrich Santner.

Fergus Brewing Co., Fergus Falls, Minn.: President, Herman Holzer; vice-president, B. L. Kimball; secretary-treasurer and general manager, Philip W. Maas; brewmaster, John Dippold.

Fischbach Brewing Co., St. Charles, Mo.: President and treasurer, Jacob Fischbach; vice-president, C. H. Willbrand; secretary, John H. Fischbach.

Fitger Brewing Co., Duluth, Minn.: President, A. Fitger; vice-president, Benj. Grimm; secretary and treasurer, P. S. Anneke; general manager, John Beerhalter.

Hubert Fischer Brewery, Hartford, Conn.: President, Hubert Fischer; vice-president and treasurer, C. L. Fischer; secretary, Anton J. Dittmar; brewmaster, John Ebersold.

Fountain City Brewing Co., Fountain City, Wis.: President, L. U. Dressendorfer; vice-president, W. G. Stoll; secretary, Robert Scholmeier, Jr.; treasurer, Albert Kirchner. The brewmaster is Emil Kohn; additional directors, L. A. Schwack, And. Dressendorfer, Chas. Kirchner, Anton Engel.

Franklin Brewing Co., Brooklyn, N. Y.: President and treasurer, David W. Neuberger; vice-president, Hector Grassi; secretary, John J. Welsch.

Fremont Brewing Co., Fremont, Neb.: President, John Dern; vice-president, L. P. Larson; treasurer, G. A. Diels; secretary and general manager, John Gumb; additional director, Geo. F. Looschen. The brewmaster is Geo. Heilman.

Furniture City Brewing Co., Grand Rapids, Mich.: President, William C. Chinnick; vice-president, Michael Hayes; secretary-treasurer and general manager, Nicholas A. Smith; superintendent, Oscar L. Faehnle.

Garden City Brewery, Chicago: President and general manager, Anton J. Zahrolsky; vice-president, Frank Sikyta; treasurer, Josef Welky; secretary, Anton Kolar; additional directors, Anton Denemark, M. Zenek, J. Tetrev, Josef Hruska and A. Dubsky. The brewmaster is Charles Urhel.

German Brewing Co., Cumberland, Md.: President, J. Blaine White; vice-president, C. A. L. Miller; treasurer, H. M. Siefers; secretary, William P. Rizer; additional director, Fred. H. Blaul. The general manager is James M. Conway and the brewmaster is Henry R. Neumann.

Gipps Brewing Co., Peoria, Ill.: President, Willis H. Ballance, Jr.; vice-president, Charles S. Cockle; secretary-treasurer, Wm. P. Costello; superintendent and brewmaster, Anton von Hermann.

Gluek Brewing Co., Minneapolis, Minn.: President, Louis Gluek; vice-president, Charles Gluek; superintendent, Karl G. Gluek; brewmaster, Xaver Bauer.

Golden West Brewing Co., Oakland, Cal.: President, George J. White; vice-president, Joseph Raspiller; treasurer, Charles W. Heyer; secretary, Joseph W. Kramm; brewmaster, George F. Goerl.

Grand Rapids Brewing Co., Grand Rapids, Wis.: President, H. A. Sampson; vice-president and general manager, Jacob Lutz; secretary and treasurer, F. L. Rourke. The brewmaster is Joseph Holly; additional directors, M. McDonald, L. Schroeder.

Griesdieck Bros. Brewing Co., St. Louis, Mo.: President, A. A. Griesdieck; vice-president, Henry E. Griesdieck; secretary and treasurer, Raymond B. Griesdieck; general manager, Joseph Griesdieck.

Gulf Brewing Co., Utica, N. Y.: President, treasurer and general manager, W. F. Welch; vice-president, A. Barney; secretary, M. A. Welch; brewmaster, W. Lafferty.

Haberle-Crystal Spring Brewing Co., Syracuse, N. Y.: President, Charles Schwarz; vice-president and manager bottling department, B. F. Haberle; treasurer, Frank C. Biehler; secretary and general manager, Edward Oswald; brewmasters, Michal Zahm and John Granger.

Haehnle Brewing Co., Jackson, Mich.: President, Mary Haehnle; vice-president, Amalia Honer Lewis; secretary and treasurer, Bertha Berger; general manager and brewmaster, Casper Haehnle.

Hannibal Brewing Co., Hannibal, Mo.: President, Henry Riedel; vice-president and treasurer, A. S. Schorr; secretary, Herman Riedel; brewmaster, Fred Simmerlein.

Harvard Brewing Co., Lowell, Mass.: President, James R. Nicholson; vice-president, John Joyce; secretary and treasurer, Richard C. Hemman; additional directors, Mau-

rice J. Curran, Elias A. McQuade, Patrick Kelley and John J. McDonnell. The brewmaster is Gottlieb P. Thumm.

Geo. Hauck & Sons Brewing Co., Kingston, N. Y.: President, Adam Hauck; vice-president, John Hauck; secretary-treasurer, M. M. Hauck; assistant secretary-treasurer, J. B. Kearney; brewmaster, Mathias Zellner.

John Hauenstein Brewing Co., New Ulm, Minn.: President and general manager, Charles Hauenstein; vice-president, Mrs. John Hauenstein, Sr.; treasurer, Martin Hose; secretary and brewmaster, John Hauenstein, Jr.

Havre Brewing & Malting Co., Havre, Mont.: President, Henry Schmitt vice-president, Fred Denninger; secretary-treasurer and brewmaster, Aloys Wutz; additional directors, Patrick Yeon, George Kuehhorn.

G. Heilman Brewing Co., La Crosse, Wis.: President and general manager, Emil T. Mueller; vice-president, Carl N. Langenbach; treasurer, Leo W. Schroeder; secretary and general manager, R. E. Albrecht; brewmaster and superintendent, Otto E. Mueller; additional directors, Geo. Schroeder and George Zeisler.

Henderson Brewing Co., Henderson, Ky.: President and general manager, H. J. McAvoy; secretary and treasurer, Joseph J. O'Byrne; brewmaster, Peter Rothenhoefer.

Hillsboro Brewing Co., Hillsboro, Wis.: President, F. A. Wopat; vice-president, Levi Klement; treasurer, Anton Stanek; secretary, Edward J. Hammer; superintendent and brewmaster, Edward Geisler; additional directors James Holak, Anton Sebranek and Joseph Liska.

J. L. Hoerber Brewing Co., Chicago: President and treasurer, J. L. Hoerber; vice-president and secretary, William L. Hoerber; brewmaster, J. L. Hoerber, Jr.; additional director, J. Wollensak.

Hofmann Bros. Brewing Co., Chicago: President, secretary-treasurer and manager, George Hofmann; vice-president, Della Ludwig; secretary and treasurer, George Herrmann; brewmaster, August Hummel.

Huntington Brewing Co., Huntington, Ind.: President, general manager and treasurer, Henry W. Hoch; secretary, John M. Eisenhauer. The brewmaster is George Glueckert; additional directors, Patrick Gorman, John S. Glenn, Robert La Mont.

Hussa Brewing Co., Bangor, Wis.: President, Oscar Hussa; vice-president and general manager, Emil Hussa; secretary and treasurer, Hugo Hussa; brewmaster, Ernst Hussa.

E. L. Husting Co., Milwaukee: President and general manager, Eugene L. Husting, Jr.; vice-president, superintendent and manager bottling department, B. A. Husting; secretary and treasurer, Oscar T. Husting; brewmaster, Alois Titze.

Illinois Brewing Co., Socorro, N. M.: President, Wm. G. Hammel; vice-president, Edna C. Hammel; secretary-treasurer, Lulu Hammel; brewmaster, J. J. Epele.

Independent Breweries Co., St. Louis: President, Hugo A. Koehler; vice-president, Alex T. Gast; secretary-treasurer, Fred Gast; superintendent, H. C. Griesdieck; additional directors, A. H. Bauer, Frank Griesdieck, J. H. Koehler, Louis Kunz, Charles A. Otis, Frank A. Ruf, Herman C. Stifel, A. C. Stuerver and H. R. Williams.

Independent Brewing Co., Auburn, N. Y.: President and superintendent, William Franke; vice-president and brewmaster, William P. Knipp; secretary-treasurer and business manager, Anton J. Lauer.

India Wharf Brewing Co., Brooklyn, N. Y.: President, Louis B. Schram; vice-president, David Goodman; secretary-treasurer, Thomas H. Bennis; assistant secretary-treasurer, Herman Schram.

Interboro Brewing Co., Brooklyn, N. Y.: President, Conrad Kremp; vice-president, Henry A. Rubino; secretary-treasurer, Frederick A. Feldmann; superintendent and brewmaster, Max Dambacher; additional directors, Peter Luger, G. Steiner, Hy. Bege, C. Meyerderks, Eli Kahn, H. Hirschfeld.

International Brewing Co., Buffalo, N. Y.: President, Julius J. Herbold; vice-president and manager, Joseph Phillips; treasurer, John Hagan; secretary, Charles Kuhn; additional director, Edward L. Jellinek; brewmaster, Theo. Praun.

Jacksonville Brewing Co., Jacksonville Fla.: President, Jacob Bongner; vice-president, Henry Free; treasurer, J. M. Wellbrook; secretary, superintendent and brewmaster, William Ostner.

Jetter Brewing Co., Ltd., South Omaha, Neb.: President and general manager, J. Martin Jetter; vice-president, August Radzuweit; secretary-treasurer and brewmaster, Fred Drews.

Jung Brewing Co., Cincinnati: President and general manager, William C. Geis; treasurer, J. F. Tieberman; brewmaster, Walter A. Weingaertner.

Kewaunee Brewing Co., Kewaunee, Wis.: general manager, William Waas, formerly with E. L. Drewry, Ltd., Winnipeg, Manitoba, Can.

Keeley Brewing Co., Chicago: President, Thomas F. Keeley; secretary and treasurer, Eugene M. Keeley; brewmaster, Max Stahl.

Kessler Brewing Co., Helena, Mont.: President, Charles N. Kessler; vice-president, M. K. Cochran; secretary and treasurer, Frederick E. Kessler. The brewmaster is Fred Dehler; additional director, M. K. Cochran.

Fred Koch Brewery, Inc., Dunkirk, N. Y.: President and brewmaster, Fred C. Koch; vice-president, Henry J. Koch; secretary-treasurer and general manager, William L. Koch; additional director, Mary Koch.

Gottfried Krueger Brewing Co., Newark, N. J.: Brewmaster, Martin Mann.

Kunz-Bleser Co., Manitowac, Wis.: President and secretary, Daniel B. Bleser; vice-president and brewmaster, Louis Kunz.

Labor Brewing Co., Uniontown, Pa.: President, W. H. Wilkey; vice-presidents, John T. Byers and R. W. Gilmore; treasurer, J. I. Feather; secretary, C. F. Kefover; superintendent, John T. Byers; brewmaster, Joseph G. Sippel.

Lange Brewing Co., Piqua, Ohio: President, treasurer and general manager, Frank Lange, Sr.; vice-president and secretary, George F. Lange; brewmaster, Alexander M. Lange; additional directors, A. M. Lange, Frank N. Lange, and M. Lange.

Leisen-Henes Brewing Co., Menominee, Mich.: President, Louis J. Leisen; vice-president, Joseph W. Leisen; secretary-treasurer and general manager, John Henes; additional director, Walter E. Henes; brewmaster, Wolfgang Binder.

Leisy Brewing Co., Peoria, Ill.: President, E. C. Leisy; vice-president, J. W. Leisy; secretary-treasurer, W. B. Marshall; brewmaster, Fritz Koehler.

Liebert & Obert Brewing Co., Philadelphia.: President, John B. Obert; vice-president, Mary Obert; secretary-treasurer, Peter Liebert; brewmaster, John L. Liebert.

Lock City Brewing Co., Lockport, N. Y.: President, Myron D. Clapsattle; vice-president, Fred Gerner; secretary and treasurer, Van Ness Douglas; superintendent and brewmaster, Joseph Sellner.

Madison Brewing Co., Madison, Ind.: President, John B. Ross; secretary-treasurer, A. T. Weber; general manager,

A. C. Greiner; additional directors, John W. Tevis and Chas. Greiner.

Marathon City Brewing Co., Marathon, Wis.: President, Fred Brand; vice-president, M. Durrestein; treasurer, A. F. Sindermann; secretary, A. J. Cherney; brewmaster, A. H. Gruneisen.

Marietta Brewing Co., Marietta, O.: President, general manager and brewmaster, Jacob Epple; vice-president, Minnie Epple; secretary and treasurer, Elmer Barnes.

Masontown Brewing Co., Masontown, Pa.: President, Thomas Hoover; vice-president, Dr. M. H. Cloud; secretary-treasurer and general manager, P. H. Ralston. The brewmaster is L. Merck; additional directors, L. G. Sterling, P. Mullen, J. A. Ramsay, F. A. Maddas.

Marx Brewing Co., Wyandotte, Mich.: President and general manager, Frank Marx; vice-presidents, Charles H. Riopelle and Jeremiah Drennan; treasurer, Theodore Hoersch; secretary, John J. Marx; superintendent, Ferdinand Fickel; additional director, Edward Haas, auditor. The brewmaster is Gustave Brandes.

Mathie Brewing Co., Wausau, Wis.: Directors, Otto Mathie, John F. Mathie, John Ringle, Edward C. Kretlow and Henry Juers; president and superintendent, Otto Mathie; vice-president, John Ringle; secretary-treasurer and general manager, John F. Mathie.

Meadville Brewing Co., Meadville, Pa.: President, W. L. Krider; secretary, A. D. Kilpatrick; assistant secretary, A. Lowman; superintendent and brewmaster, Rudolph Lichtwitz.

Mellet & Nichter Brewing Co., Pottsville, Pa.: President and treasurer, M. Mellet; vice-president and general manager, J. H. Nichter; secretary, W. E. Reilly; additional directors, D. Reeves and Kimber Hoy. The brewmaster is John F. Haug.

Michigan Brewery, Detroit: President, Charles A. Ley; vice-president and secretary, Peter J. Neckel; treasurer and general manager, Charles H. Koerber; brewmaster, William G. Koerber; additional directors, F. Lorkowsky, J. Lensky, J. Karamon, Hy. Malesky, F. Kaliszewski.

Michigan Union Brewing Co., Ann Arbor, Mich.: President, John Koch; vice-president, Oswald Dietz; treasurer and brewmaster, C. Martin; secretary and general manager, William A. Gwinner; additional directors, R. Kearns, M. Grossman, L. C. Rodman.

William A. Miles & Co., New York: President James W. Taylor; vice-president, William B. Miles; secretary and treasurer, Joseph L. Lockhart; additional directors, George H. Robinson and Ernest Housman. The brewmaster is John A. Lindsay.

Milwaukee-Waukesha Brewing Co., Milwaukee, Wis.: President, Charles Mangold, Jr.; vice-president, William H. Mangold; secretary and treasurer, A. S. Lindemann; brewmaster, John Eibl; additional directors, W. Zinn, F. T. Boesel.

Minck Brewing Co., Richmond, Ind.: President, treasurer and general manager, Lewis E. Iliff; secretary, A. W. Blickwedel; additional directors, J. P. Iliff, Edward Roser, Jacob Lichenfels, Daniel A. Rudy. The brewmaster is Charles Kraatz.

Mission Brewing Co., San Diego, Cal.: President, J. H. Zitt, vice-president, Fred W. Handschy; secretary and treasurer, A. Bloedt; brewmaster, Jacob Guehring.

Monroe Brewing Co., Rochester, N. Y.: President Charles E. Crouse; vice-president, John S. Conway, treas-

urer, Clarence E. Jennings, superintendent and brewmaster, Michael Neuhirl.

Mt. Clemens Brewing Co., Mt. Clemens, Mich.: President, treasurer and general manager, John G. Freimann; vice-president, August Henkel; secretary, Paul H. Duckert; brewmaster, John Oser.

Mountain Spring Brewing Co., Ltd., Calgary, Alberta, Can.: President, Conrad Knapp; vice-president, Andrew J. Short; secretary and treasurer, R. Besse; general manager, James T. Dee; brewmaster, William Groolfs.

Geo. Muehlebach Brewing Co., Kansas City, Mo.: President, Geo. E. Muehlenbach; vice-president, Mrs. M. M. Muehlenbach; treasurer, S. C. Buchholz; secretary and manager, Carl A. Muehlenbach. The brewmaster is Leo Wolf.

Muehlenberg Brewing Co., Bernharts, Pa.: President and general manager, Simson Becker; vice-president, Valentine Hartman; treasurer, H. J. Seidel; secretary, U. R. Fisher; additional directors, N. G. Rothermel, E. K. Leshner and William M. Becker.

Muessel Brewing Co., South Bend, Ind.: President, Edward Muessel; general manager and treasurer, Walter G. Muessel; secretary, William Muessel; superintendent, A. J. Muessel; brewmaster, Joseph Muessel.

Muskegon Brewing Co., Muskegon, Mich.: President, Otto G. Meeske; vice-president and treasurer, Gustav Meeske; secretary, Paul E. Meeske; additional directors, F. L. Meeske and Otto W. Meeske. The brewmaster is Frank E. Weber.

Narragansett Brewing Co., Providence, R. I.: President, John H. Fehlberg; general manager, Emil Schierholz; brewmaster, Otto Henn.

National Breweries, Ltd., Montreal, Que.: President, A. J. Dawes; 1st vice-president, Vesey Boswell; 2nd vice-president, Major George R. Hooper; secretary and treasurer and comptroller, James D. Hudson; managing director, Norman J. Dawes.

Northampton Brewing Co., Northampton, Pa.: President, P. J. Laubach; secretary and treasurer, L. F. Laubach; general manager, R. L. Weisel; brewmaster, John Schumm.

Northern Brewing Co., Superior, Wis.: President, Fred. J. Rueping; vice-president, L. H. Rueping; secretary-treasurer and general manager, L. E. McKinnon; additional director, H. B. Tubbs. The brewmaster is John R. Kuehlthau.

North Star Brewing Co., San Francisco, Cal.: President, John Pope; vice-president, Henry Behlmer; secretary and treasurer, John Schroeder; additional director, Mathilda Schleeman. The brewmaster is John B. Oppel.

T. M. Norton Brewing Co., Anderson, Ind.: President, M. C. Norton; vice-president, Mrs. T. M. Norton; secretary-treasurer and general manager, W. J. Norton; brewmaster, William Hacker.

John F. Oertel Co., Louisville, Ky.: President, John F. Oertel; vice-president, William Rueff; secretary and treasurer, Louis Bauer; additional director, Jacob Zaim. The brewmaster is F. W. Finger.

Oshkosh Brewing Co., Oshkosh, Wis.: Directors, W. J. Glatz, Otto Horn, A. L. Schwalm, Miss Eliza Kuenzl and Mrs. Emma Pfotenhauer.

Park Brewing Co., Winona, Minn.: President and general manager, John Dietze; vice-president, Henry J. Willis; secretary and treasurer, Julius Gernes. The brewmaster is Max Lossen; additional directors, E. Miller, A. A. Artz, W. J. Smith, C. M. Morse, Wm. Rademacher.

Peoples Brewing Co., Trenton, N. J.: President, Mahlon R. Margerum; vice-president and general manager, Rudolph V. Kuser; secretary-treasurer, John L. Kuser; additional directors, W. A. Dunn, Fred Kuser. The brewmaster is Angelus Sauerwein.

Philadelphia Brewing Co., Philadelphia: President, John McGlinn; vice-president, William J. McGlinn; secretary and treasurer, James J. Dougherty; brewmaster, Peter Mann.

Portsmouth Brewing & Ice Co., Portsmouth, Ohio: President and treasurer, Paul Esselborn; secretary, George Zeisler; additional directors, Otto Lauffer and J. Rehfsuss. The brewmaster is August Tiesse.

F. A. Poth & Sons, Inc., Philadelphia, Pa.: President, Fred. J. Poth; secretary and treasurer, H. A. Poth; additional directors, Edw. A. Schmidt and Geo. J. Roesch. Brewmaster is Martin Grauer.

Potosi Brewing Co., Potosi, Wis.: President and general manager, Nicholas Schumacher; vice-president, C. J. Ragatz; secretary and treasurer, A. W. Schumacher; additional directors, Jos. Vogelsberg, T. H. Runkel.

Princeton Brewing Co., Princeton, Wis.: General manager and brewmaster, Chas. F. Gerlach.

Emil T. Raddant Brewing Co., Shawano, Wis.: President and manager, William Buche; vice-president, F. Dengel; secretary-treasurer and assistant manager, King Weeman; additional directors, August Anderson, J. C. Black, F. Naber; brewmaster, John Seifert.

F. D. Radeke Brewing Co., Kankakee, Ill.: President and treasurer, William H. Radeke; vice-president and superintendent, August C. Radeke; secretary, Lewis E. Beckman. Arthur Schoenlein is the brewmaster.

William Rahr Sons Co., Manitowoc, Wis.: President, Maximilian Rahr; vice-president, Frank A. Miller; secretary and treasurer, Reinhardt Rahr; brewmaster, Hans B. Bauer.

Reading Brewing Co., Reading, Pa.: President and general manager, Philip Bissinger; vice-president, Ferdinand Winters; secretary and treasurer, H. C. Meck. The brewmaster is J. M. Hertlein.

Red Wing Brewing Co., Red Wing, Minn.: President and general manager, William F. Zimmermann; vice-president, W. H. Zimmermann; secretary and treasurer, C. P. Zimmermann; brewmaster, Edward Scheel.

Renner & Weber Brewing Co., Mansfield, O.: President, George J. Renner, Sr.; vice-president, Julius Weber; secretary and treasurer, John Weaver; brewmaster, John Scior.

Reno Brewing Co., Inc., Reno, Nev.: President, George W. Mapes; vice-president, Peter Dohr; treasurer, Henry Riter; secretary and general manager, Jacob Hook; brewmaster, Edmund F. Hook.

Rhineland Brewing Co., Rhineland, Wis.: President, O. A. Hilgerman; vice-president, L. Emmerling; treasurer, A. Schauder; secretary, A. S. Post; superintendent and brewmaster, Louis Brunner.

F. A. Rieker Brewing Co., Lancaster, Pa.: President, Harry A. Rieker; treasurer and general manager, Frank J. Rieker; secretary, Charles A. Rieker; additional director, Anna Rieker-Vogel. The brewmaster is Theobald Schlegel.

Rising Sun Brewing Co., Elizabeth, N. J.: President and treasurer, George Seeler; vice-president, William H. Reynolds; superintendent and brewmaster, Carl F. Guntrum.

Rockford Brewing Co., Rockford, Ill.: President and general manager, John V. Petritz; vice-president, Frank

J. Petritz; secretary and treasurer, Mathias J. Petritz; brewmaster and superintendent, William Dirian.

Rubsam & Horrmann Brewing Co., Stapleton, Staten Island, N. Y.: President, Wm. Horrmann; vice-president and treasurer, Chas. Horrmann, secretary, Theo. L. Horrmann; superintendent, August Horrmann.

Geo. Ruder Brewing Co., Wausau, Wis.: President, Jacob Gensmann; vice-president, Julius Quade; secretary and treasurer, Henry Ruder; additional directors, Hugo Peters, Edward Schulze, Anton Mehl and Emil Flatter. The brewmaster is Louis Zimmerer.

Thomas Ryan's Consumers' Brewing Co., Syracuse, N. Y.: President, treasurer and general manager, Thomas Ryan; vice-president, Joseph Wittner; secretary, William E. Sembach; additional directors, Christian Fusz, Frank S. Patridge, Charles W. Ziegler, William T. Klink, Thomas R. Heffron, Michael McMahon, Thomas H. Ward, Christian Fusz and Anthony Langan. The brewmaster is William J. Bauer.

Santa Cruz Brewing Co., Santa Cruz, Cal.: President, Fred R. Walti; vice-president, Carl Beck; secretary-treasurer, superintendent and brewmaster, Frank A. Stenz; additional directors, Max Stenz, Pio Scaroni, R. Heins, L. W. Weissendorf, Geo. Cardiff.

Santiago Brewing Co., Santiago de Cuba, Oriente: President, E. F. McManus; vice-president, E. J. Chibas; secretary, W. N. Bale; general manager, F. Perez Ruiz; additional directors, Gustavo Ros and Douglas Brooks. The brewmaster is Louis Brodhag.

H. B. Scharmann & Sons, Brooklyn, N. Y.: President, Herman F. Scharmann; vice-president and treasurer, August C. Scharmann; secretary, Louis G. Burger; general manager, H. G. Scharmann, Jr.; additional director, H. G. Scharmann. The brewmaster is John Rief.

August Schell Brewing Co., New Ulm, Minn.: President and general manager, George Marti; vice-president, Otto A. Schneider; secretary and treasurer, Ernst A. Hagberg; additional directors, H. N. Somson, Chas. W. Quandt; brewmaster, Gust. Guse.

Schorr-Kolkschneider Brewing Co., St. Louis: John J. Schorr, president and brewmaster; Hy. W. Kolkschneider, vice-president, treasurer and general manager; Clarence W. Schorr, secretary and superintendent.

Seitz Brewing Co., Easton, Pa.: Clinton F. Hilliard, president; J. H. Steele, vice-president; John B. Schmid, superintendent and brewmaster.

Semrad Bros. & Pusch Brewing Co., Highland, Wis.: President, general manager and brewmaster, Frank F. Semrad; vice-president, Anthony J. Pusch; secretary and treasurer, Joe E. Semrad; additional director, Mrs. Kate Semrad.

Sheridan Brewing Co., Sheridan, Wyo.: President, R. A. Keenan; vice-president, D. D. Warner; secretary-treasurer and general manager, Henry Kroger. The brewmaster is Herman Dahlke.

Silver Spring Brewery, Ltd., Sherbrooke, Quebec, Canada: President, W. R. Osmond; vice-president, R. H. Gillespie; secretary, W. E. Gillespie; general manager, John Rowell; brewmaster, Cyril Gwyn; assistant brewmaster, E. F. W. Causton.

Robert Smith Ale Brewing Co., Philadelphia: President, Edward A. Schmidt; vice-president, Frederick W. Schmidt; treasurer, Henry C. Schmidt; secretary and general manager, Rudolph H. Wolf; additional director, George Oppenlander. The brewmaster is Charles J. Schmalzried.

South Bend Brewing Association, South Bend, Ind.: President, G. A. Stueckle; vice-president, Ernest Krueger; secretary-treasurer and general manager, T. M. Hoban; additional directors, M. J. Hoban and J. E. Senrich; brewmaster, John B. Glueckert.

Standard Brewing Co., New Castle, Pa.: President, George W. Lamoree; vice-president and superintendent, H. Grotefend; treasurer and general manager, M. Feuchtwanger; brewmaster, Albert Grotefend.

Standard Brewing Co., Rochester, N. Y.: President, Louis H. Daus; vice-president and secretary, Benjamin S. Meyer; treasurer, C. C. Werner; brewmaster, John L. Lang; additional directors, Geo. C. Staud, Geo. F. Nelson, Chas. Hetzler, Thos. H. Christie.

Star Brewing Co., Greensburg, Pa.: President, George Slaine; vice-president and general manager, D. L. Joyce; secretary and treasurer, D. P. Hudson; additional directors, C. B. Hollingsworth and B. E. Levinstein. The brewmaster is Klemens Baar.

Stevens Point Brewing Co., Stevens Point, Wis.: President, W. E. Kingsbury; vice-president, Henry Gross; secretary and manager, N. Gross; treasurer, C. A. Schenk; brewmaster, Geo. Egenhofer; additional Directors, John Martin, W. L. Playman, J. Kaczmarek.

David Stevenson Brewing Co., New York: President, David Stevenson; vice-president, Malcolm Stevenson; treasurer, John M. Brown; secretary, Philip Stevenson; general manager, Isaac Sickel; brewmaster, William Bertschinger; additional directors, Newell Bent, H. Clarke, and Edward J. Brown.

Storz Brewing Co., Omaha, Neb.: President G. Storz; vice-president, A. G. Storz; secretary and treasurer, Charles F. Weymuller; superintendent and brewmaster, John Buck; additional director, G. W. Tierney.

Tell City Brewing Co., Tell City, Ind.: President, A. C. Obrecht, vice-president, Albert Hoher; treasurer, Joseph Einsiedler; secretary, Rudolph Fischer; superintendent and brewmaster, Otto Kniesche.

Terre Haute Brewing Co., Terre Haute, Ind.: President, Crawford Fairbanks; vice-president and general manager, Thomas G. Beggs; treasurer and secretary, George Maier; additional directors, E. P. Fairbanks and J. E. Beggs. The brewmaster is Herman F. Hahn.

Thieme & Wagner Brewing Co., La Fayette, Ind.: President, John Wagner; vice-president and treasurer, Frederick P. Thieme; secretary, Frank H. Wagner; superintendent and brewmaster, Adolph Heuss; additional director, Mrs. Charles C. Thieme.

Val. Udermann Brewing Co., St. Cloud, Minn.: President, F. J. Schroeder, treasurer, August Pilantz; secretary and manager, Peter Spaniol. The brewmaster is F. J. Kircheis.

Union Brewing Co., New Orleans, La.: President, Josef di Carlo; vice-president, Geo. Mulé; secretary and treasurer, Phil Foto; superintendent and brewmaster, Henry Dihlmann.

Union Brewing Co., Peoria, Ill.: President, William B. Woolner; vice-president, Samuel Woolner; secretary-treasurer and general manager, E. S. Woolner; brewmaster, Joe Dierson.

United States Brewing Co., Chicago: President, treasurer and general manager, Edward Landsberg; secretary, G. B. Windston; purchasing agent, Carl H. Arens.

Upper Sandusky Brewery, Upper Sandusky, Ohio: Proprietor and general manager, Albert H. Martens; brewmaster, Lorenz Freimann.

Wabash Brewing Co., Wabash, Ind.: President, Karl

P. Alber; vice-president, Thomas Alber; secretary and treasurer, Jacob Alber; brewmaster, August Franstein.

John Wagner Sons' Brewing Co., Sidney, Ohio: President, Henry Wagner; vice-president, Louis F. Wagner; secretary and treasurer, Edward J. Wagner; superintendent and brewmaster, William Herancourt; additional directors, Alma Marshall, Elle Zech, Rose Wagner, Celia Wagner and Clara Mayer.

John Walter Brewing Co., Eau Claire, Wis.: President, John Walter; secretary, Alfred B. Loether; treasurer, George L. Blum.

Watertown Consumers' Brewing Co., Watertown, N. Y.: President, John M. McCutchin; vice-president, Austin E. Rose; secretary-treasurer and general manager, Elmer E. Worthen; superintendent and brewmaster, Gottfried Laible; additional directors, John E. Pendergast, James E. Barney, Ivan J. Gotham, R. W. Carpenter, John Simpson and Andrew P. Weldon.

West Bend Brewing Co., West Bend, Wis.: President and director, Martin F. Walter; treasurer, Julius Kerber; secretary and director, Charles W. Walter; brewmaster, Adam Spaeth.

West End Brewing Co., Utica, N. Y.: President and general manager, Frank X. Matt; vice-president, S. D. Powers; secretary, H. Etting; assistant secretary, Joseph F. Lenhardt. The brewmaster is Peter Stammberger.

West Hammond Brewing Co., West Hammond, Ill.: President, Richard O. Winckler; vice-president and general manager, Charles H. Mayer; secretary-treasurer, Joseph P. Mayer; additional directors, H. F. Lindner and H. Schomaker. The brewmaster is Franz Fanta.

West Louisville Brewing Co., Louisville, Ky.: President and treasurer, Frank Bloemer; vice-president, Jacob Ziegler; secretary, Albert Schmutz; additional directors, T. L. Block, Leo Klarer, William Zurlinden, W. F. Woodruff and Henry R. Ellerman. The brewmaster is John Schneider.

West Point Brewing Association, West Point, Neb.: President, Ferdinand Koch; vice-president, Chris. Schin-stock; secretary and treasurer, J. F. Zajicek.

Wetterer Brewing Co., Cincinnati, O.: President and treasurer, F. J. Wetterer; additional directors, Agatha Wetterer, Magdalen Wetterer Vogel and Rose Wetterer Uihlein. The brewmaster is Joseph Ritter.

Christian Weyand Brewing Co., Buffalo, N. Y.: President, Conrad Hammer, Jr.; vice-president and treasurer, W. W. Weigel; treasurer, Robert F. Schelling; brewmaster, Joseph Ettl.

Gottlieb Wildermuth Brewing Co., Pomeroy, Ohio: President, Chas. F. Wildermuth; secretary and treasurer, Max W. Wildermuth; Carl Schwope, brewmaster.

Windisch-Muhlhauser Brewing Co. (the Lion Brewery), Cincinnati: President, Charles F. Windisch; vice-president, Wm. A. Windisch; treasurer, Henry Muhlhauser, Jr.; secretary, Edward C. Mulhauser; superintendent and brewmaster, Carl Storz.

Willow Springs Brewing Co., Omaha, Neb.: President, H. V. Hayward; vice-president, Henry Schroeder; secretary and treasurer, O. M. Olsen; brewmaster, Henry Schulz.

Worcester Brewing Corporation, Worcester, Mass.: President, Michael J. Finnigan; vice-president, Michael A. Henry; secretary and treasurer, Herbert A. Maynard; additional directors, Joseph F. Finnigan, John H. Meagher, Thomas Brazell and Dennis M. Crowley. The brewmaster and superintendent is George Bieberbach.

Yale Brewing Co., New Haven, Conn.: President and

general manager, N. W. Kendall; vice-president, John E. McPartland; secretary and treasurer, Henry Musch. The brewmaster is Henry Reichel.

Yough Brewing Co., Connellsville, Pa.: President, B. Franks; vice-president, Frank Zacharias; manager and brewmaster, Otto Koehler; secretary-treasurer, Joseph Tippmann; additional director, John Dean.

George Zett Brewery, Syracuse, N. Y.: President and general manager, Charles A. Frank; vice-president, Jacob F. Hecker; secretary and treasurer, Patrick F. Maloney; additional director, William F. Rafferty. The brewmaster is Robert Vogt.

M. Ziegler Brewing Co., Mayville, Wis.: President, Louis Ziegler; vice-president, Clotilde Balz; treasurer and general manager, Emil Ziegler; secretary, Eugene Ziegler; brewmaster, Joseph Baierl.

Philip Zorn Brewing Co., Michigan City, Ind.: President and treasurer, F. Vullmahn; vice-president, Robert P. Zorn; secretary, C. E. Remer; general manager, A. J. Luhr.

BRITISH-AMERICAN BREWERIES. The Bartholomay Brewing Co., Ltd., announce dividends of 8 per cent. on the funding certificates for the year, and 3 per cent. on the ordinary shares.

Report of the Chicago Breweries, Ltd., for the year ended November 30th, 1916, shows a total income of £39,089; total expenses £22,422 and a total surplus of £19,755. The combined sales were 294,221 barrels, an increase of 30,454 barrels over the figures of the previous year.

The report of the Indianapolis Breweries, Ltd., for the year ended Sept. 30th, 1916, states that the sales show an increase of 16,823 barrels as compared with the previous year. After paying debenture interest and interim preference, dividend, and providing for depreciation, &c., the profit is £21,756. A dividend of 6 per cent. on the ordinary shares was paid, carrying forward £5,988.

Goebel Brewing Co., Ltd. The report for the year ended Aug. 31st, 1916, states that, after providing for excess profit duty for 1913-14 and 1914-15, and including £21,721 brought in, the profit is £51,156 as compared with £39,920. A further dividend of 15 per cent. (making 20 per cent. tax free for the year, as for each of the two preceding years) was paid, leaving £23,971 to be carried forward.

New York Breweries Co., Ltd. The report for the year ended Aug. 31st, 1916, states that, after paying debenture interest (£19,725), the profit was \$30,388, out of which the usual dividend of 3 per cent. was paid and \$10,000 transferred to sinking fund reserve. The 3 per cent. dividend was increased by interest received, profit on exchange, &c., to £3,635, from which are met London expenses, fees, &c., leaving £577 to be added to the balance, increasing it to £14,383.

St. Louis Breweries, Ltd. The report for the year ended Sept. 30th, 1916, stated that sales were 763,216 barrels, an increase of 41,296 barrels over 1915. The accounts of the American Co. show that the profit, after providing for debenture interest and depreciation, is £99,914, which with the amount brought forward makes £106,723. Dividends have been declared of £89,861, of which the amount due to the English company is £89,836. After adding transfer fees, interest, &c., and deducting expenses, the balance is £79,559, which with £18,523 brought forward makes £98,082. A dividend of 2 per cent. on the ordinary shares was paid, carrying forward £8,082.

Personal Mention.

William H. Austin, secretary and counsel of the Wisconsin Brewers' Association, when recently addressing a meeting of the Milwaukee Retail Liquor Dealers' Protective Association, is quoted as having said that "drinking men who vote for a dry city know that they can get all the drink they want from sources other than the saloon."

Gustav Becherer, president of the Milwaukee Brewery Co., Milwaukee, says: "During 1916 brewers have faced almost a crisis in their business. Not the increase in prohibition territory, for that is of lesser importance, but the tremendous increase in the cost of raw materials which go into the manufacture of our product. Averaging almost 100 per cent. increase in the cost of grains and machinery, 1916 prices have kept the brewer straining every energy to meet conditions, and only toward the latter part of the year, when no relief seemed in sight, did he raise the price of his product to the trade. It had to be done, for brewing could not be continued with costs so high and prices at the old scale. The Prohibition situation is not so oppressive as might be imagined. Of course it is making itself felt to the larger shipping brewers, but we are confident that it has reached its zenith; that the retail department of the industry will meet the demands of the public and so conduct their places as to fully meet the sentiment of the people." The selling end of the business, it seems, does need improvement and I fully believe this will be done. The manufacturing of our product is as perfect as it can be made, the public finds no fault with that, for beer is as pure a food and beverage product as can be produced. The prohibition movement will be successfully met by improvement in the retail selling and that is something over which the brewers have no control."

William Braunstein, treasurer of the Wm. Peter Brewing Co., Union Hill, N. J., celebrated his sixty-third birthday on Wednesday, January 3rd, being the recipient of congratulations and charming presents from the members of his family and his numerous friends.

August A. Busch, president of the Anheuser-Busch Brewing Association, St. Louis, has gladdened the hearts of 3,500 orphans in his city and St. Louis County by giving each of them a warm sweater, or sweater coat, as a Christmas present.

Zane Cetti, president of the Texas Brewing Co., Fort Worth, Tex., recently experienced a severe shock when his son Carl met with an automobile accident, his car being crushed between two street cars and the young man was so dangerously injured that, to save his life, one of his legs had to be amputated. Young Cetti's companion, Charles Onins, cashier of the Texas Brewing Co., died during the night after the accident, December 15th, without having regained consciousness.

George Ehret, New York, who has been in Europe for now nearly three years, on New Year's day sent wireless greetings, to his family and officials and employes of his great New York brewery. Mr. Ehret expects to return to the United States as soon as peace has been effected by the belligerent nations, believing that this will be very soon. This is the fifty-first year since Mr. Ehret founded his plant. To the West Side Library of the Young Men's Christian Association, Mr. Ehret gave as a Christmas present a complete set of the German Classics.

L. A. Erhart, who for nineteen years successfully managed the business of the Northern Brewing Co., Superior, Wis., has severed his connection with that

corporation. He recently disposed of his home and business interests in Superior and has removed to Fond du Lac, his former home, where he has established his permanent residence.

Crawford Fairbanks, president of the Terre Haute Brewing Co., Terre Haute, Ind., has donated a large tract of land to the municipality of Terre Haute, as an addition to its system of public parks.

Joseph Fallert, president of the Joseph Fallert Brewing Co., Inc., Brooklyn, N. Y., celebrated his birthday on Saturday, December 16th, receiving numerous good wishes, congratulations and gifts from relatives and friends.

Christian W. Feigenspan, president of Christian Feigenspan, Inc., Newark, N. J., was the principal speaker for the brewers of New Jersey at the recent hearing before the Interstate Commerce Commission, to protest against discrimination against New Jersey people in regard to freight rates which, it is asserted, are favoring New York to the great detriment and injustice resulting to business that must be done through New York harbor.

August C. Gruenewald, vice-president, superintendent and brewmaster of the Premier Brewing Co., Philadelphia, and his pretty wife celebrated their paper wedding on Saturday, December 2nd, the many friends of the happy young couple being with them at the festive board and showering them with gifts, appropriate to the occasion.

Thomas Halstead Harley, who is said to be the oldest brewer in New Zealand, having been born in 1845, and his wife, celebrated their golden wedding on September 27th, 1916. Mr. Harley is the son of a brewer in whose plant he was apprenticed to the trade. Subsequently he purchased Field's Brewery and then built breweries in Nelson, Picton and Wellington. He also operated several malt houses and was an extensive grower of hops. In 1909 he retired from active work.

W. V. Hirsh, of Hirsh & Scofield, attorneys-at-law, New York, has written a public letter discussing the results which will probably be produced by enforcement of the Webb-Kenyon law, making the point that, when everybody should distill spirits at his home, the "dry" prospect for Americans would be quite "nice."

Fred Krug, president of the Fred Krug Brewing Co., Omaha, Neb., celebrated the eighty-second anniversary of his birth on Friday, December 22d, as hale and hearty as ever, and congratulated by the hosts of his loving relatives and admiring friends.

G. A. Kusterer, president of the Grand Rapids Brewing Co., Grand Rapids, Mich., when interviewed on New Year's day as to the company's future, said: "We have just declared our regular annual dividend of 15 per cent. During the coming year we will make just as much beer as we can sell. What will come after that when prohibition is in force remains to be seen. We have no plans for our big plant as yet and I do not think the brewers of the State are any clearer as to the future than we are."

H. Landesmann, partner in S. Landesmann Company, dealers in hops, Prague, Nuremberg and Saaz, has been decorated with the Austrian war medal for bravery on the firing line.

Louis E. McKinnon, the newly elected manager of the Northern Brewing Co., Superior, Wis., has great confidence in the future development of that city and, consequently, in the further success of the company. He has been a resident of Fond du Lac for the last nine years and moved to Superior last month, making his permanent home in that city. Mr. McKinnon was educated in the

Superior schools and entered the employment of the Northern Brewing Co. as a stenographer in 1899, and in 1909 he was promoted to the management of the company's branch at Fond du Lac, while in 1914 the company made him manager of their Fond du Lac malting plant. Since January 1st, 1916, he was assistant of the general manager of the brewing company, L. A. Erhart.

Julius R. Petersen, treasurer, superintendent and brewmaster of the Petersen Brewing Co., Grand Rapids, Mich., and his amiable young wife, the former Miss Amelia Weaver, celebrated their cotton wedding on New Year's day, their many friends presenting them with welcome gifts all made of the material the occasion called for.

J. P. Rettenmayer, president of the California State Brewers' Association, and president of the Acme Brewing Co., San Francisco, advocates the control of the retailers through the sources of the supplies; a slow weeding out of undesirable saloons, but no arbitrary revocation of licenses or increase in the fee; absolute suppression of the illicit sale of liquor; elimination of all disorderly resorts; the reduction of the number of saloons by a process of remuneration. "By that I mean," explains Mr. Rettenmayer, "that no man should be deprived of his property rights without compensation. This compensation should be paid by the surviving saloons. A license-retiring fund should be created by increasing the present license tax \$100 or \$200 at once. This money would go into a license-retiring fund, which could be placed in the hands of a commission comprised of three men not interested in the liquor business. This reduction would put the remaining saloons on a paying basis."

Rudolph J. Schaefer, president of the F. & M. Schaefer Brewing Co., New York, on New Year's day sent out cards wishing his friends and clients the compliments of the season, and expressing the hope that the New Year will bring all of us much success and happiness, a wish which we herewith desire to return to him and his company, the brewery of which this year celebrates the seventy-fifth of its existence.

Louis B. Schram, president of the India Wharf Brewing Co., Brooklyn, N. Y., read an interesting report upon the subject of "Accident Prevention" before the seventeenth annual convention of the National Civic Federation, held January 22nd at the McAlpin Hotel, New York.

Peter Schreihart, although he retired from active business some time since, he being now in his ninety-second year, still visits the office of the Schreihart Brewing Co., Inc., Manitowoc, Wis., almost every day and his associates and all other officials at the brewery are only too eager to consult him in matters of difficulty and importance. Mr. Schreihart celebrated his 91st birthday on December 21st, 1916.

John Stanton, president of the John Stanton Brewing & Malting Co., Troy, N. Y., observed his eighty-fifth birthday January 16th, and the employes of the company presented him eighty-five handsome American beauty roses, while his many friends sent telegrams of congratulation and numerous bouquets and baskets of flowers.

Hon. Charles J. Vopicka, founder of the Atlas Brewing Co., Chicago, and for many years its president, but now United States Minister for the Balkan States, with residence in Bucharest, Rumania, has been dragged through the newspapers of late because, it was alleged that when the military authorities of the central European powers occupied Bucharest, they demanded Mr. Vopicka's recall, claiming that, as he is a native of Bohemia, he favored Russia and, therefore, did not behave as a neutral. It now turns out that all of the ministers from neutral states

were sent out of Rumania and Mr. Vopicka is now in Berlin, awaiting further orders from the State Department in Washington.

Wm. F. Wurster, superintendent of the Orange Brewery, Orange, N. J., and his wife, celebrated their silver wedding January 26th. They are now enjoying a trip to Florida.

Charles Zoller, president of Charles Zoller Company, New York, importers of brewing machinery, brewing materials and all other supplies, recently received from the Queen of Wurttemberg the decoration of the "Charlotte Cross," as a reward for his liberal contributions to the funds of the Red Cross Society. He is now on a trip to California.

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. Secretary C. A. Nowak, in a "Retrospect 1916" says that correspondence from districts and members, "recently received, has been most gratifying in its character. Suggestions and criticisms have been carefully considered and will be given due attention." Arrangements for two visiting trips to districts by National President Wm. F. Carthaus were made, the first trip comprising Monday, January 22nd, Chicago; Tuesday, January 23rd, Milwaukee; Thursday, January 25th, La Crosse; and Saturday, January 27th, St. Paul. The itinerary for the second trip will be: Monday, March 5th, Baltimore; Tuesday, March 6th, Philadelphia; Wednesday, March 7th, New York; Saturday, March 10th, Boston; and Tuesday, March 13th, Albany. The members of the districts have been discussing the question of convention arrangements and committees, Secretary Nowak having submitted a number of valuable hints and propositions as follows: (1) A National Convention Committee to be appointed by the President. (2) An Arrangement Committee to consist of the chairmen of various committees. (3) Reception Committee to consist of district members, allied tradesmen, and their wives and daughters. Also to take care of hotel information. (4) Entertainment Committee to take care of halls decoration, music, refreshments and entertainments. (5) Press Committee to take care of Press matters, technical papers and printing. (6) Finance Committee to control all finance matters. (7) Festivities to consist of: 1st evening, Reception; 2nd evening, Banquet; 3rd evening, Ball. (8) Badges, Bulletin Board, Information Bureau. (9) Dispense with serving refreshments during the day. (10) Suggestion for a successful convention. Colleague Louis W. Silberschmidt, of the La Crosse district, writing to Secretary Nowak upon the subject "Need of Organization," has said, in part: "Michigan, Montana, South Dakota and Nebraska voted in favor of Prohibition on November 7th, 1916, and what did the Master Brewers' Association of the United States do to stop this movement? To our lasting shame, we must confess that we virtually told our colleagues in these States 'to go to hell and fight their own battle.' I do not mean to say that the Master Brewers' Association of the United States could have saved these States, but we certainly could have had the honor to say that we, as a body, did our share to overcome this agitation. I cannot understand how the Association can expect to get new members when they do absolutely nothing regarding the most vital question confronting the members to-day."

District Meetings.

ALBANY. The Albany District favors the proposition that the "Communications" be printed in the English language only; that the national association shall not contribute towards convention expenses, the money to be raised by charging a fee to the attending members and visitors from

the allied trades. Berthold Ruprecht, assistant brewmaster of the Beverwyck Brewing Co., Albany, N. Y., has been admitted to membership.

BOSTON. The 105th regular meeting of the Boston District was held on January 13th, 1917, at the Hotel Hayward, Boston, with colleagues Slawson, Koessler, Aichel, C. F. Russert, Lieber, Thumm, Bieberbach, Rathgeb, J. W. Russert, Carroll and Nicoll answering to the roll call. Mr. Winther of the National Brewers' Academy, New York, was present, as also was Mr. Emil Oetteking of the True W. Jones Brewing Co., Manchester, N. H. August F. Neschke, assistant brewer of the Frank Jones Brewing Co., and Emil Oetteking, of the True W. Jones Brewing Co., were unanimously elected to membership. Raymond Holland and Herbert J. Kresser who, owing to ill health, did not put in their application, were granted a delay. It was voted to refund sleeper-fare to members who attended the convention in Buffalo. The Committee on membership reported and the secretary was instructed to send letters of sympathy to colleagues Geo. J. Gracie and Otto Henn who were unable to be present owing to sickness. The Secretary was also instructed to acknowledge telegrams of congratulation over the victory in the recent election sent by Secretary Graf of Cleveland and Carl Robitschek of New York. Jas. R. Nicholson, President of the Harvard Brewing Co., Lowell, Mass., was then elected an honorary member of the Association. Mr. Russert as Chairman with Lieber, Gindele, Thumm, Aichel, Slawson and Nicoll, were appointed as a Reception Committee for President Carthaus who is to attend a special meeting on March 10th. The Secretary was instructed to write to President Carthaus in order to inquire whether this special meeting is to be attended by members only. The Technical Committee then presented the following question: "What is the difference in the chemical composition of two worts, one made by starting high at 162° F. and mashing down to 150° F., the other by starting low at 132° F. and mashing up to 150° F?" After a general discussion it was concluded that so far as the sugars are concerned there would not be a fundamental difference, but the wort made by mashing upwards would certainly contain more soluble albumen, the difference being more pronounced if a malt of inferior quality is used and much less apparent with a well-modified malt. The next subject for discussion was the so-called "Zahm Filtering System" for modern bottling plants in which everybody was very much interested, especially since their visit to Buffalo, and Mr. Winther took this occasion to explain in detail the essential features of this process from the technical as well as chemical and biological aspects. A vote of thanks was then tendered Mr. Winther for his kindness in acting as referee in the technical discussion. The committee was adjourned with thanks and colleagues Barth, Koessler and Rathgeb were appointed a committee to prepare questions for the next meeting. The meeting was then adjourned and a few hours were spent in friendly, social intercourse among the members and their guests.

R. F. NICOLL, Secretary.

BUFFALO. District Buffalo has received letters from all over the country, members and Districts thanking the Buffalo colleagues for their splendid entertainment and hospitality during the national convention. From the convention surplus \$100 has been donated to the Charity Association of the Chamber of Commerce, and \$100 to the German-American Alliance. The annual banquet and ball was held at the Hotel Statler, January 24th, the function being a grand social success.

CHICAGO. The members of the Chicago District, having full confidence in the sincerity, capabilities and honor in the financial officers of the National Association, are opposed to the engagement of an expert accountant as a superfluous expense. They favor the printing of the "Communications" in English only; they also favor \$2,000 convention expenses being paid by the national association. At last month's meeting a campaign plan against Prohibition was discussed and agreed upon. The annual banquet and ball will be held at the Hotel Sherman, February 15th. At last month's meeting the District was addressed by National President Wm. F. Carthaus.

CINCINNATI. The Cincinnati District is making a determined effort to promote the interests of the trade by opposing Prohibition. The members are also in favor of the United States government trying to bring about peace among the belligerent nations of Europe.

CLEVELAND. The Cleveland District held its annual ball at the Social Turn Hall, Cleveland, Ohio, on Saturday, January 27th, and it was a decided success in all respects. National President Wm. F. Carthaus has been invited to visit the District. To the German-Austrian-Hungarian Christmas Bazaar, \$25 was contributed.

DETROIT. The members of the Detroit District, after having discussed the disastrous result of last year's election for the trade in Michigan, have arrived at the conclusion that the District will cease to exist in the near future.

LA CROSSE. Secretary Fred Bloesing reports that "District La Crosse is of the opinion that a separate fund should be created and a National Committee should be appointed by our President to work out ways and means to organize all liberal-minded bodies to fight the present agitation against our industry. We know this is going to be a big job, but the start must be made and we can not see why the Master Brewers cannot start this as well as anyone else. We are also of the opinion that a popular man of high character and good reputation should be employed in each of the different liberal States where the agitation against our industry is being made." National President Wm. F. Carthaus spoke at the District's meeting on Thursday, January 25th. Colleague W. A. Steinmann, brewmaster of the Wausau Brewing Co., Wausau, Wis., was admitted to membership. The newly elected officers are: Ferdinand J. Effinger, President; Ernst Chitel, Vice-President; Frederick Bloesing, Secretary-Treasurer; Otto E. Mueller, George Neukomn, La Crosse, Emil Kohn, Fountain City, Directors; Louis Silberschmidt, National Board of Directors.

MILWAUKEE. The members of the Milwaukee District were addressed by National President Wm. F. Carthaus, on Tuesday, January 23rd. There was a large attendance. Newly admitted members are Colleagues Otto Roesch and Herbert Uihlein.

The officers elected at the meeting held January 6th, are: President, Fritz Bock; vice-president, Oscar Mueller; treasurer, Oscar Husting; secretary, Carl F. W. Wrede. Office, 750 Newhall Street, Milwaukee.

NEW YORK. The New York District held its regular monthly meeting January 13th. In the absence of the president, Vice-President Max Papai presided. The advice from Secretary Nowak announcing March 7th as the date National President Carthaus will visit the District was favorably acted upon and this date chosen for the regular March meeting instead of the second Saturday. The Arrangement Committee for the banquet and ball to be held at Liederkranz Hall, February 10th, reported that all arrangements have been made and the committee looks forward to a record attendance. After Dr. Leo Stein had read a very

interesting paper on "The Manufacture of Alcohol," for which he received the thanks of the District, the meeting was adjourned.

JOHN KOENIG, Secretary.

PHILADELPHIA. The members of the Philadelphia District are opposed to the "Communications" being printed in English only because that might be detrimental to the Association. The appointment of an accountant they consider to be an unnecessary expense. They also do not wish that members attending conventions should pay an additional tax of \$10; expenses should be cut, they say.

PITTSBURGH. Colleagues J. T. Muth and Anthony Kircher have been granted withdrawal cards by the Pittsburgh District; D. Dietrich and C. Haag were dropped from the roll for non-payment of dues.

SAN FRANCISCO. The San Francisco District has invited National President Wm. F. Carthaus to address its members during the course of the present month. At the December meeting Ralph A. Gould, for seven years in charge of the San Francisco Laboratory of the U. S. Bureau of Chemistry, addressed the members upon the subject of "The Food and Drugs Act of 1906 as it applies to the Brewing Industries," saying, among other things: "The Food and Drugs Act probably changed the prevalent practice of the brewing industry as little as any industry at the time of its passage. Preservatives were rapidly disappearing from beer, owing to improved cellar treatment and the old-time methods of beer sophistication had died a natural death as a result of improved manufacturing methods. Some difficulties were encountered in the labeling of beer, but they were easily overcome as soon as brewers understood the Act and saw the justice of the Act's requirements. Obviously Pilsner beer can only be made in Pilsen, but it is just as obvious that a beer similar in all respects can be made elsewhere in the world if the same materials and processes are employed. The food law simply requires that Pilsen be permitted to enjoy the fruits of its own reputation and prevents piracy on it by a product made elsewhere, no matter how good or how bad the other product may be. This is simply justice and no right-thinking manufacturer can or should object to it."

ST. LOUIS. At its December meeting the members of the St. Louis District listened to some terse remarks made by National President Wm. F. Carthaus upon the subject of the recent vote on Prohibition, the speaker being of the opinion that the question is no longer a local one but has become a national issue which may reach a climax in 1920. Over one-half of the members in Congress favor Prohibition, and while most of these are from States with a small city population, their voice is as good as that of some of the representatives from the highly populated Eastern States which are liberal in their views. Members of the Association should keep in touch with the tendency in brewing lines and be able to change their product should this become necessary in the near future.

ST. PAUL-MINNEAPOLIS. National President Wm. F. Carthaus was enthusiastically received by the members of District St. Paul-Minneapolis when he addressed them on Saturday, January 27th. The District is doing well and the members are doing their very best to agitate for the advancement of the trade and guard its interests against the growth of Prohibition.

—President Louis A. Adoue, of the Galveston Brewing Co., Galveston, Tex., has announced that the outside interests in the company will be taken over by the local stockholders and that the business will be reorganized under the name of the Galveston Brewing Association.

Obituary.

Frank H. Bechaud, secretary, and one of the founders, of the Bechaud Brewing Co., Fond du Lac, Wis., died in that city November 26th, 1916, after having been ill for a long time. He was a native of Freinsheim, Palatinate, born January 19th, 1848, and came to the United States with his parents in 1850. At the age of thirty-one he and his brothers established the plant which is now owned by the Bechaud Brewing Co. His widow, three daughters, Mrs. E. H. Karrer, Mrs. R. H. Steffen, and Miss Laura H. Bechaud, and his three brothers, A. G. Bechaud, A. R. Bechaud, and J. B. Bechaud, survive him.

Albert F. Bullen, formerly secretary and treasurer of the Minnesota Malting Co., Red Wing, Minn., died in that city, December 18th. He was born in London, Ontario, Can., in 1845 and started in the malting trade with his two brothers, Fred F. and George Bullen. In 1899 he was elected secretary-treasurer of the Minnesota Malting Co., holding the position until 1914, when his corporation merged with the Winona Malting Co., Winona, Minn. His survivors are his two sons, Roy Bullen of Minneapolis, and William H. Bullen, of Los Angeles, Cal.

George E. Green, of Binghamton, N. Y., State Excise Commissioner for New York, and formerly State Senator, died January 16th, at the New York Eye and Ear Infirmary, aged fifty-eight years. He had been a sufferer from mastoiditis, with complications and was suddenly stricken while on a trip of inspection of the New York local office of his department.

Joseph F. Hausmann, brewmaster of the Hausmann Brewing Co., Madison, Wis., died there, November 30th, at the age of thirty years. He leaves his widow and one daughter.

Alfred B. Jenkins, president of Jenkins Brothers, manufacturers of valves and rubber goods at 80 White Street, New York City, died on Friday, December 29th, 1916, of heart disease at his home in Llewellyn Park, West Orange, N. J. He was born in Boston, in 1848, the son of the late Nathaniel Jenkins and Mary Tucker Jenkins. Mr. Jenkins leaves his widow and one daughter, Mrs. Farnham Yardley. Some time before his demise Mr. Jenkins had endowed the Orange Free Library with the magnificent gift of \$25,000.

and W. J. Roser, vice-president of the Bierbauer Brewing Co., and Andrew Meltzer, one of the sons of the founder of the Meltzer Brothers Brewing Co., Brooklyn, N. Y., died of pneumonia, January 21st, at his mother's home, 1064 Willoughby Avenue, Brooklyn, aged forty-six years. His mother, four sisters and one brother survive him.

George Moerlein, vice-president of the Christian Moerlein Brewing Co., Cincinnati, Ohio, died at his home in that city early Tuesday, January 2nd. He was thirty-nine years of age and had been vice-president of the company since the death of his father, Jacob Moerlein. When his health began to decline he went to Arizona, November 23rd, accompanied by his family. Failing to recuperate, Mr. Moerlein, upon the advice of his physician, returned to Cincinnati, December 28th, 1916. The body has been cremated. Deceased's survivors are his widow, Mrs. Bertha Moerlein, and his thirteen-year-old son, Jacob Moerlein.

Henry Siegel, president and one of the founders of the Olean Brewing Co., Olean, N. Y., succumbed to pneumonia at his home in that city during the night of December 16th, 1916. He was one of the prominent and most widely known citizens of Olean. Born in Buffalo, N. Y.,

March 2nd, 1863, he received his education in Olean and established himself there. In 1894 he was elected Sheriff of Cattaraugus County, and in 1907 organized the Olean Brewing Co., having been its president ever since. For many years he was a power in local politics. Beside his widow, née Mary E. Lang, whom he married August 16th, 1884, Mr. Siegel is survived by three daughters, Clara Frances, Florence Marie and Dolores Marie.

Charles J. Warner, secretary of the New York State Brewers Association, who was also secretary of the Lager Beer Brewers' Board of Trade of New York and Vicinity, and the Ale Brewers' Association of the States of New York and New Jersey, died from pneumonia, at his home, No. 26 West Eighty-second Street, New York, on Saturday evening, January 6th, having been ill several weeks. The brewing industry loses in him an indefatigable, intelligent and loyal worker. Born in Buffalo, fifty-five years ago, Mr. Warner was called to his post at New York City in 1896, after having been active in the politics of New York State. Under Grover Cleveland, then governor, Mr. Warner was private secretary to the Secretary of State, and subsequently he was appointed by President Cleveland to the office of Collector of Internal Revenue for the Buffalo District. For a number of years he had also been secretary and then foreman of the New York Sheriff's Jury. Being a member of many social, political and religious organizations, Mr. Warner was popular and widely known throughout the Metropolis and its vicinity. His survivors are his widow and his children, Mrs. Victor H. Stockwell, Raymond Jerome, Madeline, Hortense and Cecile Warner, his father, Norton J. Warner, three sisters and one brother.

G. Weber, president of the G. Weber Brewing Co., Inc., Theresa, Wis., died there January 21st, aged seventy years.

Deaths in Foreign Countries.

Arthur Botsford, head brewer to James Hole & Co., Ltd., Castle Brewery, Newark-on-Trent; aged 46.

Edward Peart Brett, former proprietor of City Brewery, York, England; aged 90.

Captain A. Humphrey Mason, director of Morgan's Brewery Co., Ltd., Norwich, England; killed in action.

John D. Johnston, director of J. & A. G. Johnston, Ltd., Oakbank, South Australia, aged 64.

Second Lieutenant, Neimeth C. Macardle, son of Thomas C. Macardle, of Macardle, Moore & Co., Ltd., The Brewery, Dundalk, England; killed in action.

Edward Leake, chairman of the Ludlow & Craven Arms Brewery Co., Ltd., Ludlow, England; aged 73.

J. C. Peacock, managing director of Soames & Co., Ltd., The Brewery, Spalding, Lines, England.

Second Lieutenant Arthur Price, only son of E. Price, Shrewsbury, England; killed in action.

Alexander Sich, secretary and director of Sich & Co., Ltd., Chiswick, England; aged 79.

Louis de Luze Simonds, director of H. & G. Simonds, Ltd., Reading, England; aged 64.

Lieutenant James Speedy, son of F. Speedy, of the Clifton Brewery, Wandsworth, S. W.; killed in action.

Arthur O. Stopes, joint manager of the Colchester Brewing Co., Ltd., Colchester, England, aged 66.

George Thomson, formerly head of the defunct firm of Thomson, Marshall & Co., Ltd., Aulton Brewery, Old Aberdeen; died at New Plymouth, New Zealand.

Lieutenant Cyril C. H. Tripp, son of C. Howard Tripp, chairman British Pure Yeast Co., Burton-on-Trent; killed in action.

Private James H. Watkins, second brewer at Atkinson's Brewery, Ltd., Birmingham, England; killed in action.

A. C. Willcocks, director of the Queensland Brewery, Ltd., Brisbane, Queensland.

Richard Worsley, former managing director of Whitbread & Co., Ltd., London, England.

R. A. Yerburch, head of the brewing firm of Daniel Thwaites & Co., Ltd., Blackburn, England.

—The price of beer has been raised by the breweries in Cumberland, Md.

—The William Rahr's Sons Co., Manitowoc, Wis., has given \$10,000 in cash gifts to its employes for Christmas.

—It is reported from Louisville, Ky., that the brewers in that city have advanced their prices on lager beer 40 cents per barrel.

—Brewers in Troy, N. Y., say that they are about to increase their prices for keg beer, bottle beer to be raised 5 to 10 cents a dozen.

—The Wisconsin Grain & Malt Co., Appleton, Wis., presented each of its employes with a basket filled with a Christmas dinner and a \$10 bill.

—Howard Noble, secretary of the Massachusetts Brewers' Association, has announced that in Massachusetts the price of beer is to be raised 50 cents to \$1.00 per barrel.

—The plant of the Uneeda Brewing Co., Wheeling, W. Va., is being converted into a match factory, to be ready for business next August; daily capacity, 10,000,000 matches.

—The directors of the Lansing Brewing Co., Lansing, Mich., whose plant has been closed for some time, on December 19th, 1916, filed a notice with the Michigan Secretary of State, announcing that their corporation has been dissolved.

—The estimate of the aggregate value of the breweries in Buffalo, N. Y., has been increased by the municipal department of finance in that city from \$2,269,530 in 1916 to \$4,372,100 in 1917.

—The breweries and brewery agencies of New Orleans will be well represented by floats and trucks in the industrial parade planned for February 17th by the Association of Commerce in New Orleans.

—The Pilsener Brewing Co., Cleveland, Ohio, had a gala day at their plant, December 20th, when they royally entertained their employes and families, each receiving a substantial gift, a banquet in the company's rathskeller following the presentation.

—As the U. S. War Department wants to have the bridges over the Allegheny River to be raised, many business concerns of Pittsburgh, among them all of the Pittsburgh brewery companies, have filed their protest against the project, as, if it were carried out, the raised bridges would offer a very inconvenient obstacle to local traffic.

—Four men were held up in the offices of the Northwestern Malt & Grain Co., Chicago, by 3 bandits, who took \$1,250 in wages of 50 employes, tore 2 telephones from the wall to delay an alarm and escaped. They entered the office about 4 o'clock in the afternoon and held a revolver to the head of William Sprowl, the cashier.

—The Massachusetts Supreme Court, on January 5th, affirmed a decree of the Massachusetts Superior Court ordering Thomas McCormack to pay to the Commercial Brewing Co., Boston, \$12,776.75 and interest from June 14, 1914, representing an excess over the fair market value of a block of stock purchased by McCormack for the benefit of the brewery corporation.

Illinois State Brewers' Association.

The Illinois State Brewers' Association held its 18th Annual Luncheon and Meeting in Chicago, January 3rd, 1917.

Of the eighty-seven breweries located in Illinois, thirty-six were represented by members of the Association present.

President Fecker called the meeting to order at 2 P. M., and welcomed the members in an appropriate address, advising harmony and team work in the defense of the industry and urging the enrollment of all brewers doing business in Illinois in this organization.

Routine business having been disposed of, it was voted that an auditing committee be selected by the Chair, to examine and report upon the Treasurer's accounts.

It was also voted that the Chair appoint a committee upon nomination and a further committee on resolutions.

The Chair appointed the following committees:—Auditing Committee: H. F. Piepenbrink, August C. Radeke, and Ernest Kunde. Nominating Committee: Edward Landsberg, John A. Cervenka, Frank Griesedieck, Oscar Schmidt, and Andrew Nebel. Resolutions Committee: H. A. Berthold, Robert Wagner, Wm. J. Ruff, A. N. Dick, and William Gebhard.

A recess was taken to give the committees time to prepare reports. After recess, the committee on nominations made the following recommendations for officers and trustees of the Association for the current year:

Officers:—Ernest Fecker, Jr., Danville, President; George Reisch, Springfield, 1st Vice-President; Edward C. Leisy, Peoria, 2nd Vice-President; Peter S. Theurer, Chicago, Treasurer; Ernest Kunde, Chicago, Secretary.

Trustees:—Robert Bethmann, East St. Louis; A. C. Radeke, Kankakee; H. F. Piepenbrink, Joliet; H. A. Berthold, Aurora; Oscar Schmidt, Milwaukee.

Mr. Landsberg called attention to the recommendation of Mr. Kunde instead of Mr. Legner for Secretary, which change he stated was made on the solicitation of Mr. Legner, the former Secretary, who stated that his duties as President of the Chicago Brewers' Protective Association took up so much of his time that he wished to have his place filled by some other member.

The Secretary was instructed to cast one ballot for the nominees, which was done and the gentlemen named were declared duly elected.

Mr. Landsberg, in behalf of the nominating committee, recommended that Mr. Austin J. Doyle be re-elected as representative on the Inter-State Conference Committee of the United States Brewers' Association, and that Mr. John A. Cervenka be selected as National Councillor and Delegate to the National Council of the Chamber of Commerce of the United States; unanimously carried.

Mr. Piepenbrink, chairman of the auditing committee, made the following report: "We, your committee, have carefully examined the report of your Treasurer and found the report of receipts and expenditures correct."

The report was accepted.

Mr. Berthold, chairman of the committee on resolutions, presented resolutions of condolence on the death of the Association's late member, Charles Emil Ernst, which were adopted by a rising vote and ordered to be recorded and an engrossed copy delivered to the family of the deceased.

The Secretary read a communication from Chas. Lilienthal, President of the National Association of Commerce and Labor, urging cooperation of all members in using the stamps of his organization.

Mr. Landsberg explained the working of the organization of the National Association of Commerce and Labor and

urged that all brewers cooperate with that organization, and, in conclusion, moved that the Association endorse the National Association of Commerce and Labor and that the members be urged to cooperate with and lend such assistance as lies within their power to said Association of Commerce and Labor. Mr. Landsberg's motion was carried unanimously.

A letter was read by the Secretary from C. B. Carroll, of East St. Louis, editor of "The Beacon," requesting that the members aid in circulating his paper.

Robert Bethmann spoke very highly of the personal attributes of the editor of "The Beacon," stating that the great aid afforded the trade by the paper, as well as the energetic work which had been done by the editor during their recent fights in Southern Illinois, had been of great value and he believed it would be good policy for the members to aid Mr. Carroll's paper in every manner possible.

"The Beacon" was endorsed.

Mr. Cervenka then said: "I want to know what the National Association is doing, if anything, towards defeating the resolution for a prohibition amendment to the United States Constitution?" Mr. Landsberg replied: "That is in the hands of the political action committee."

Mr. Cervenka moved that the Board of Governors be instructed to draw the attention of the National Association to the advisability of bringing up the matter of prohibition before the National Chamber of Commerce of the United States, with a view to getting the opinion on this matter from the directors of that association. Carried.

It was also resolved that the members communicate with their Senators and Representatives on the Underwood amendment to the Sheppard bill, relating to making the District of Columbia dry.

Mr. Ruff suggested that the Association introduce bills in the Legislature in favor of our industry.

Mr. Kunde said he was in favor of this proposition and was also in favor of introducing another compensation bill.

President Fecker suggested that if any member had any kind of a bill which he is desirous of having introduced, that he should have same drawn and mailed to the Secretary.

The President then thanked the members on behalf of himself and the other gentlemen elected for the ensuing year and paid special tribute to Mr. Legner, the retiring Secretary, for the manner in which he had conducted the office of secretary for many years past and expressing regret that Mr. Legner's multifarious other duties compelled him to decline a reelection.

The meeting then adjourned *sine die*.

THE FRANKLIN INSTITUTE, composed of scientists, engineers, etc., held its annual meeting at the Hall of the Franklin Institute, Philadelphia, and elected the following officers: President, Walton Clark; vice-presidents, Henry Howson, Coleman Sellers, Jr., Louis E. Levy; secretary, R. B. Owens; treasurer, Cyrus Borgner; board of managers, Francis T. Chambers, Charles E. Bonine, Charles Day, Kern Dodge, W. C. L. Eglin, Walton Forstall, Alfred W. Gibbs, Edward Goldsmith, Alfred C. Harrison, George R. Henderson, Charles A. Hexamer, George A. Hoadley, Harry F. Keller, Robert W. Lesley, Marshall S. Morgan, Edw. V. McCaffrey, Richard Waln Meirs, Isaac Norris, Jr., Lawrence T. Paul, R. S. Perry, Alexander P. Robinson, James S. Rogers, Geo. D. Rosengarten, E. H. Sanborn, William C. Wetherill; board of trustees, Joseph C. Fraley, president; William L. Austin, Charles A. Brinley, Walton Clark, John Gribbel, Alfred C. Harrison, Frederick Rosengarten.

"MAN HATES A HYPOCRITE. We fear the burglar, but we detest the sneak-thief. The hypocrite is society's sneak-thief. About the worst hypocrite we now suffer from in our midst is the Prohibitionist."—(W. B. Rubin, in "Enlightenment.")

BLACKMAIL CHARGED TO ANDERSON. "William H. Anderson has not secured the enactment of a single measure, and he never will, for the very good reason that the members of the Legislature who have any character, independence and manhood will not permit themselves to be dictated to and controlled by a man who they know is a paid lobbyist and a bulldozing political blackmailer."—(Lyons [N. Y.] "Republican.")

BONFORT'S DIRECTORY 1917 has just been sent out to the trade, where it is always welcomed as a valuable guide and friend of those who produce and distribute alcoholic beverages, here and abroad. Bonfort's is a wine and spirit trade directory and agency guide, containing a complete and correct list of the licensed wholesale dealers, licensed rectifiers and distillers in the United States; also a copious amount of useful information in regard to all laws regulating and restricting the trade. Bonfort's is published at 29 Broadway, New York.

FIRES. The storage depot at 9th and Leavenworth streets, Omaha, Neb., of the Jos. Schlitz Brewing Co., Milwaukee, was partly destroyed by fire December 28th, 1916.

There was a small fire in the plant of the Weibel Brewing Co., New Haven, Conn., December 15th, and it could be extinguished before the arrival of the city's firemen.

In the brewery of Harry Bowler, Amsterdam, N. Y., fire caused a loss of about \$12,000, January 18th.

Fire in the garage of the Duquesne plant of the Independent Brewing Co., Pittsburgh, January 11th, caused about \$30,000 damage. Six auto-trucks were totally destroyed.

Haegle & Roth's Yellow Creek Brewery, Freeport, Ill., was partly destroyed by fire, January 15th; loss, about \$8,000.

IMITATION OF COLORS ON KEGS. On January 3rd the Court of Common Pleas of Lackawanna County, Pa., handed down an opinion in the Pennsylvania Central Brewing Company's case against the Anthracite Beer Co., to restrain the latter from using the same colors on their kegs, in imitation of the colors used for over forty years by the plaintiff's E. Robinson's Sons Dept., at Scranton, Pa. The opinion is final, as far as the Common Pleas Court is concerned, the court saying, in part: "Confusion of property arises from the lawless or capricious act of a rival. Having regard to the conditions under which plaintiff must serve its trade, the injury is quite as palpable and vexatious so far as it operates to interfere with and increase the cost of the service, as where it directly tends to take away the trade. In respect to the need of relief, there is no rational ground of distinction between the two. Hence, one can appreciate the broad statement of the principle as deduced from many cases by the editors of the Encyclopædia: 'A dealer coming into a field already occupied by a rival of established reputation must do nothing which will unnecessarily create or increase confusion between his goods or business and the goods or business of his rival. Owing to the nature of the goods dealt in or the common use of terms which are *publici juris*, some confusion may be inevitable. But anything done which unnecessarily increases this confusion and damage to the established trader constitutes unfair competition. . . Any artifice, device or peculiarity of arrangement adopted by defendant which tends to increase the probability of deception and which is not necessary for any useful or proper purpose, will be enjoined.'"

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 98,811. Lexington Brewing Company, Lexington, Ky. Filed Oct. 21, 1916.

The background being in red. Particular description of goods.—Non-Alcoholic Beverage, a Soft Drink.

Claims use since on or about the month of August, 1916.



Ser. No. 99,595. Alonzo G. Van Nostrand, Boston, Mass. Filed Nov. 27, 1916.

Particular description of goods.—Non-Intoxicating Malt Beverages.

Claims use since No. 11, 1916.

ONA

Ser. No. 99,044. Obermeyer & Liebmann, Brooklyn, N. Y.

Filed No. 2, 1916.

Particular description of goods.—Non-Alcoholic Beverages prepared from Selected Barley-Malt, Rice, and Hops.

Claims use since Oct. 28, 1916.

Ser. No. 99,357. Piel Bros., Brooklyn, N. Y. Filed Nov. 17, 1916.

No claim is made to the exclusive use of the word "Brew" apart from its association or combination with the trade-mark shown in the accompanying drawing.

Particular description of goods.—Beer.

Claims use since May 1, 1916.

Ser. No. 99,824. Pabst Brewing Company, Milwaukee, Wis.

Filed Dec. 9, 1916.

Particular description of goods.—A Non-Alcoholic Preparation, which is an artificially carbonated beverage compounded with various carbohydrates and matter derived from hops, which is not brewed or fermented and does not contain any malt or alcohol at any stage of its manufacture.

Claims use since 1908.

Ser. No. 98,906. Münch Brewery Bottling Dept., Inc., Brooklyn, N. Y. Filed Oct. 26, 1916.

No claim of extensive right being made to the use of the words "Gold Medal Extract—a Compound of Malt and Hops" except as shown in the accompanying drawing. The background of the words "Malt and Hops" is a red ribbon.

Particular description of goods.—A Beverage made from a Compound of Malt and Hops and Cereals.

Claims use since March 1, 1916.

Ser. No. 99,283. Ruff's Brewing Co., Quincy, Ill. Filed Nov. 13, 1916.

Particular description of goods.—A Malt Beverage.

Claims use since Aug. 10, 1916.



TUYU

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,209,849. Bottle-washing machine. Julius H. Kintzele, St. Louis, Mo.
 1,209,850. Bottle rinsing and brushing machine. Julius H. Kintzele, St. Louis, Mo.
 1,209,980. Bottle-sealing cap. Clarence J. Lawson, Yonkers, N. Y.
 1,210,484. Bottle-washing machine. James A. Johnson, Norfolk, Va.
 1,210,567. Beer-measuring device. John Van Gelm, Erie, Pa.
 1,211,947. Filtering apparatus. Karl Kiefer, Cincinnati, Ohio.
 1,212,275. Apparatus for drying grain. Gray Staunton, Muskegon, Mich.
 1,212,389. Bottle-cap remover, William O'Neill, New York.
 1,212,442. Process for making cleaning compounds. Arthur W. Bishop, St. Louis.
 1,212,459. Bottle-washing machine. Joseph W. Dawson, St. Louis, assignor to Barry-Wehmiller Machinery Co.
 1,212,587. Barrel-washing machine. Charles B. Van Horn, Philadelphia.
 1,212,656. Pure-culture apparatus for yeast, etc. Jean Henri Pascal Magné, Mexico City, Mex.
 1,212,665. Cap-making and bottling machine. Elof Nordstrom, Newark, N. J., assignor to American Dan Stopper Co., Bridgeport, Conn.
 1,212,747. Bottle-washing apparatus. Joseph W. Dawson, St. Louis, assignor to Barry-Wehmiller Machinery Co.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for the BREWERS' JOURNAL, by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C. London, England, and 10 Gray's Inn Place, W. C. London, England.

Specifications Published

1915.
 17,030. Gould. Bottle stoppers.
 1916.
 102,119. C. Brewer. Closures for receptacles containing liquid.

For copies of published specification of Foreign Patents (25 cents each), address Messrs. G. F. Redfern & Co., 15 South Street, Finsbury, London, England.

The following Trade Marks have been definitely Registered:

- 114,663. Non-intoxicating malt beverages. Alonzo G. Van Nostrand, Boston, Mass. Filed September 11, 1916. Serial No. 97,937. Published October 17, 1916. Registration granted, December 26, 1916.
 114,725. Beer. Thomas O. Dixon, Townsend, Mont. Filed September 30, 1916. Serial No. 98,328. Published October 31, 1916. Registration granted, January 2, 1917.

Schaeffer & Budenberg Establish a St. Louis Office.

The Schaeffer & Budenberg Mfg. Co., of Brooklyn, N. Y., announce the establishment of a selling office in St. Louis, Mo., under the direction of Mr. A. H. Reuter, who was formerly connected with the Chicago office.

The principal selling offices of this company are now Brooklyn, N. Y., Philadelphia, Pittsburgh, Chicago, St. Louis, and Los Angeles, Cal.

As is well known, the Schaeffer & Budenberg Mfg. Co. are the makers of "Columbia" Recording Gauges and Thermometers, S. & B. Indicating Gauges, "Crescent" Industrial Thermometers, "Reform" Mercury Actuated Dial Thermometers, Gauge Testers, Hand Tachometers, Indicating and Recording Stationary Tachometers, Counters, Operation Recorders, Steam Calorimeters, etc., etc.

—George Ehret's staff, New York, moved into their new office building January 22nd. The plans of the office were described in these columns at the time they had been submitted by the architect.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,
 NEW YORK, January 30th, 1917.

Barley. The Barley market is firm, at a fair demand, while the supply on hand remains to be moderate. Quotations for Malting Barley are nominal.

There was a very severe storm in Montana, North Dakota, South Dakota, Iowa, Wisconsin and Minnesota, and the result has been that very little barley came into the primary market at Minneapolis last week, at the rate of 13 to 16 cars per day. Yesterday the arrivals amounted to 53 cars and the market went up 1c. The demand for Barley is very brisk; prices very steady and strong, \$1.07@ \$1.30.

BUFFALO, January 29th: Low grade Malting Barley is held here at \$1.28@ \$1.30; choice, at \$1.35@ \$1.36. No Fancy offered.

CHICAGO, January 27th: "Trading in Barley for the past month has been comparatively small, as offerings, for the most of the time, have ruled light. One of the largest Barley-carrying roads, for a part of the time has had the country embargoed for grain shipments, and generally country shippers have found it difficult to get cars to load. There has been a steady demand for good malting barley and the price basis now is considerably higher than a month ago. Quotations: Low grade Malting, \$1.05 to \$1.10; fair-to-good, \$1.11 to \$1.15; good-to-choice, \$1.16 to \$1.23; choice to fancy, \$1.24 to \$1.28.

SAN FRANCISCO, January 27th: California Barley, \$1.30@ \$1.45.

Malt. Quotations for Malt have not changed very much; market ruling strong.

Many brewers have been buying from hand to mouth with the result that the market is very strong with a heavy demand for export. Prices: Standard Malt, \$1.45; Bottle Beer Malt, \$1.53.

BUFFALO, January 29th: Standard Malt is quoted here at \$1.43 @ \$1.44; choice, at \$1.46@ \$1.47.

CHICAGO, January 27th: Standard Malt to-day is \$1.37@ \$1.38; Bottle Beer Malt, \$1.42@ \$1.45; Extra, \$1.50@ \$1.52; Coast, \$1.37. Large sales were recently effected, but last week they slackened down.

Corn Goods. We quote: Grits, \$2.70; Meal, \$2.69; Corn Syrup, \$3.24; Corn Sugar, \$3.21@ \$3.23.

CHICAGO, January 27th: Grits, \$2.52@ \$2.54. Meal, \$2.50@ \$2.51.

Rice. The Rice market remains firm with prices somewhat stronger and higher. The price of Imported Rice is \$2.85 per hundred pounds at Pacific Coast, \$3.33 Chicago, and \$3.60 New York, and Domestic Rice \$3.10 to \$3.20 Chicago and New York. The coastwise embargo from Gulf ports to New York has caused a scarcity of Domestic goods in the East, while the embargoes on most of the overland railroad systems have done the same thing for Chicago and the West on Imported and Domestic both.

Hops. Very little change is to be reported in the condition of the hop market. Brewers are reluctant about buying any quantities. Growers on the Pacific coast, on the other hand, are not willing to make large concessions. We hear of some contracts being made for the 1917 crop, at rather better prices, which acts partly as a stimulant to some growers for future hop raising, where they would otherwise plow up their yards. There are no imports from Germany or Austria, but we notice that total 139 bales French hops have been imported for the season of 1916-17 up to date. The exports to England, on account of the embargo, have stopped, but there is a fair demand for American hops, from South America, South Africa, and some of the neutral European countries. N. Y. State hops are virtually all sold, as far as growers are concerned. Some dealers have a very limited quantity left, which still bring full prices. We quote: 1916 Pacific coast hops, 12@15c; 1916 N. Y. State hops, 45@51c; 1915 Pacific coast hops, 9@12c; 1914 States and Pacifics, 6@10c.

SAN FRANCISCO, January 20th: Hops are quiet; price from 9½c@ 11c.

—On January 23d the Franklin Brewing Co., Brooklyn, N. Y., transferred its property to Louis K. Arasik, 44 Court Street, Brooklyn, and Christopher L. Meyerdirks, 4802 Ashland Street, Queens Boro, New York, with a view to coming to an agreement with its creditors, the two assignees to continue the business for that purpose.

PURE FOOD LAW FOR VENEZUELA. According to the new Pure Food Law of Venezuela, the adulteration or alteration of a product or the addition of any injurious substance is in general prohibited, and the sale of products not in accordance with the requirements is forbidden in that country.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Compressed Air and Its Use in Bottle Washing and Sterilizing Machinery.

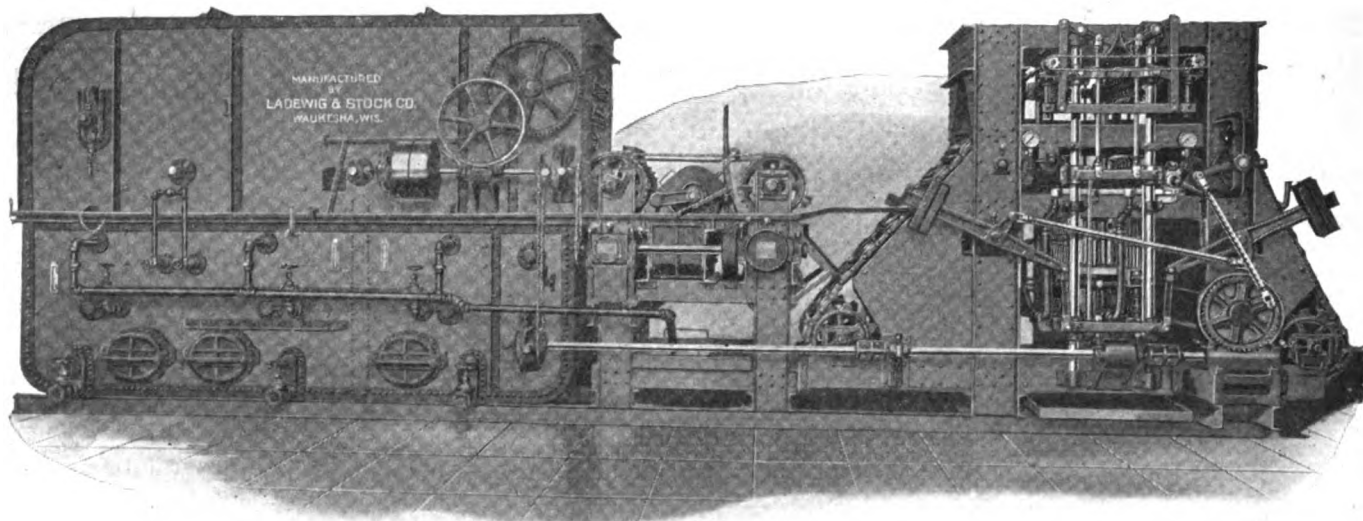
The subjoined illustration shows a complete automatic bottle-washing and sterilizing machine manufactured by the Ladewig & Stock Co., Waukesha, Wis.

After the dirty bottles are placed in the machine they are not again handled, but the clean bottle is automatically discharged to the filler.

It is evident at first glance that this machine was designed and constructed with a view to withstand the severe conditions under which machinery of this class is operated. There are but very few castings used and the majority of these are steel and practically indestructible.

The frame is constructed entirely of steel channels and angles which are placed in such a manner as to give the machine a neat and attractive appearance.

The soaking tank, or that part of the apparatus where the bottles are immersed in an alkali solution, consists of three or more separate compartments containing a solution of from 3 to 5 per cent. alkali which is maintained at a temperature of from 130 to 140 deg. Fahrenheit. The first and last compartments are kept at a somewhat lower temperature for the purpose of gradually heating the bottles and again gradually cooling them before they pass under the outside brush and spray, thereby preventing breakage which would otherwise result on account of a too sudden change in temperature.



When operating, the bottles are placed in racks which are subdivided into 8, 10, or 12 pockets, depending on capacity of machine, one bottle to each pocket. These racks are of steel electrically welded and are bolted to two endless chain belts, one on each side of machine, and are equally spaced a certain distance in order to allow for making the turn over the sprockets when passing from one compartment to the other. These racks are provided with a steel slotted cover through which the necks of bottles project and by means of which they are retained in the pockets while they consecutively pass through each compartment, being emptied and filled as many times as there are compartments in the machine, and during which they are subjected to the action of the hot alkali solution for from 10 to 30 minutes as desired, depending entirely on the nature of bottles to be cleaned. The action of the alkali dissolves all dirt and thoroughly sterilizes the bottles.

After passing through the last compartment and being thoroughly drained of solution, they are passed through under a rotary brush and a spray of fresh water, and are thoroughly cleaned on the outside. (All labels and other dirt removed at the end of a day's run.) They then pass over the spindles, where they remain stationary

while the spindle enters, emitting a stream of compressed air and water under a pressure of approximately 70 pounds per square inch, and through its revolving motion thoroughly scours and rinses the entire inner surface. This operation is repeated on the second row of spindles, after which the bottles if desired can be automatically conveyed to the filler.

Aside from the substantial design and construction, the outstanding feature of this machine and one that should appeal to every bottler is the fact that it eliminates the bristle or rubber brushes which are a source of continuous trouble and expense, in place of which it uses compressed air, or what might properly be called an air brush. This has a great many points of advantage over the bristle or rubber brush, which may be summed up as follows:

1. It is equally efficient at all times, while a bristle or rubber brush commences to lose its efficiency the moment it is put in operation.
2. It never wears out, consequently never need be replaced, while the bristle or rubber brush needs constant watching so that it might be replaced before it is worn to such an extent that its efficiency is entirely lost, which means dirty bottles.
3. It is absolutely sanitary because it cannot carry contamination from one bottle to another due to the fact that the brush renews itself for every bottle. On the other hand, if a bottle, contents of which have been kerosene oil or other substance of similar nature

and which has not been entirely neutralized by the caustic solution, is passed over a bristle or rubber brush, this same brush will contaminate succeeding bottles which otherwise would be perfectly clean.

4. It is equally efficient on all size bottles, because it acts with equal force on the small or large size, while a bristle or rubber brush is required to pass through the same size opening due to the uniform size of all bottle necks, thereby limiting size of brush regardless of size of bottle. Consequently its efficiency on the large bottle is less.

5. It is equally effective on all parts of the bottle and gets to places that the bristle or rubber brush will not touch, due to the unevenness or crevices in the glass, especially at the bottom of the bottle, which is the most difficult place to get at. This is especially true of champagne or similar shapes.

6. It does not depend on speed to be effective, consequently eliminates all fast-moving parts, thereby prolonging life of machine and reducing repair expense.

7. It is absolutely noiseless.

8. It is never cut by a broken bottle.
9. It never leaves bristles in bottles.
10. It is not necessary to keep a stock on hand because it is made as it is used.

There are numerous other points which might be mentioned, but space is limited. The manufacturers, however, will no doubt be pleased to supply further information if desired, and their reputation as designers and makers of high-class machinery for the bottling trade is well established, being among the oldest in the business.

Trucks Equipped with Edison Batteries.

Perhaps one of the biggest selling arguments for the electric trucks equipped with Edison Batteries is the fact that large brewers and department stores and other business houses who have been persuaded to buy one electric truck equipped with Edison Batteries, have in time brought more, until the original purchase of one has grown into a large fleet.

Another argument is the apparent absence of operating costs. Nowhere do we remember having seen statements of operating costs of electric vehicles equipped with Edison Batteries. Certainly

long; Swift & Company, Wentworth Avenue, Chicago, one 20-ton horizontal double-acting belt driven refrigerating machine and condensing side complete, also 7,920 feet of 2-in. direct expansion piping for storage room, together with connections; Wellington Ice & Cold Storage Co., Wellington, Kansas; one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; J. F. Kramer & Co., Falls City, Neb., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Purity Ice Cream Co., Atlantic, Iowa; one 8-ton vertical single-acting belt driven enclosed

commercial trucks for several years, purchasing and installing this type of vehicle as fast as they require new equipment.

Their first truck was started on June 9th, 1913; to-day they have eight.

Seven of these trucks operate on regular delivery routes, while the eighth truck is used as an advertising vehicle, but being a standard chassis it can be readily converted into a regular truck for delivery work when necessary.

The eight electric trucks operated by Haffenreffer & Co., of Boston, are equipped with Edison Alkaline Storage Batteries and to date there has not been one dollar's worth of expense on the total



the simplicity of the electric truck and its operation permits of cost keeping much more readily than any other method of transportation. Can it be that the users of electric trucks have made a discovery which is too good to publish?

Be this as it may, we have observed that those large concerns which finally install one Edison equipped electric vehicle in a short time are operating large fleets.

In brewery service our attention has been called to Haffenreffer & Co., of Boston, Mass., who have been constant users of electric

battery equipment outside of the new solution and distilled water. The maintenance cost on the trucks complete has been practically nothing.

The truck which they use for advertising made a record tour of Worcester, Mass., this summer, and, except on one occasion where the roads were very sandy and the truck sank nearly to the hubs of the wheels, there was never a call for towing the vehicle. Inasmuch as electric vehicles are not considered practical for touring purposes, especially a 5-ton truck, this performance is remarkable in itself.

Installations by York Mfg. Co.

Since their last report, the York Mfg. Co., York, Pa., have made numerous installations of their refrigerating machinery, among them for the Union Ice Co., Los Angeles, Cal., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Peters Packing Co., McKeesport, Pa., one 40-ton vertical single-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side, including 3 "Shipley" flooded atmospheric ammonia condensers, also two double pipe brine coolers complete, each 18 ft. 2 in. long, 10 pipes high, made of 2-in. and 3-in. pipe, and miscellaneous repairs to their old machine; the Nuckolls Packing Co., Pueblo, Colo., a 125-ton vertical single-acting high speed enclosed type refrigerating machine, direct connected to a poppet valve engine, and one 20-ton vertical single-acting belt driven enclosed type refrigerating machine, together with the complete condensing side, also a 25-ton flooded freezing system and a 25-ton distilling system, a 135-ton shell and tube brine cooler and 7,760 feet of 2-inch direct expansion piping for freezers; Elder & Wells, New York, a 250-ton vertical single-acting refrigerating machine, direct connected to a cross compound condensing Corliss valve engine, and condensing side, including 20 "Shipley" Flooded atmospheric ammonia condensers, also a 143-ton raw water flooded freezing system and 1,200 feet of 2-inch direct expansion piping for ice storage room; Citizens Ice Co., Covington, Tenn., a 14½-ton Coilless freezing system, also two double pipe counter-current ammonia condensers, each 19 ft. long, 12 pipes high, made of ¼-in. and 2-in. pipe and one ammonia receiver, 16 in. diameter, 6 ft.

type refrigerating machine and high pressure side complete; Bennett's Market, Sacramento, Cal., a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Hotel Courtland Co., Kokomo, Ind., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Pacific Dairy Machinery Co., San Francisco, Cal., a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. This installation was made in Pometti Brothers' Creamery, Benicia, Cal.; Crystal Ice & Cold Storage Co., Bartlesville, Okla., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Fleming Milk Products Co., Jackson, Mich., one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete, also a 10-ton flooded freezing system; Elkhorn Live Stock & Dairy Co., Pocatello, Idaho, one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Spencer Penrose, Colorado Springs, Colo., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Las Alamas Ranch, Buckman, N. M., a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; the Waldorf-Astoria, New York, N. Y., one 15-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Installations made in breweries are mentioned elsewhere in these columns.

Security Investments.

Philip Lynch, stock broker, 2 Wall Street, New York City, deals in security investments, stocks and bonds. He has a fifteen years' experience, having been connected with a well known New York Stock Exchange firm. His advertisement appears in another column of this trade journal.

"Right Way to Bush a Bung Hole."

The National Bush Company, 2 Rector Street, New York City, publish a trade announcement, elsewhere in these columns, which to read will convince every cooperage expert and all others who have anything to do with kegs and barrels, that there is a way to bush a bung hole so that the package cannot leak. It will pay you to carefully read that announcement.

What is "Par-O-Lac"?

An answer to the above question is given by a trade notice to be found elsewhere in this trade journal. The firm answering this question, Hirsh & Schofield, Inc., 50 Broad Street, New York City, has also a report from a Scientific Station for the Art of Brewing, which testifies that, when "Par-O-Lac" is used for varnishing, it can be applied in a molten state on a varnished surface.

Hand-Hole Covers for Beer Cases.

Gumb & Kerkow, Fremont, Neb., manufacture the Kerkow Patent Hand-Hole Covers which effectively serve to keep out the light from beer cases, thus preventing the beer from being deteriorated by decomposing radiation. They also keep out bugs, mice and dirt; and, while they do not interfere with the hand, they cost but little and are a permanent protection to the brewer's product.

Recording Thermometers.

Daily temperature records of feed and condense water, brine, superheated steam, mash, wort, flue gas, etc., are indispensable for the rational and economical operation of any brewery or malt house. This is acknowledged by every brewer, brewmaster, maltster and all brewery technologists.

Many of these experts recommend the H & M Tycos, recording thermometers manufactured by the H & M Division of the Taylor Instrument Companies, Rochester, N. Y., who also make angle and stem thermometers, automatic temperature regulators, hydrometers, hygrometers, pyrometers, etc., of approved efficiency.

New Advertisers in THE BREWERS' JOURNAL.

The names of wide-awake firms and manufacturers, who know a thing or two about the effects of advertising in a widely-circulating trade paper, are spread over the pages set aside for that purpose in THE BREWERS' JOURNAL. To-day we add to those with whom our subscribers have already become familiar, the following:

COLUMBIA MACHINE & STOPPER CORPORATION, 414-418 West 38th St., New York, N. Y.

Automatic Crowning Machines and Bottle Closures.

GUMB & KERKOW, Fremont, Nebraska.

Patent Hand-Hole Covers for Beer Cases.

PHILIP LYNCH, 2 Wall St., New York, N. Y.

Security Investments, Bonds, etc.

ZAHM MANUFACTURING CO., 74 E. Jewett Ave., Buffalo, N. Y.

Beer Sterilizers.

—Col. Charles P. Dehler, secretary of the Central Consumers' Co., Louisville, has announced that an increase in the price of beer in Louisville has become inevitable.

—Adam J. Rossbach has been appointed Receiver for the Birkenhauer Brewing Co., Newark, N. J., and he plans to carry on the company's business and reorganize it completely. The company's assets aggregate about \$150,000.

—Bruce O. Rowan and John H. Keating, of the St. Charles Land Co., Portland, Ore., have bought the plant of the North Pacific Brewing Co. at Astoria, and they are now turning it into a plant for the manufacture of condensed milk.

—The breweries of Manitowoc, Wis., have increased their prices as follows: Keg beer, per barrel \$7.25 net. Bottle beer, per dozen 11 oz. bottles, \$1.10. Bottle beer, per 2 dozen 15 oz. bottles, \$1.25 net.

—The Standard Brewery Co., Baltimore, Md., had their property sold as a going concern to Joseph Gottschalk, who continues the operation of the plant until a new company may be formed.

—The interstate commerce commission has dismissed the complaint of the Becker Brewing & Malting Co. vs. Utah railroads and decided that freight rates on beer from Salt Lake City and Ogden to points in Nevada on the Nevada Northern railway and of returned empty beer packages from these Nevada points to Salt Lake and Ogden are not unreasonable and not unjustly discriminatory.

CLASSIFIED ADVERTISEMENTS.**Wanted.**

Several second-hand Vacuum Kettles. Address:
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Hortonville, Wis.

Jan 17]

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

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Praise for New York Brewers.

The Committee of Fourteen, New York City, which devotes most of its energies to suppressing Raines law hotels and other disorderly resorts, gives much praise in its annual report to the cooperation of the brewers, who by their active participation in the work of the committee have been a powerful force in putting vicious saloons and hotels out of business. The committee, of which the Rev. Dr. John P. Peters is chairman, gives several instances of hotels which were forced to close for the one reason that the brewers, on the complaint of the committee's secretary, refused to furnish liquor.

"When the committee commenced its work it was commonly understood that the brewers were behind all the disorderly houses and improper resorts of the city," says Dr. Peters. "It was the opinion of this committee that the brewers did not realize what they were doing, and that the wisest plan was to obtain the facts, lay the situation before them and ask them in the name of common decency to clean up the resorts which they directly or indirectly controlled.

"The appeal of the committee met with almost instant response, and from that day to this the brewers have cooperated with the committee. Moreover, this cooperation has steadily increased until to-day it can be said that there is no brewer in New York who does not respond to a complaint from the committee. They have also offered to cooperate financially."

SWALLOWING ANY HUMBUG. "Prohibition or its makeshift, Local Option, have proven failures wherever tried, and if it were not for the agitation of professionals to make money out of such outcries there would be no call for prohibitory laws in this or any other State. There are always, however, susceptible people ready to respond to almost any humbug solicitation or appeal that is brought before them." —("Bulletin," Pennsylvania State Brewers' Association.)

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

The Drawbacks of Wort Infection.*

By STOCKHAUSEN and VON KALCKSTEIN.

Between the brewhouse and the fermenting room wort is exposed to numerous sources of infection, particularly from the germs which collect in the carbonized incrustation lining the pipes leading to the cooler. Another fertile source of danger is the air around the cooler and the refrigerator, and the water used for cleaning the latter; and, finally, the pipes—rubber hose especially—leading from the refrigerator to the fermentation room, and in the fermentation vessels themselves. The germs finding their way, in this fashion, into the wort are chiefly dangerous when they are capable of surviving the primary fermentation; that is to say, are not killed by the activity of the yeast, by alcohol, or carbon dioxide. Such germs include those of *sarcina*, rod bacteria, and wild yeasts, which are difficult to detect microscopically among the thousands of real yeast cells, and come into active operation when the latter have settled down at the close of fermentation.

The most important of the wild yeasts are the *pastorianus* and *ellipsoideus* species; and *torula* yeasts, though they generally disappear during primary fermentation, may survive that process when in large numbers, and then begin to develop, especially when favored by the chemical composition and attenuation of the wort. Their harmlessness, however, is merely relative, and not a permanent property. Moreover, even the organisms which disappear during fermentation are not altogether negligible, the putrefactive bacteria attacking yeast, decomposing protein, lowering the fermentative power and imparting a putrescent flavor to the beer. Other even less harmful varieties may, if in sufficient quantity, prove too much for the yeast, especially when, for any reason, the attenuation is too slow. The same thing may occur when the yeast itself is strongly infected, certain bacteria causing premature flocculation and loss of fermentative power, the beer becoming flat and the secondary fermentation sluggish and incomplete.

The wort bacteria set up extensive chemical changes, decomposing sugar and proteins, and increasing the proportion of the products of bacterial metabolism which may have a directly toxic action on the yeast. Some of them also liberate hydrogen, which combines the oxygen so essential to the yeast, besides forming undesirable flavoring substances and altering the color of the wort. Excessive infection with thermo bacteria often gives rise to a smell of celery. As wort is highly susceptible to all flavoring and odoriferous substances, it naturally must be seriously affected, especially when the strongly infected wort is left for a long time—overnight—on the cooler. In such cases, it is not surprising that the yeast does not work briskly and fermentation is retarded, thus giving time for the positively injurious germs—*sarcina*, rod bacteria and wild yeasts—to reproduce abundantly and spoil the flavor of the beer, even though further bacterial action is arrested by the yeast.

The care expended by the brewer in order to obtain his worts as free as possible from germs is therefore in no wise

wasted. The drawbacks resulting from serious infection of the pitching wort are too manifest to be neglected; and one must not rest content with the easy assumption that many of such germs are more or less suppressed during fermentation; but must bear in mind that biologically pure wort still remains an essential factor in the production of stable beers of good flavor.

The authors then proceed to give a number of instances of injury caused by wort infection, including putrescent flavor due to thermobacteria, bad flavor, and loss of keeping properties, as the result of bacteria and wild yeasts; infection of the pitching wort by dirty pipes and the wooden fermentation vessels; infection by incrustation in the pipes leading to the cooler and in rubber piping; instability produced by rod bacteria; infection by wild yeasts and *sarcina* on the cooler; and infection of *ellipsoideus* yeasts.

VACUUM HOP STORAGE. For small brewers the cold storage of hops has its drawbacks as well as its advantages for having no cold store of their own, they can only enjoy the benefits of the system by depending upon the merchant who happens to possess the necessary installation. But in many such cases the heavy price charged for the convenience is deemed only worth while for the few pockets of choicest quality set aside for the better classes of pale ale, and for which the demand may perhaps not be great, with the result that the pocket once out of cold store is kept for weeks in cut and in consequence rapidly deteriorates. Now a plan calculated better to meet the requirements of the small user is to store the hops in vacuo, in stout, air-tight, galvanized iron cylinders of a size just large enough to take half a pocket; the cover of such a cylinder is provided with an india-rubber ring to make a perfectly air-tight joint and a suitable valve to which are attached connections for a vacuum gauge and a tube of carbonic acid gas. A pocket of hops is cut into two equal portions without removing the bagging and the halves placed in two cylinders, the covers of which are securely bolted on; an efficient vacuum pump is then connected to the valve and the air exhausted; carbonic acid gas is now let in at a suitable pressure and the valve securely closed. In such a container the hops will keep practically as new for at least twelve months, even if stored only in the brewery cellar. The only sign of any alteration in their condition is revealed by a peculiar cheesy or rancid odor which is noticeable on opening the cylinder, but which quickly passes away, being quite volatile, while the oily nature of the hop will have given place to a certain dryness due to the volatilization of the oil. The color is in no way affected which remains as fresh and bright as when first put in new, while on analysis the resins exhibit practically no change, the soft preservative ones retaining all their pristine power. These cylinders being air and water-tight, may be stored in any cool or cold place, and may safely be entrusted to the care of any local tradesman who possesses a refrigerating plant and storage chamber.—(London "Brewers' Journal.")

* "Wochenschrift für Brauerei."

Generating Carbonic Acid Gas.

By FRED. M. MAYNARD.

The enormous and rapid development of the bottled beer trade has been responsible for the establishment and corresponding multiplication of a number of factories for the manufacture of carbonic acid gas by the combustion of coke and its subsequent compression into the liquid state as contained in the familiar steel cylinders of commerce. But owing to the high freight charged by the railway companies for compressed gases, carbonic acid gas in this very pure and convenient form is not universally available in the more remote country districts for either brewers or mineral water makers; consequently the home manufacture of this article continues to be practised on an extensive scale, and as there appears still to exist a certain lack of knowledge, among some workers, as to the most desirable methods to employ in its production, purification and employment, the following few practical notes may prove of service.

The chemical symbol of carbonic acid gas is CO_2 , signifying that it contains one equivalent of carbon and two equivalents of oxygen, it being composed of carbon and oxygen in the following proportions, namely:—

Carbon 27.28 per cent.

Oxygen 72.72 per cent.

Although this gas may be obtained from various sources, it is generally made by the action of sulphuric acid upon either the earthy carbonates, such as whitening, chalk, marble or limestone, all of which are different forms of carbonate of lime, or the alkaline carbonates, such as bicarbonate of soda. In order to avoid trouble with carbonated beers, and to obtain high-class mineral waters, it is primarily essential that the gas employed be pure, and this, as should be obvious to everyone, naturally depends to a great extent upon the quality of the raw materials employed. Unfortunately the chemical purity of the acids and alkalis purchased for the purpose is a matter to which frequently far too little attention is given, yet it is just as important that these should be of as high a quality of their kind as the malt, hops and sugars from which the beers themselves are brewed.

On account of the inconvenience attaching to the disposal of the semi-solid residue of sulphate of lime, resulting from the employment of sulphuric acid with the earthy carbonates, it was suggested some years ago that hydrochloric acid should be used, because the chloride of calcium, which is the neutral product formed, remains in solution, and, forming no sediment, can be run down the drains without fear of blocking them; but this acid was found in practice to be quite inadmissible, since it yields a gas containing chlorinated compounds, which few metals can resist, while the taste and odor imparted to the gas, which no washing or reagents will remove, are most objectionable.

The sulphuric acid, which should have a specific gravity of at least 1.840° (or 168 Twaddle), must, however, not only be of "good quality," but be guaranteed as having been made solely from sulphur, since much of the cheaper vitriol now offered is produced from pyrites and refuse from copper works, and, being in consequence greatly contaminated with arsenic and other dangerous impurities, is quite unsuitable for the purpose. In this connection it is, further, most essential that no nitrous compounds be present, as the flavor and color of the beers are liable to be affected by a gas containing them. They are never present, however, in sulphuric acid made with proper care, and in the commercially pure acid they

should be entirely absent. The presence or otherwise of these nitrous compounds in sulphuric acid may be determined by the following simple test: Put into a test-tube about half a fluid ounce of the sulphuric acid to be tested; make a solution of pure protosulphate of iron (green vitriol), filter this, then pour a small quantity very carefully down the side of the test-tube, which must be held in an oblique position, so that the solution does not mix with the sulphuric acid, but floats upon it. A brown discoloration or ring where the iron solution meets the acid indicates the presence of nitrous impurities. Although this is a simple experiment, it requires a steady hand and care in its manipulation. But in buying oil of vitriol a guarantee should always be required and insisted upon from the manufacturers, to the effect that the acid is free from arsenic, nitrous compounds and all other impurities.

For making carbonic acid gas from whitening, chalk limestone or marble chippings the following will be found to be the most suitable proportions:—

Whitening (or other earthy carbonate). 60 lb.

Sulphuric acid 55 lb.

Water 20 gals.

Theoretically these quantities should produce 20 lb. by weight of carbonic acid gas, but in practice only about 16 to 17 lb. are obtained, owing to moisture and various impurities always present in these carbonates. Were the latter perfectly pure and dry it would take exactly 60 lb. of sulphuric acid to decompose them. It is therefore always advisable, on account of the varying quality of these materials, to make a rough test of the residue from the generator from time to time, in order to ascertain the amount of acid needed, so that no waste takes place from adding more acid than is necessary. This test may conveniently be applied by mixing one fluid ounce of the residue (well mixed up) with half a pint of water, dividing this into two parts, then adding to the one a little whitening, when if effervescence occurs excess of acid is indicated, showing that too much has been used; if, on the other hand, no effervescence is apparent, a little acid may be added to the other portion of the mixture, when effervescence would at once show that too much whitening had been used, and that more acid was required to liberate the remaining gas. If accurately weighed quantities of each are taken, the exact proportions can be easily ascertained by noting how much acid is required to neutralise a given weight of whitening.

Although perfectly satisfactory gas can be obtained from the earthy carbonates, undoubtedly the purest and best is that yielded by bicarbonate of soda, which, possessing as it does so many other distinct advantages, is for the following reasons rapidly ousting the former and coarser material. To obtain a given weight of carbonic acid gas from bicarbonate of soda only two-thirds by weight are required as compared with the earthy carbonates, and about two-fifths of the amount of acid. The correct proportions to use for 20 lb. of carbonic acid gas are:—

Bicarbonate of soda 40 lb.

Sulphuric acid 24 lb.

Water 6 gals.

It will be found that the gas is more freely and evenly generated, this rendering it possible to so regulate the flow of vitriol as to yield a constant pressure and consequently a more uniform flow, while considerably less agitation is required than with the various carbonates of lime. At the same time, the actual yield of carbonic

acid gas obtained will be within one per cent. of the theoretical figure, due to the absence of inert impurities and moisture always present in the cruder material. Further, considerably more bicarbonate of soda may be used to the gallon of water, or in other words, a much smaller quantity of water is needed in proportion to the weight of alkali used, which means in practice that a generator only capable of holding one hundredweight of whitening, thirty-six gallons of water, and six and a quarter gallons (i. e., 1 cwt.) of acid, can be charged with two hundredweight of bicarbonate of soda, thirty-four gallons of water, and seven and a-half gallons (i. e., $1\frac{1}{4}$ cwt.) of acid, which will give three times as much carbonic acid gas as would be obtained from the former quantities of materials by the whitening method. But after experience has been gained in the manipulation of the soda process, the water may be cut down to the minimum of three gallons to the twenty pounds of alkali, as given previously; while should the demands on the generator be greater than were anticipated at the time of charging, or more gas is required after the charge is spent, it is not necessary to run it off and recharge, as would be the case with whitening, all that is necessary being to add a little more bicarbonate of soda, and work it off in the usual way. For it will generally be found that there is sufficient free acid remaining for the purpose. From this it will be seen that where the trade has increased or the business is temporarily brisk, the substitution of bicarbonate of soda for carbonate of lime will obviate the necessity of installing a larger generator.

But in addition to giving a superior product and a greater yield of gas, the cost is actually less, as is illustrated by the following comparative figures:—

	£	s.	d.
Whitening, 30 cwt., at 35s. per ton...	2	12	6
Sulphuric acid, 30 cwt., at 90s. per ton.	6	15	0
or	9	7	6
	£	s.	d.
Bicarbonate of soda, 1 ton, at £5 per ton	5	0	0
Sulphuric acid, 12 cwt., at £4 10s. per ton	2	14	0
	7	14	0

(To be Continued.)

IT WOULD BE PATCHWORK. "The campaign against the lawless saloon is not facilitated by penalizing the lawful one or making it the scapegoat for a patchwork municipal revenue system."—(Peoria [Ill.] "Transcript.")

PREVENT JOINTS FROM CORRODING. To do this, put up all pipe joints with graphite, use it on bolts and nuts, cover gasgets with it on hand-hole plates and use it on all joints and bolts in and around the front ends, and when you want to take the parts down they will come without the use of cold chisel and sledge. In making pipe joints, if some of the graphite gets inside the pipe it flows through as easily as oil, and does not harden into shot to destroy the efficiency of injectors, lubricators and what not. It is the only lubricant that does not burn away, and is especially valuable for washo-us plugs or other boiler joints. Another good point about graphite is that it can nearly always be found ready for use.—("Railway & Loco. Eng.")

Belting for Bottling Machines.

To protect workers employed on bottling machinery, it is not only important that belting should be efficiently guarded, but that belt perches should be provided for every belt. Very often when a filler or other part of the plant is not working the driving belt is thrown off the shaft pulley until the machine is again required; this is done not only to save power but also to save wear and tear of the belt and pulleys, and indeed is not done so often as it should be. Then again a belt may also slip off the driving pulley accidentally or may be thrown off intentionally for repair purposes.

It is however a highly dangerous practice to permit a belt under such circumstances to rest on the revolving shaft, owing to the liability of the shaft to pick up the belt and wind it up. There have been many accidents caused by this fact, not only to machinery but to persons as well. In the case of machinery the belt may violently strike some projection causing it to fall, which in a bottlingery might happen on a stack of bottles; it has also been known, when employees have accidentally taken hold of the belt, to carry them up to the shafting and so caused serious injuries, this of course being due to the increase of frictional resistance between the belt and the shaft.

In every case provision must be made to keep loose belts out of contact with revolving shafts. The easiest method is to fence all the shafting with a sleeve of metal or wood; this is expensive but absolutely safe, and where shafting is under six feet from the ground it is of course compulsory. In other cases some type of belt hook or belt perch must be used. The simplest consists of a strong hook fixed adjacent to the driving pulley, with the horizontal portion somewhat longer than the width of the belt, and the end turned up under the top of the pulley rim. Another method is to sleeve the shaft with a sheet-iron sleeve or trough on either side of the pulley for about double the width of the belt. These sleeves can be rivetted to a bracket fixed to the ceiling.

For horizontal belts, the perch may consist of a simple bracket provided with two pegs to take the upper and lower belt fixed near the driving pulley and shaft; if the belt is a long one, then similar brackets may be fixed at intervals. In some factories it is necessary to use a belt pole to replace belts, and a good perch in this case is one consisting of four or more parallel pegs with turned-up ends bolted to a curved bracket fixed eccentrically near the pulley. The design of this bracket can easily be adapted to suit different positions or directions of the driving belts. Belts should never be tied up to the shaft or ceiling, nor should belts that are being repaired come into contact with the shaft while it is in motion.—(London "Brewery Trade Review.")

PHYSICIAN'S REASONS FOR OPPOSING PROHIBITION. "While it is yet time, I wish to be on record as opposed to prohibition. First, because I do not believe men are made virtuous by prohibitory laws, and particularly is this true when any law is opposed to the well considered sentiment of a large number of thoughtful people. Apart from this general sentiment I am radically opposed to prohibition because, as a physician, I know that many people, especially the old, are dependent for their continued health and strength upon their taking with one or more meals every day a small or moderate amount of brandy, whiskey, wine, or beer. Further, I know that in many instances of disease, such as pneumonia, diphtheria, typhoid fever, recovery will not take place unless alcoholic stimulants are given at regular intervals."—(Beverly Robinson, M.D., New York City.)

Use of Hydrogen Peroxide in the Brewery.

From a paper read at a Meeting of the North of England Section of the Brewing Institute, held at Manchester,

By H. B. WOOLRIDGE.

Although, hydrogen peroxide possesses a high degree of stability—i. e., when properly made—it is extremely susceptible to the action of a wide variety of bodies which act as catalysts, that is to say, bodies which exercise a decomposing effect upon peroxide. Among these are nearly all metallic oxides. Enzymes, fungoid growths, and bacteria of all kinds act most violently on strong peroxide, such agents being, of course, themselves destroyed at the same time. It is because of this that peroxide is so potent a purifier and steriliser.

Hydrogen peroxide possesses great penetrative power, especially in the presence of micro-organisms of any kind. Sound wood is scarcely affected by peroxide, so that it can safely be applied to the surface of vats, casks, and the like. Hydrogen peroxide insinuates itself right into the pores of the wood contaminated with bacteria or fungoid growths. Casks used for the conveyance of peroxide often furnish strong proof as to the truth of this; if such casks have contained grease, and owing to exposure some of the latter has become rancid, the peroxide persistently penetrates right into the pores of the staves wherever the germs producing rancidity have found a lodgment, and sooner or later the peroxide leaks right through to the outside.

Practical Application—I. Cask Plant.—From the preceding remarks it will be evident that hydrogen peroxide might prove a valuable sterilizer in the brewery. With this idea practical experiments have been conducted with it. The power of hydrogen peroxide of penetrating wood, especially when contaminated with fungi, etc., naturally suggested its use in curing fusty or mouldy and stinking casks. That frequent cask trouble known to brewers as "casky" proceeds from a green mould belonging to the species *Penicillium*, the hyphæ of which penetrate deeply into the wood. The general tendency of an empty cask which has contained beer and has been left unwashed or neglected is to become mouldy. How often is this seen with empty casks returned by haymakers. We have treated many casks of this character with hydrogen peroxide and invariably with success. Casks which have been left in the open exposed to weather often get a peculiar smell due to rain water finding its way in. These have also been treated with success in many cases, and then we have the well-known "stinker" due to germ life penetrating into the pores of the wood. These also have in several cases yielded to the potency of hydrogen peroxide, but I should like to point out at once and to emphasize the fact that neither hydrogen peroxide nor any other substance or treatment of any kind so far as my experience goes will ever cure those stinkers which are in a very advanced state of decay, where often the wood itself has perished. They are in fact quite useless and only fit to be burned.

In putting before you my own experience of hydrogen peroxide as an agent for treating casks, I do so with a great deal of diffidence, because when one mentions a cure for stinking casks it is often assumed that it is meant to be a "cure-all." I should like to impress upon you that I am not suggesting for one moment that hydrogen peroxide will cure every foul and stinking cask, for, as I have already stated, when a cask reaches a certain condition of being absolutely perished and thoroughly bad, nothing, I believe, will cure it. I have had such casks sent to me

as samples to experiment on and cure, and if I have failed to accomplish with them a perfect cure, I have been as good as told very politely that I must be quite mistaken in my opinion that hydrogen peroxide is of any use as a cask restorer. It is not fair to select such casks as a test, since probably they represent but a very small proportion of the particular cask plant of any brewery, by far the larger number of those suffering from trouble belonging to the milder form of mouldy and stinking casks, which would in the usual way be treated with boiling water or bisulphite or both, with the hope and chance that they may yield to such treatment. This has, however, seldom been realized, yet I maintain that with far greater certainty can such casks be cured with hydrogen peroxide because of its penetrating properties and its greater power as a destroyer of mould and germs.

I now wish to put before you my own personal experience with hydrogen peroxide in the treatment of casks, as I believe this to be quite a new field of enquiry, and I trust that my remarks in this paper may induce other brewers to experiment with this agent in their breweries. I should indeed be most interested to know the results of their experience under other conditions, and if they, like myself, are led to adopt the use of peroxide treatment on all empties coming back during the summer and autumn months.

I now propose to give a brief description of the method employed in treating casks with hydrogen peroxide, which has been found from experience to be successful. The cask is first put over a steamer and steamed for about a quarter of an hour until the outside feels warm to the hand. One gallon of a certain strength of hydrogen peroxide is now poured in. This applies to hogsheads, barrels and kilderkins. In the case of an ordinary mouldy cask, one quart of a 12 volume strength of hydrogen peroxide, made up to 1 gallon with water, should be sufficient. One is naturally guided by the conditions of the cask and by one's knowledge concerning it. If the cask is suspected of being a bad or stubborn case, the amount of hydrogen peroxide can be increased to 2 quarts made up with water to 1 gallon. Also if 1 quart has been used in the first instance and the cask is still not free from trouble, a second attempt should be made with 2 quarts as above, and if necessary a third with 1 gallon of undiluted hydrogen peroxide (12 volume strength).

Having put in the solution, the cask is bunged down, and well rolled in every direction so that the inside surface is completely covered by the solution. It is then left for a few hours, giving it an occasional roll. Casks have been left like this for days, but it is not necessary, since all the beneficial action which takes place is accomplished in a few hours. The steaming opens the pores of the wood and allows the solution to penetrate well into it, and the constant and vigorous rolling in all positions enables the solution to cover completely every part, this being most essential. The cask can then be emptied and washed, if necessary, ready for use. I will now give a few specific cases of casks thus treated.

Towards the end of February, 1914, a kilderkin which had been standing in the yard for about two years, and had a very bad smell, was treated in the manner described with a $\frac{1}{8}$ strength solution of hydrogen peroxide (12 volume), i. e. 1 pint of hydrogen peroxide made up to 1 gallon with water. It was left with the solution in it for three weeks and subsequently emptied, washed in the usual way, filled with porter and sent into the trake. The cask came back and was filled and sent out again several

times. On June 4th it was finally examined and found to be sweet, and no complaint was received of the beer that had been sent out.

On March 26th, 1914, six barrels were treated with a similar strength solution of hydrogen peroxide, the same method of treatment being adopted, but this time they were left for one week only with the solution in them before being emptied and washed. I may mention that these casks had been returned from haymakers the previous summer and were very fusty and mouldy. On April 14th, 1914, they were all filled with porter and sent into the trade and some into the bottling stores. No complaints were received in either of these cases. On April 16th, 1914, nine barrels which, like the previous lot, had come back from haymakers were treated in a similar manner with the same strength solution. After two weeks they were emptied and washed out, and on May 4th were filled with mild ale and sent into the trade and to the bottling stores. No complaints were received.

On April 24th, 1914, two barrels considered to be stinkers, which smelt very badly, were treated with hydrogen peroxide. Prior to treatment, a shaving from the inside surface was taken for examination; these casks, being in my opinion much worse and likely to prove more stubborn to treatment, had a $\frac{1}{4}$ strength solution of hydrogen peroxide, i. e. 1 quart of 12 volume peroxide made up to 1 gallon with water. The same treatment as regards steaming, rolling, etc., as previously, was followed. On May 5th they were emptied and washed in the usual way and a shaving from the inside surface taken. On May 6th the casks were filled with mild ale. By May 14th they had been out into the trade, the ale consumed, and the empty barrels returned. No complaints had, however, been received. Samples of the beer, prior to the casks being sent out into the trade, were submitted to examination. A shaving from the inside was again taken.

Tube cultures in wort of the shavings were then examined on May 25th. The shavings taken prior to treatment showed a very large growth of mould. The shavings taken after treatment showed a little mould, but very much less than that present prior to treatment.

On June 4th a pin in a very bad condition, also two kilderkins, purchased as stinkers from a cooperage, had shavings taken from them. On July 4th these three casks were treated with hydrogen peroxide, the kilderkins with 1 quart of 12 volume hydrogen peroxide and 3 quarts of water, and the pin with 1 pint of hydrogen peroxide and 3 pints of water. On July 18th these casks were emptied, and washed out. On the 21st these casks were filled with mild ale. The ale was sampled on the 29th, and being found to be quite sound and good, was sent over to the Brewery Tap for sale. No complaint was received from customers.

The treatment of a fermenting round or square is not so easy as that of a cask. Unlike the cask you cannot get the entire surface steamed at the same time nor the solution so well applied as by rolling a bunged-down cask. But a vat used for some considerable time for holding water, which had a bad smell, also a vat which had become very mouldy, were treated as follows: Steam from a movable pipe was made to play on a small area of the surface until the surface was hot, and then a half strength solution of 12 volume peroxide was applied with a mop. This method was carried out until the entire surface had been well covered with hydrogen peroxide. The result was entirely successful, as the following results will show.

April 27th, two shavings from fermenting vessel No. 6. called respectively "top" and "second," were taken, the first, "top," from the surface of the vat, the "second" from directly underneath the top. On April 28th the vat was treated as already described. Again two samples of shavings were taken on April 30th, one from the side, marked "S," and one from the bottom, marked "B," both being the first shaving off the surface inside. On May 25th the first set of shavings, which had been subjected to tube culture, were examined. That marked "top" was found to be worse than that marked "second." Also that marked "B" showed a larger growth than that marked "S." The latter developed, in fact, only a very small growth. Since, however, the shavings from the bottom of the vat showed a larger growth than was deemed safe or desirable, the vat was on June 4th again treated in the same manner as before, but this time with undiluted (12 volume) strength of hydrogen peroxide, and shavings from side and bottom, marked "S 1" and "B 1," were also taken. Tube cultures of these were examined. "S 1" then gave practically no growth, whilst "B 1" gave only a small growth of mould.

The vat was then therefore taken into use, and in the first instance filled with porter. Since then it has been and still is in regular use, every kind of beer having been fermented in it—even stock ale.

The other vat described as mouldy was treated in a similar manner, but a full strength solution being used on both occasions. On June 1st this vat, No. 11, which was very mouldy, was washed out and a shaving taken. On June 2nd the vat was treated as already stated. On June 4th shavings were taken. The tube culture of the shavings sent prior to treatment showed an extraordinary growth of mould, but the tube culture of that after treatment showed a marked improvement. This vat has also been and still is in constant use, and being a small vat has been almost invariably used for stock beer brews.

We have never experienced any trouble from beers brewed in these two vats. These, however, being the only two cases of curing vats with hydrogen peroxide of which I have had experience, and as neither would probably be described as very bad cases, I am not in a position to speak with the same degree of confidence with regard to the treatment of large open vessels, such as vats, as I am in the case of casks.

2. Filter Pulp.—We next come to the value of hydrogen peroxide in the pulp washer as a sterilizer and bleacher. It has no effect on wood or cellular tissue, and this, of course, applies to pulp. I have used hydrogen peroxide in my pulp wash for two years with excellent results. The method employed has been as follows:—The pulp is first well washed with cold water and the temperature raised to 160° F. It is then allowed to cool down again by running in cold water. When the temperature has fallen to 120° F. two quarts of strong (12 volume) solution is added to a pulp washer which washes 25 lb. of pulp at one time. The pulp is allowed to stand for some time (about half an hour) before being used. When treated with hydrogen peroxide, pulp becomes beautifully white and is perfectly sterile; moreover, it has a longer life, and the beers filter perfectly brilliant. Since the cost of pulp, especially to-day, is very high, the life of the pulp is a matter of great consideration. The following extracts from some experiments and trials made in the washing of pulp before adopting it for general use may be of interest.

On June 13th a sample of pulp was taken from wash

after treatment with one pint of a 10 per cent. solution of hydrogen peroxide (12 volume strength). It was examined after two weeks' incubation in wort at 75° F., and moulds, yeast, and bacteria were found. The same pulp after washing with one pint of full strength hydrogen peroxide (12 volume) developed much less of the organisms last named. Finally, some of the pulp, after being treated with two pints of full strength hydrogen peroxide (12 volume), developed only very little mould and bacteria. With three pints of hydrogen peroxide there were no moulds and comparatively few bacteria. Next this pulp was heated to 180° F., then cooled to 120° F., and three pints of hydrogen peroxide added. Samples were incubated in wort at 75° F. and examined. They were found to be quite sterile. Having, therefore, arrived by stages at the effective method of applying hydrogen peroxide to filter pulp, this is the one I now employ generally in my brewery.

General.—I have now dealt with three specific uses of hydrogen peroxide in the brewery, but doubtless there are many more for an agent which I have, I venture to think, shown to be effective in the cases I have instanced. The sole products of its decomposition when acting on germs are oxygen and water, both of which are desirable on general grounds of cleanliness. Unfortunately, in the time at my disposal in this period of extraordinary stress, I have not been able to carry my experiments further, but should the opportunity arise in the future I will do so. I may add that if any of you care to repeat or extend my experiments nothing would give me greater satisfaction.

SPONTANEOUS IGNITION OF COAL. A. P. Bruigum rejects the ordinary explanation that spontaneous ignition of coal is due to the presence of iron pyrites. After extracting coal with benzol, to remove bitumen, and with caustic soda, to eliminate humic acid, the residue consists of humin (made up more or less of cellulose), to which is due the weathering and deterioration of coal, with loss of carbon and hydrogen and increase in the percentage of oxygen and of ash, and a fall off in the heating value. This weathering is most pronounced in the layers most exposed to the air. If the coal be dry the weathering is very slow, but if damp is greatly accelerated. The yield of tar from weathered coal is much less than from fresh coal, but is richer in paraffins. During weathering the humin undergoes gradual combustion, and the humic acid undergoes changes in presence of oxygen, under the action of microbes, with formation of CO₂. This acid takes up ozone, with which it forms ozonides, which are decomposed in presence of moisture, liberating heat and carbon dioxide. In the absence of ozone coal absorbs a good deal of oxygen, but holds it simply as an absorbed gas. The process of chemical combination is very slow at ordinary temperatures, but becomes rapid when the temperature is raised; concurrently the absorption of oxygen is greater. The reaction therefrom tends to produce progressively rising temperatures, culminating in some cases in spontaneous combustion. For an effective start, however, ozone is essential, and this is formed wherever evaporation of water takes place. A damp heap of coal is, therefore, bound to start weathering; and if the circumstances are favorable to this the temperatures will begin to rise, and the inactive oxygen begin to fall in the process of destruction. This explains why warm weather after rain is dangerous to coal in heaps, and why sea air laden with ozone is dangerous to the coal in ships' bunkers; and it would appear that ventilation of the coal may import its own special risks. There is never any risk of spontaneous ignition of the endosperm. One sample of Caramel Malt was

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

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Barleys.

Of the 6 samples of Barley submitted, 5 were from various parts of Canada; 3 were satisfactory for malting purposes, 1 sample from Western Canada contained 10% of foreign seeds, and 1 sample of Manitoba showed a very low germinating capacity. One sample of Western U. S. barley also showed deficient germinating capacity.

Malts.

During this period there were analyzed 175 samples of Western Malts and 37 samples of California Malts besides 1 sample of Caramel Malt. The Western Malts showed an average moisture of 4.18% and yielded an average extract of 68.8% air dry, and 71.7% calculated on dry substance. The California Malts as usual made a far better showing; the moisture in 35 samples averaged 4.50%, the average yield on air dry malt was 71.3% and calculated on dry substance 74.7%. All samples showed satisfactory modification of the endosperm. One sample of Caramel Malt was satisfactory in every particular, having an air dry extract of 64.21% and a moisture of 3.50%.

Malt Adjuncts.

Thirty samples of Cereal-products were analyzed comprising:

Corn Grits.....	15 samples
Corn Meal.....	8 "
Refined Grits.....	6 "
Mazam	1 "

Six samples of the Cereals contained too much moisture; the remaining materials were all of satisfactory brewing value. Ten samples of brewing sugars and syrups were of normal and satisfactory composition.

Colorants.

Eight samples of various Colorants were tested and found to be satisfactory for the purposes intended.

Hops.

Four samples of 1916 crop Pacific Hops were passed upon; three of these were satisfactory for all purposes, while 1 sample was decidedly inferior owing to careless picking, and the presence of a large percentage of mouldy cones.

Grains.

Nine samples of mash tub residue were analyzed in order to check the mashing and sparging operations and the yields obtained; in all cases their composition indicated complete conversion and satisfactory extraction during the sparging process. One sample of dried brewers' grains was of normal and satisfactory composition.

Waters.

All 16 samples were subjected to a biological examination, and in 8 samples the nature and quantity of their different mineral salts were determined, especially in the cases where the waters were to be used for brewing or boiler feeding purposes.

Worts.

Fifty samples of Lager Beer Worts and 5 samples of Ale Worts were analyzed as to their chemical composition; 5 of these Worts were also examined in the Biological Laboratory for the presence of infectious organisms with a view to establish the sanitary conditions during cooling operations.

Yeasts.

Of the total 217 samples 155 were Lager Beer Yeasts and 62 Ale Yeasts—23 samples of Lager Beer Yeasts showed the amount of contamination above the safety limit; 127 brewery yeasts were in satisfactory condition, while 5 samples from the Pure Yeast Department were absolutely free from any infection. The general condition of the Ale Yeasts submitted was satisfactory, only 3 samples contained an excessive amount of lactic acid ferments.

Beers and Ales.

One hundred and fourteen samples of Ale from various stages of manufacture were examined in the Biological as well as the Chemical Laboratory; 35 samples were subjected to a complete chemical analysis, giving the following average figures:

Original Gravity.....	13.3°B
Alcohol by weight.....	4.39%
Alcohol by volume.....	5.52%

The 159 samples of Lager Beer were examined chemically and biologically; 66 samples were completely analyzed showing average results as follows:

Original Gravity.....	12.2°B
Alcohol by weight.....	3.53%
Alcohol by volume.....	4.42%

Temperance Beverages.

The 20 samples under this heading comprise 9 low alcoholic beers, 6 ciders and 5 samples of low alcoholic ales. The average original gravity of the Ales and Beers was 6.1°B, and the alcohol content 0.34% by weight or 0.43% by volume. The cider samples varied in alcohol content from 0.4% to 3.6%.

Coals.

Only 5 samples of Coal were of such composition, that they could be termed satisfactory fuels; the remaining 16 samples contained excessive amounts of ash, which in one sample reached 32%.

Miscellaneous.

The 50 samples examined under this heading were classified as follows:

Rubber and leather washers.....	14
Cleansers and disinfectants.....	11
Pitch and mammut.....	5
Filtermass	3
Soaking solutions.....	4
Bottles	3
Dried yeast, oils, isinglass (each).....	2
Oil of vitriol, fuel oil, and boiler scale (each) ..	1
Distilling apparatus, tested.....	1

*Notes on Yeast.**

By T. BOKORNY.

Although the higher carbohydrates have to be hydrolyzed before they can be attacked by zymase, it is often found that solutions of saccharose or maltose are more rapidly fermented than those of dextrose or invert sugar. The reason for this is ascribed by the author to the higher reactive power of the nascent monosaccharides formed by the dissociation of disaccharides. Pressed yeast, weakened by several hours' contact with 0.1 per cent. formaldehyde, carbolic acid, sublimate solution or chloroform water, is found to ferment maltose and saccharose more powerfully than dextrose solutions of equal strength. The presence of emulsion in yeast was demonstrated by the fact that a mixture of pressed yeast and amygdalin liquified, with formation of benzaldehyde, dextrose and hydrocyanic acid, the dextrose being fermented. The glucosides salicin, arbutin and coniferin are not decomposed by yeast. The biological value of emulsion in yeast is not apparent, more particularly since the benzaldehyde and hydrocyanic acid formed at the same time as the dextrose are yeast poisons.

Other experiments indicated that glycerol may form a source of carbon for the building up of the cell substance, the addition of this material giving in nearly every case an increased weight of dry matter in comparison with the check experiments without glycerol. The toxic action of aldehydes, formaldehyde in particular, was confirmed by several special experiments. On the other hand, the value of a series of tests on the production of fat in yeast under varying conditions of nutrition, was impaired by the method adopted for the quantitative estimation of the fat, namely extracting the dried samples with ether for only an hour, with the result that out of 14 experiments the fat content did not in any case exceed 2 per cent. of the dry yeast substance.

The author finds that aminotetrazotic acid cannot be utilized as a source of nitrogen by yeast, but the fermentative action is not impaired by that compound, neither could a capacity to reduce potassium nitrate to ammonia—possessed by certain fission fungi—be detected, the only nitrogenous substances assimilable being those containing NH_2 groups. Among the substances of this kind the best results in respect of yeast reproduction were furnished by peptone, whereas somatose failed entirely. The optimum conditions of reproduction—measured by the increased weight of dry matter—are found to be 20 deg. C. and 5 per cent. sugar solution. Exposure to a temperature of 15 deg. C. for 24 hours did not destroy the vegetative and fermentative activity of pressed yeast. In the preparation of permanent yeast by drying at room temperature the enzymatic powers of the yeast are retained, only the maltase becoming inactive.

Experiments on the stoppage of growth by toxic agents showed that this effect is produced by a 0.1 per cent. solution of caffeine, 0.1 per cent. of formaldehyde, 0.001 per cent. of hydrofluoric acid, 0.5 per cent. of phosphoric acid, 0.1 per cent. of hydrochloric acid, 0.01 per cent. of copper sulphate, and 5 per cent. of alcohol. The following concentrations produced cessation of fermentative power, hydrochloric acid, formic acid, oxalic acid and ammonia, 1 per cent., lactic acid, butyric acid and acetic acid 5 per cent., hydrofluoric acid 0.2 per cent. potassium carbonate 2 per cent. Zymase is less sensitive than yeast protoplasm toward alkali fluorides, alkali oxalates and potassium chlorate, but, on

* "Pflueger's Archiv."

the other hand, as little as 0.1 per cent. of potassium bichromate, bleaching powder and potassium permanganate destroy the fermentative power. In the absence of sugar and other nutrient substances, most of the heavy metals are injurious at even low concentrations. Zymase is unaffected by 5 per cent. of ether, or even 20 per cent. of ethyl or methyl alcohol, in 24 hours. Exposure to the action of a 50 per cent. sugar solution for three weeks destroyed the fermentative power of yeast, whilst leaving the invertive power intact.

In two important particulars the author adopts an attitude opposed to his own experimental results. Although it transpired that an increase of 152 per cent. of dry yeast substance was obtained in a nutrient liquid containing only 2.5 per cent. of meat peptone, in addition to mineral substances, in 48 hours, he asserts that sugar is indispensable to the growth of yeast. The production of glycerol during alcoholic fermentation is considered to be derived not from the dioxycetone and glyceraldehyde resulting from the decomposition of sugar, but from the fission of fats. The absence of an equivalent quantity of free fatty acids is explained by their being more rapidly consumed than the glycerol, but elsewhere the author mentions stearic and oleic acids as not among the sources whence yeast can derive carbon.

MECHANISM OF THE ACTION OF BEER YEAST ON GASTRIC DIGESTION AND FERMENTATION. By I. Novi, in "R. accad. delle sci., Bologna, Italy. Beer yeast accelerates the action of pancreatis diastase more energetically than, for example, pepsin. If the concentration is greater than 1-10 per 1,000, the results may not be favorable. Sodium carbonate has no influence on the results. The action of yeast is similar to that of the kinases.

MANHOLE COVERS. The spigot, or part of the door which passes through the opening in the shell of the boiler, should be a very neat fit, that is, there should not be more than about $\frac{1}{8}$ in. clearance in large doors. The cover should also be carefully centered, so that when placed in position, the clearance is $\frac{1}{8}$ in. all round, and not $\frac{1}{4}$ in. on the bottom, and none on the top. Round packing, or packing which has to be cut to lengths and bound into a ring, should not on any account be used. Packing that will stretch, or any of the rubber and canvas type, is not suitable, and the Board of Trade officials recommend that for large doors the joints should be made with flat asbestos rings of good quality about $1\frac{1}{4}$ in. wide and $\frac{1}{4}$ in. in thickness. The rings should exactly fit the spigots at the doors, as those that are too large or too small are apt to get out of place when fitting the door. It is also very important that the jointing surfaces, both on the door and at the edge of the opening, should be even and smooth, it being particularly dangerous to attempt to make a good joint where the surfaces are corroded and uneven. Another important precaution against a new joint being blown out is to carefully tighten up the nuts on the cross bars, or dogs, as the boiler becomes warm on raising steam, so as to compress the jointing material as it softens by the heat, and prevent the door dropping out of position. There are, therefore, five important points about a manhole door and joint. The spigot of the cover should be a good fit in the opening. The surfaces of both cover and bearing surface around the opening in the boiler should be even and smooth. The jointing material should be a thin, flat ring of asbestos. The door should be carefully centred in the hole. The nuts securing the door should be gently tightened up at intervals during the period of raising steam.—("Journal of the Operative Brewers' Guild.")

Hints on Running Air Compressors.*

By MAIKRANZ.

Practically every large brewery employs a compressor for its supply of compressed air; and mostly a second machine is kept as a spare. Some makes—usually those intended for running at slow speed—are fitted with slide valves, whilst fast-running compressors are provided with plate valves. Where the working pressure exceeds four atmospheres a two-stage compressor is desirable, the air being partially compressed in one cylinder, and then passed through a cooler before reaching the second cylinder, in order to cool it down to the initial temperature, and thereby ensure a final temperature lower than is attainable with a single-stage compressor, while at the same time economising power consumption.

The inside walls of the compressor should be well lubricated, since they become heated in proportion to the final pressure attained, and the speed generally exceeds 100 revs. per minute. The lubrication of the compressor cylinders is the more important in brewery work because the compressed air supplied comes, in many instances, into direct contact with the beer. The chief danger is that particles of oil may be carried off in the compressed air and spoil the head-retaining properties of the beer. Many devices, more or less fulfilling their purpose, have been introduced to prevent this danger; and in some breweries glycerine oil is used for lubricating the cylinders, instead of the special compressor oils usually employed. A point to be noted with regard to this glycerine oil is that it should have a high boiling point—which is synonymous with high specific gravity—since the troubles attending the use of this kind of oil are intensified as the boiling point and density decreases and the degree of compression of the air increases.

The hot air causes the glycerine oil to boil, and thus become thicker and very "tacky," a result particularly noticeable in slide-valve compressors, because the air passages become choked, the suction resistance increasing continuously and the output diminishing. This, in turn, means more power required to drive the compressor, and, unless care be exercised, may lead to complete failure of the machine. In plate-valve machines a regular crust forms on the valve casings, increasing the suction resistance; and if the compressor is fitted with automatic gear, which keeps the valves open when a certain suction resistance is exceeded, the sticky glycerine oil may put this gear out of operation and stop the delivery of air altogether.

When circumstances render the use of glycerine oil imperative, the foregoing drawbacks may be minimized by thoroughly cleaning the compressor at regular intervals, which will be shorter in the case of plate-valve machines than with slide-valve machines. The oiler is an important factor; and it should be borne in mind that open oilers of the sight-feed type are unsuitable when automatic pressure regulators are fitted, because when the pressure reaches the limit at which the suction valve is closed, a vacuum is produced in the cylinder and the oil will then all run down into the latter. A pressure oiler, similar to those used for steam engine cylinders, is advisable, because when once the supply is adjusted it is maintained uniformly, thus saving the expensive oil and keeping the cylinder cleaner.

A growing practice is to separate the oil from the com-

* "Wochenschrift für Brauerei."

pressed air, by passing the latter into a large vessel, where the lessened rate of flow enables the particles of oil and moisture to settle down, so that they can be drawn off through a tap in the bottom. An oil separator may also be interposed between the compressor and the large vessel; but this apparatus is not thoroughly effective. After leaving the large vessel, the air is passed through a coke filter (large lumps), followed by a cotton-wool filter, and then through a disinfecting solution of permanganate. In some cases the air is passed through still another cotton-wool filter impregnated with disinfectant.

With these precautions, it may be confidently assumed that the air will be quite pure, and will have no effect on the head-retention of the beer. It is very desirable to have a cloth filter in the suction pipe of the compressor, to keep out soot and dirt which would injure the cylinder walls, by mingling with the oil and forming an abrasive. The intake should be installed in a cool, but not damp, place, and the feed pipe should be large enough to ensure that the suction will not be interfered with by the filter. When racking is effected at a low pressure, it is preferable to have a small separate compressor for this purpose, because then the advantages of using glycerine oil under high pressures are no longer experienced.

LONG MASHING PROCESS AND EXCESSIVELY SOFT WATER.

The success of the long pre-mashing process may be jeopardized by the use of excessively soft malting and brewing liquor. In the brewery where this experience was gained, the water was obtained from a river supplied from springs in the granite, and left practically no residue on evaporation. The beer attenuated too far, was thin flavored, and did not hold its head. Examination of the drainings from the steep showed that the soft water had extracted the phosphatic salts from the barley. Trials were made with purchased malt, the degree of hardness of the steeping liquor used by the maltster being ascertained in each case, and it was found that the best results were obtained with malt steeped with water having a hardness of 10° English. In connection with protein-rest temperature, 122° F. did not prove satisfactory, but on raising the temperature to 129-131° a more compact yeasty head was obtained in fermentation, the wort had a better "break," and the beer a fuller flavor.—("Wochenschrift für Brauerei.")

BELT CONVEYORS. By R. Trautschold, in "The Engineering Magazine." Material supplied in an adequate and continuous stream can be handled more expeditiously by the belt conveyor than by other form of material-handling equipment. For handling loose material a troughed belt is required, and, though the load that can be supported by a foot of belt is not great, the capacity of even a narrow belt is surprisingly high, owing to the speed at which a belt may be run. For instance, under perfect loading conditions, a belt conveyor only 12 inches wide can handle nearly 90 tons of sand per hour, while one 36 inches wide has a capacity of 800 tons per hour when run at a speed of 375 feet per minute. Considering a specific belt conveyer installation, one handling 85,000 tons of fine coal per year may be taken as typical and well illustrating the economic value of the device. Such a conveyor, 500 feet long, elevating the load 30 feet in its travel, and distributing it to an overhead bunker 100 feet in length, would not be an unusual installation. With power delivered to the conveyor drive costing 2 cents per horse-power, the net operating cost per ton, including all charges, is 1.957 cents with pin-bearing idler and 1.629 cents with roller-bearing equipment.

Notes and Queries.

As nearly all the questions we receive refer to matters generally interesting replies.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the National Brewers' Academy and Consulting Bureau.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

J. McM. The trouble with your Stock Ale apparently arises from unsound and improperly cleaned hogsheads. The ale, which was probably sound before entering these hogsheads, has now an abnormal, stocky odor; it is quite hazy, and contains a considerable amount of different yeasts and bacteria. We suggest that you re-rack this ale into perfectly sound, clean hogsheads, and treat it with about 1 ounce of fresh hops per barrel. In this way you will improve its character to some extent, but it will never be fit for bottling purposes.

O.V.G. The sample of malt which you submit has been very improperly kilned. It would otherwise be pronounced satisfactory. It was made from a good, average six-rowed Western barley. The starchy part nearest the outside of the kernel has been dried while in a gelatinous condition, and the sheath thus formed is hardly penetrable, and will give great trouble in the mash tub. If you are compelled to use this unsatisfactory material, we suggest that you adopt very low initial temperatures and give the malt a thorough soaking for at least an hour before attempting to work for diastatic action.

M. E. S. The cleansing compound of which you submit a sample, is a mixture of commercial soda ash and caustic soda, in the proportion of about 2 to 1. It is quite satisfactory for use in the soakers, and we should advise you to use it in the strength of 1% for your first compartment and 3% for your second compartment. We take this opportunity to impress upon you, when using a two-compartment soaker, the necessity for very thoroughly rinsing the soaked bottles.

A. M. In pasteurizing beer of your type for exportation to tropical climates, a temperature of 150-151°F. is quite sufficient. This temperature should be maintained in the case of pints for at least 25 minutes, and for quarts for at least 35 minutes. It serves no good purpose to use such high temperatures as you mention. You will only produce steamed, or bread, taste, and the beer will be very susceptible to albuminoid turbidity. Regarding your question of a proper bottle-closing device, we have found that the crown seals give every satisfaction provided the cork discs are of the very best quality.

C. S. G. The amount of lactic acid ferments in your ale yeast is quite alarming. We urgently advise you to obtain a sufficient amount of Pure Ale Yeast to pitch an entire brew, but if you are somewhat skeptical about changing your yeast, we suggest that you treat it as follows: Start your fermentation at 55° F. and let the temperature rise to 66°F. This temperature should be reached, under ordinary circumstances, within a period of 72 hours. Skim the ale clean and throw away the skimmings. When the first crop of your yeast is formed, skim off about 2 inches, which must also be thrown away; then collect the remaining crop. It is also very important, when the yeast stands in the yeast trough for a few days, to skim off two or three inches from the top and throw it away, before beating up the yeast previous to use.

E. M. N. Your two samples of Hops, of which one is a Pacific Hop and the other a New York State Hop, are both considered inferior brewing materials. You have no doubt yourself noticed that both samples contain a large amount of stems and leaves, indicating very careless picking. If you examine the New York State Hops more thoroughly, you will also find on close observation that they contain a large number of mouldy cones, and as the moisture in these Hops is very high, they are likely to deteriorate quickly during storage. The Pacific Hops are sound, but the large amount of stems and leaves should be considered in fixing the price of purchase.

H. J. R. The lack of yeast reproduction may depend upon a variety of causes which it is impossible to enumerate in these columns. You may take it for granted that well-constituted wort and proper fermentation temperatures always produce good yeast and plenty of it. You should never get less than about 3 to 4 pounds of clean, solid yeast from every pound of pitching yeast used. Your present way of stimulating the yeast will not improve it in that direction; but on the contrary will cause it to become sluggish. The best method for improving the fermentation as well as the yeast crop is treatment with strong first wort from the mash tun. The details of this procedure have frequently been given in these columns, and your brewer should be familiar with them.

F. A. M. The matter that is deposited on the bottom of your cool ship and on the bottom of your Baudelot cooler, commonly known as sludge, may be roughly taken to represent about 1% of the total wort that you run out of the kettle. Sometimes it is a little less and sometimes a little more, depending upon the nature of the brewing materials (especially of the malt), the age of the hops, and the gravity of the worts. We have had several experiences at various times with sludge collected from various breweries, and find that it contains approximately 10% of dry, solid matter, of which about 25 to 30% is maltose and dextrines, the rest being made up chiefly of resinous and albuminous matter.

B. D. P. The species of budding fungi to which you refer is undoubtedly the *Saccharomycopsis*, which was first described by Schjoenning. It consists of egg and sausage-shaped cells, and forms a white film on the liquid where it grows. The main characteristic of this species is the double-walled spores, which germinate after bursting the outer wall. This fungus is able to ferment levulose and maltose, but not saccharose. For further particulars, we refer you to Lafar, "Handbuch der Technischen Mykologie," Vierter Band.

C. O. A. The sample submitted is a Temperance Beer. It contains 0.4% of alcohol by volume and 6.2% of extract. Its appearance is quite hazy and it has a distinctly disagreeable, harsh, bitter taste. Judged from its general character, we should say that this beverage has been produced by boiling off the alcohol from an ordinary lager beer. There are several ways of producing beverages of this type, containing less than 0.5% of alcohol by volume, and if your trade calls for such, we advise you to consult a brewers' chemist who could give you proper advice as to the best method for its manufacture.

C. L. P. For your information we might say that, although red lead is the oldest and most effective means of protecting iron from rust, it is no longer favorably considered because it dangerously affects the health of those coming into contact with it. Some of the substitutes now replacing red lead have been found to be quite satisfac-

tory. Among them is a paint, composed of linseed oil and graphite, which, if applied on surfaces free from corrosion, is just as good as red lead. If the parts to be protected are not too large, they may be successfully cleaned from rust and dirt by immersion in diluted sulphuric acid and then brushed off with a wire brush. Large pieces of structural iron or parts of heavy machinery may be painted with the diluted acid and then brushed off until their surfaces are a metallic, pure light color. To completely remove the acid, the surfaces should be rinsed with water or lime water, and then thoroughly dried. The linseed oil-graphite paint may now be applied with a brush, and two or three coats are generally given.

H. K. V. The process to which you refer is employed mostly in France and Belgium. It is known as the Amylo-process. Without going into details, this process of alcohol manufacture is characterized by the use of certain mould fungi as saccharifying agents. The mould now most commonly used is the *Rhizopus Delamer*. When saccharification of the mash has reached a certain stage, pure yeast is added and the total process is finished in about four days. A very interesting paper which will give you more detailed information on this subject was written by O. Grove and is published in the Journal of the Institute of Brewing, April, 1914.

TREATMENT AND UTILIZATION OF SULPHITE-CELLULOSE WASTE LYES IN CONNECTION WITH DRIED BREWERS' GRAINS. To render sulphite-cellulose waste liquor suitable for feeding to cattle, it is neutralized with lime, oxidized by allowing it to trickle over galvanized wire gauze, again neutralized by passing it over limestone, and then allowed to trickle over a bed of porous brick coated with oxide of manganese. The purified liquor is concentrated to a thin syrup by indirect heating with steam, the syrup is mixed with dry feeding stuffs (bran, malt coombs, dried brewers' grains, etc.), and the mixture dried until the water content is reduced to 10-12%. (J. Koenig, in "Z. Nahr. Genussm.")

PENTOSANS AND FURFUROIDS. In order to test the accuracy of the conclusions of Cross and Bevan with regard to furfural formers, King carried out experiments on crushed barley husks, by extraction with boiling dilute hydrochloric acid, followed by alcohol and ether. He states that no substance having the assumed structure of the pentose monomethylene ethers could have been present, since no CH_2O could be detected by the Rimini reaction in the distillates obtained after dissociation with acids. On the other hand, the occurrence of two types of furfural formers, viz., true pentosans and furfuroids—in the sense applied by Braun—was confirmed. Approximate separation can be obtained by prolonged boiling in 2% sulphuric acid. Arabinose passes into solution and 90% of the residue can be hydrolyzed—with formation of arabinose—by boiling with 1% sulphuric acid under a pressure of 3-4 atmospheres. The solution did not give any true alcoholic fermentation with yeast. Its parent substances must also be pentosans, though they are undoubtedly identical with the typical furfuroids of brewers' grains; and it must be assumed that the other natural furfural formers (furfuroids and oxycelluloses) of similar origin, but regarded as different from pentosans, have a pentosan structure. The solutions they furnish on dissociation also contain other substances, protoids, free acids and their derivatives, furfural and other degradation products, which probably disturb the phloroglucin reaction.—("Biochemische Zeitschrift.")

— THE —

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War, and the Trade.

The brewing industry has always been loyal to the nation in the country of which it exists. It always will be.

The brewers of Germany have been sustaining the people of that country in its present crisis. They have subscribed many millions to its various war loans. They have paid enormous war taxes. They have suffered their output to be reduced to a minimum in order to provide nutriment for the army at the fronts and for the workers at home. Thousands of brewers, their sons, employes and friends, have given up their lives in battle. They are fighting with and for their people today. They are and will be loyal to the end, and they know that their people and their government will not harm their trade, will not try to destroy it. There is no desire, no reason to perpetrate an outrage like that in Germany.

The brewers of England are as loyal to their nation and its government as are the brewers of Germany. They have made the same sacrifices, and they will continue making them, confident that their services to England will be acknowledged and that their nation will not accede to the clamor of the enemies of the trade who would avail themselves of present conditions to cripple and finally destroy the trade, in puerile imitation of their Prohibitionist prototypes in the United States of America.

The brewers of Belgium have suffered for their country, and they remain loyal to its nation. So do the brewers of France, who have suffered and sacrificed like their colleagues in all other countries where war has made havoc of all that is valuable to man and his welfare.

The brewers of the United States are no less loyal to their country and its nation than the brewers of Europe to theirs. They are willing to make the same sacrifices if necessity should require them to do so. Their forefathers have shown that they, too, were ready to fight and to die for liberty. American brewers and their sons have bled on the battlefields of the Revolution and of the Civil war. With millions and millions of dollars paid in war taxes by American brewers the army and navy of the United States have been equipped and maintained for more than half a century. American brewers are paying war taxes today and they are willing to pay more if the country should ask them to. Their sons and their employes are ready to shoulder the musket if called upon by the President.

And now in this solemn hour, when all of us may be expected to do our duty to our country, its nation and its liberty, even to the death, the brewers of America demand that they be no longer treated like outlaws. The legislative attacks upon their legitimate trade must cease. The voice of the parson, of the jobless agitator and of the time-serving politician, raised against the brewer must no longer be listened to. He, who would destroy any useful and tax-paying industry in times like these must be considered a traitor, bent upon preventing the nation from defending itself against an aggressor.

Congress must drop its Prohibition bills. This is not a time to pass them. Nor should they ever be passed. There is no necessity at any time for passing them. The brewing industry is part and parcel of the economic and financial system of this nation, and all attempts to destroy it, must be classed with all other kinds of treason—in peace as well as in War!

Cooperation among all industries to protect one and all from destructive legislation fostered by fanatics, ignor-amuses and self-seekers, is what we need in this country!

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Same Cause — Same Effect.

The passing over President Wilson's veto of the immigration bill providing for a literacy test in keeping with the passing of Prohibition laws by American legislators.

Three Presidents have declared it to be unjust, un-American, unconstitutional, unwise, illiberal, stupid and what not, to prevent persons from seeking freedom and happiness in this great country only because they were so unfortunate as to have had no opportunity of learning how to read or write their own or any other language. The entire American press has denounced the measure and all decent and intelligent Americans say the same thing.

And yet an overwhelming majority in both houses of Congress not only passes the infamous bill, but passes it over the President's veto!

Why?

Because the politicians voting for it did so at the dictation of a few so-called labor leaders, men representing organizations whose members have been told that the less competition they have upon the field of labor, the higher their wages will rise. The delusion of the alleged argument becomes obvious if the conclusion is carried to the extreme: Reduce the number of laboring men to a minimum, and wages would absorb the wealth of the rest of the population.

However, aside from the absurdity of the proposition, these voting-for-their-own-pocket politicians are themselves deluded. They fear a power which does not exist. There is no labor vote in this country. We have witnessed that fact again and again—the last time on November 7th, 1916, when the vote promised by Sam Gompers to President Wilson did not materialize. The President was re-elected by men in all stations of life who believed in his integrity and his statesmanship. But the peanut politician who trembles whenever any threat is hurled at him by some fakir pretending to possess "political influence," and to carry other men's votes in his vest pocket, votes for any old thing that the fakir commands him to.

The parallel between votes for "labor" bills and Prohibition bills is apparent.

Prohibition bills emanate from persons pretending that they can manipulate the "church vote." And of that the peanut politician is far more afraid than of the labor vote, as he thinks, because he sees more men go to church than attend labor meetings, the "church vote" is so much more powerful than the "labor vote." In both cases the voting politician is deluded by imagination.

Voting for "labor" bills and Prohibition bills by peanut politicians is caused by the cowardice of selfishness—every time!

Dr. William S. Sadler recently addressed the Illinois Manufacturers' Association at its annual dinner, declaring that almost all diseases to which mankind may be a victim are due to intemperance in the use of food, drugs, medicines, sexual and all sorts of other "pleasures." Then, why blame alcohol alone?

Indiana and Pennsylvania.

The Legislature of Indiana has passed a Prohibition bill which, if enforced, could destroy the business of thirty-four breweries producing about 1,500,000 barrels of beer per annum. There is no wide-spread demand for Prohibition in Indiana. Therefore, the question arises: Why did the politicians composing the Indiana Legislature pass that bill?

We are told that it was a matter of revenge. Because most of the brewers of Indiana refused to be bled by certain politicians during the last presidential campaign, they must be punished. And so the politicians destroy the business of the men who, instead of doing the bidding of some political bosses, followed their own inclinations and convictions and kept their purse-strings tight.

Here we have a case of men being punished for refusing to put their money into a political campaign fund.

Just the opposite thing has been done in Pennsylvania. There politicians have caused the persecution of brewers for doing what their Indiana colleagues refused to do: For contributing large sums, regularly, to certain campaign funds.

And what is the moral brewers should draw from this object lesson taught them by the politicians of these two States?

Be your own politicians!

Educate, enlighten and organize the masses, independent of political action with any of the existing political machines and thus have men elected to legislative offices who, instead of destroying an American industry, simply for the matter of revenge, will advance and foster its interests.

No sane man in this country believes that President Wilson will ever sign a nation-wide Prohibition bill if it were passed by a stupid and cowardly majority in Congress. But who can tell whether the bill would not be passed over the President's veto, as has been done in the case of the vicious and un-American Immigration bill containing a literacy test?

The foremost psychological item in the mental make-up of the Prohibitionist is the characteristic of indomitable conceit. Whatever he does is right, because he does it. His desire to destroy and make millions miserable must prevail. He stands forth as the only one among his fellow creatures who tells the truth and knows how to govern everyone else. For him Abe Lincoln's saying that "no man is good enough to govern any other man without that man's consent" does not exist. By the side of his colossal egotism, the selfishness and greed of the animal world appear humane, the vanity of the peacock amiable and the shallow self-satisfaction of children amusing. The appearance of the Prohibitionist in our midst is a remarkable phenomenon, indicative of the moral and intellectual decay of part of our middle-class population, which, in the great struggle for economic emancipation from the oppression through insatiable greed, plainly sees its rapidly approaching finish. Prohibition is but a passing phase of mankind's development from individualism to cooperative collectivism.

Graduated Taxation?

It has been suggested that the drink question might be solved satisfactorily by so changing our system of liquor taxing that for an increasing percentage of alcohol in any beverage a corresponding increase in taxation be collected, say a graduation doubling the rate for each per cent.

If that were done, brewers and distillers would be striving to produce beverages of the lowest possible alcoholic percentage compatible with palatability, and the high percentage alcoholic beverages might be gradually eliminated with the gradually changing tastes of the public. However, the difficulty would confront the authorities how to ascertain the percentage of alcohol in every beverage produced. A complicated machinery of inspection and detection would have to be created the cost of which might increase the cost of beverages to such an extent that manufacturers would no longer find it profitable to carry on their business and the result would then be the same as if manufacture were prevented by enforcement of Prohibition laws, with the natural consequence that persons desiring to consume alcoholic drinks would resort to home brewing and distilling. Then drunkenness, instead of being decreased, would increase enormously, a condition of affairs which no one advocates.

We do not believe that graduated taxation of alcoholic beverages is either desirable, nor that it is practicable.

The National Industrial Conference Board, recently organized by manufacturers and merchants of several States for the purpose of insisting that their industries shall not be crippled, or destroyed, by fool laws, should be supported in its aims and objects by every brewer and all others who live by working in and dealing with the American brewing industry.

The attempt made by the Randall and Bankhead bills in Congress to prohibit the circulation of newspapers and magazines carrying "liquor" advertising, is an attack upon the liberty of the press, the bulwark against despotism which to erect thousands of Americans spilled their blood upon the battlefields of the Revolution. Have their descendants degenerated to such an extent that they will meekly lay down when parson-led politicians decree that in the Twentieth Century there shall be a free press no longer for citizens of the United States?

Some people have recently advocated the appointment of a commission to "investigate" the drink question, the liquor industry, the effects of alcohol upon the "morale" of nations, etc., and then shape legislation in accordance with the conclusions arrived at by the commission. We think this would all be superfluous. What could the commission "investigate" that is still unknown—what could it propose? The fact has been established, and universally acknowledged, that all organisms have a natural craving for alcohol, one of the decomposition products of sugar; and it is equally well enough known that this craving increases with the development of organisms. Is nature to be controlled by man-made laws and regulations?

"Billy" Sunday recently insinuated in Boston that the sons and daughters of brewers, distillers and retailers of liquor should not be accepted as students of American universities, because the fortunes possessed by their fathers were made "by trade across footrails." Was there ever in history a more despicable nuisance that obtrudes itself upon a patient public as this raving maniac—Sunday?

Luckless Florida!

The people of Florida may, by this time, have seen that they made a ghastly mistake when they elected the "Reverend" Sidney J. Catts to the exalted office of Governor of their beautiful State.

Catts is a Prohibitionist. He was nominated by a number of brainless politicians at the behest and order of the organized Protestant clergy of Florida. And a majority of thoughtless, uninformed and, therefore, credulous voters, elected him. Some of those voters will sorely regret their folly when, under the leadership of the "holy" Catts, their State will have gone "dry" and one of the principal industries of Florida, yielding many millions every winter, the hotel industry, will have been crippled, or altogether starved out of existence by all devouring and devastating Prohibition. That Catts is supremely unfit to be governor of anything, much less of a great and important American commonwealth, appears from a reply he recently sent to a letter written to him by the Southeastern Land Show, the management of which requested him to contribute an article to their official program. In that reply made by Catts, these lines occur: "You say that you are issuing a development book * * * and ask me to write an article of 1,000 words for your publication. Nothing would afford me more pleasure except that I am too busy. I do not have time to say my prayers at night nor read my Bible, and a newspaper I never look at. So it is impossible for me to comply with your request. I am glad that the Governor of Alabama has time to do these things, but if he were Governor of Florida he certainly would not."

Would any one believe it to be possible that a so-called Minister of the gospel could have written a scurrilous screed like that? And what must his own colleagues in the "reverend" business think of Catts!

But that comes of electing one of that outfit to an important public office. Imagine some fellow like that were ever elected President of the United States.

Federal Judge Henry D. Clayton has said in the United States Court at Montgomery, Ala., that out of every ten men who voted for Prohibition in that State, nine are violating the very law for which they voted, and he agreed with us that whenever you scratch the hide of a Prohibitionist, you find a hypocrite beneath it. Is there anyone anywhere to contradict Judge Clayton?

We have immigration laws barring Anarchists from landing in this country; but the Anarchists of the Anti-Saloon League and Prohibition party, who destroy more property and human happiness in a year than all the other Anarchists throughout the world could destroy in a century, are still with us; nobody disturbs them; nobody calls a halt to them!

Poor country-side editors are in a bad fix when it comes to considering whether or not to support Prohibition. If they do, they lose their "liquor ads," and if they don't, the job printing for the various local "reverends" and their duped little business men is taken away from them. The only way out of the difficulty is to stay neutral; so the editor keeps all of his ads. And this is the reason why the light of truth does not penetrate the dark country-side, and the "reverends" have it all their own way, unless the trade should decide to flood all towns and villages with enlightening literature and convincing speakers.

Intolerance.

Vivian Klank, daughter of a policeman in Chicago, is employed as a telephone operator at the switchboard of the Standard Brewery in that city. She has been there for more than four years. And she is a good girl. So everybody says that knows her.

But the "Reverend" L. H. Meister, pastor of the church in which Miss Klank was one of the Sunday school teachers for some time, is of a different opinion.

When Miss Klank became a Sunday school teacher of Mr. Meister's congregation he did not know that she was employed in the brewery. It was but lately that somebody came to him whispering: "Do you know that Miss Klank is working for Demon Rum?" "Why, no," the pious gentleman replied. "You don't say!" And he summoned Miss Klank to his holy presence.

"Is it true that you work in a brewery?" he sternly asked her.

"Why certainly," the girl replied.

"Then you must choose between the Lord and the Devil," was the pastor's ultimatum.

"And who is to employ me if I quit?" the girl inquired.

Mr. Meister had no definite answer to that vital question and so Miss Klank told him: "I guess I'll keep my job."

Talk about boycotting being wrong and un-Christian! Are there any boycotters more intolerant than certain so-called Christians?

It is impossible to establish universal rules of diet to govern every one of us. We all have certain individual tastes and, if they are not satisfied, we don't feel well. No one can tell us what we should eat or drink to be healthy and happy. We know that by experience. Experiments as they were made with dieting for a number of New York policemen may be interesting enough for some food scientists, but they are of no practical value for the rest of us.

If the Federal government cannot prevent those states which have denied the right to vote to their negro populations from continuing that flagrant violation of the United States constitution, how can it ever hope to prevent Nationwide Prohibition to be violated by the millions of Americans who will insist upon being provided with alcoholic beverages?

When woman suffrage was defeated in South Dakota, the cry arose from the ranks of the suffragists that the "forces of evil"—the liquor interests—had caused the defeat. If that were so, why did not the same forces prevent the adoption of State-wide Prohibition in South Dakota? And during the last few days woman suffrage was defeated in the Senate of Tennessee, one of our nice Southern Prohibition States!

"Table Talk," official organ of the International Mutual Cooks and Pastry Cooks Association, is publishing Prohibition literature of the kind put out by Dr. Harvey W. Wiley, the crank who had to leave the service of the United States for being an outspoken Prohibitionist. Unless the organized cooks know what they are doing, their pernicious activity against the interests of the hotel industry, which are identical with those of the alcoholic beverage industry, should be stopped at once by their employers, the hotel men. No one can serve two masters at the same time. If the organized cooks want to be fools, let them be so at their own peril. There are plenty of good cooks in this country who would be willing to assist the trade upon which their livelihood depends to replace those who would like to see it destroyed.

Why the Nickel and Dime are Diverted from "His Reverence."

The Rev. T. C. Baxter, at a meeting of the Presbytery of Westminster, in York County, Pa., in rooting for the Anti-Saloon League and advocating that collections be taken up for it, declared that too many church members spend more money across the bar of the saloon than for "religion." The wail is perfectly justified from the viewpoint of the theologian who remembers that, in times gone by, the church not only took one-tenth of what every person over which it held sway produced, but often all the property, and even the liberty and the lives of men and women, particularly when they dared to mutter that the church was becoming a little too rapacious. That was then called "heresy," and the torturer's rack, the gallows and the stake were the fate of the intolerable offender. This has all been changed by education and enlightenment. Men and women have found out that material welfare is necessary for them, first of all; only after they have procured the means of personal comfort and the joys of life they indulge in sentimental and emotional pleasures—as they understand them. And that is the reason why many men, who still give cents, and even dollars, for the support of theologians and their institutions, spend more money "over the bar of the saloon" and other places where to obtain good drinks and other things that make work and life more worth the living than some hundreds or thousands of years ago, when every penny and every handful of grain and other necessities of life that could be squeezed from the attendants of the temple and the church went over its bars and altars to fatten oily-tongued non-producers and "preachers," whose assertions could not—as they cannot now—be supported by reliable evidence.

"The bulk of the nation's population is still in wet territory. They will undoubtedly remain there so long as New York, Pennsylvania and Illinois remain local option States." —New York "Evening Mail."

The figures of the Internal Revenue Office in Washington show that while Prohibition territory in the United States is being extended, the consumption of intoxicants is increasing. If Prohibition prohibits, the per capita consumption of "liquors" must be growing enormously in the area still "wet." But that is not a fact. Consumption is increasing throughout the country.

We heard some literary fellow recently say that he had lost interest in drink, as there was "no fun in it" for him; but if the saloon were suppressed in his town and he were compelled to look for a "blind pig" if he wanted to treat some friend, his interest in "Demon Rum," would surely be revived. That's just it; Prohibition makes drinkers of people who would not think of touching "liquor" if it were at their elbow whenever and wherever they could reach it.

As long as the publisher of the "Keystone Gazette," a little country sheet printed in Bellefonte, Pa., held down the job of postmaster of that town, he tamely obeyed the orders given him by his political masters. But as soon as he lost his job, he turned against them and became a rabid Prohibitionist, hoping that thereby he may again get something from the "reverends" and their would-be political following, to compensate him for what he has lost. Still, there is a long way to Prohibition in Pennsylvania and we may never see Prohibition-appointed postmasters in the sturdy Keystone State.

Kansas is full of dead railroads, and no new ones building. Do the States lately trying to emulate Kansas's example desire a similar condition of affairs within their borders?

The Prohibitionists are doing more to discredit their own ridiculous scheme than anybody else could do. But that is just what they want to make appear to accomplish. They would like to see Prohibition really prohibit.

The Prohibition fanatics cannot be convinced that they are wrong. They will continue shouting and lying and, as we have free speech in this country, they must be endured. The only thing to do in this aggravating case is to appeal to the nation, enlighten it and prove that the fanatics are wrong. Then they will become innocuous and they will be preachers in a desert.

Several bills were passed by the New York Legislature increasing the annual fees for motor trucks, while those for pleasure vehicles are to remain as they are. To pass those bills was an injustice to manufacturers and merchants, because they were discriminated against. Let the man who ruins public roads simply for pleasure's sake, pay as much as the man whose vehicles are useful conveyors of the products of necessary industries, then it will not be necessary to bolster up the public treasury by disproportionally mulcting one class of citizens while coddling another class.

"Local Option leads to Prohibition, and Prohibition—Prohibition leads to so much that is illicit that it is all one and the same thing, so far as results are concerned. Anything that seeks to prohibit, after years of toleration, after centuries of licensed toleration, cannot prohibit. Local Option permits localities to wipe out licensed liquor places entirely, and whenever that happens, and wherever that happens, it is a matter of common knowledge that illicit drinking places spring up in cellars, back rooms, garrets, woodsheds, hotel bedrooms, cabins and boats."—"Hudson Dispatch."

Another shocking example of Prohibitionists' disloyalty to the interests and welfare of their nation has been afforded by the utterances in Congress of Representative Works, the California Prohibitionist, who attacked the President for his patriotic stand taken in the great crisis which may result in the United States being involved in the European war. But his constituents and the whole of California's citizens have repudiated Works, as the entire nation repudiates him. Prohibitionists are not safe persons to be placed in public office. They should be shunned like mangy curs!

Before Wheatland, Cal., went "dry," there were four large congregations and four pastors, all doing well, but they didn't know what they were doing when they were yelling against the saloons. They drove them out, but with them went business and pretty soon the church people could support their pastors no longer. The "reverends" then resigned and moved elsewhere. But the local "dry" paper says that Wheatland no longer needs any pastors—because it is "dry." That reminds us of the fox in the fable who said that the grapes coveted by him were sour—when he could not reach them.

Prohibition Drink-Money.

Congress passes a bill cutting off revenue as lightly as one calling for the expenditure of hundreds of millions. Since the legislative department has refused to consider the effect upon the Treasury of the act forbidding shipments of liquor for personal use into Prohibition States, perhaps the executive branch will inquire into the matter.

Assuming that Representative Shierley is well-advised when he says that 40 per cent. of Kentucky's liquor product has been sold in Prohibition States, it is reasonable to suppose that the ratio holds good generally and that it applies to brewers as well as to distillers. Last year the direct tax upon the manufacture of spirits, beer and wine amounted to about \$238,000,000. If the new law proves effective in stopping the "personal-use" traffic in Prohibition territory, it will also, on the 40-per-cent. basis, stop about \$95,000,000 in taxes which Congressmen and others in Washington have found highly useful for appropriations.

In joyous disregard of consequences, Congress appears to have considered this subject only as a moral, social and political problem, with a suggestion on the side that the action taken was an excellent joke upon the Prohibitionists whose cellars have never gone dry. When the bill gets to the President, who must necessarily grapple with sordid finance occasionally, he may want to know how he is to replace that \$95,000,000 of Prohibition drink-money.—(New York "World.")

"HUMAN CRANKS have been busy in this country for more than a century, inventing and evolving laws to straight-jacket and restrain men engaged in the liquor business. The end of freak activity against them in legislative bodies is not in sight, and it is perhaps visionary to hope that it will ever come."—(Belleville "News-Democrat.")

TO CONTINUE THE BREWING INDUSTRY. "We are not interested in the beer industry except for a belief that the beer industry should be continued for some years to come as a preventative against the evils that result from attempts to jump to Prohibition. When people who are now earning their living from the whiskey industry are deserting the ship, trying to get in other lines, it would seem sensible for those engaged in the beer industry to look after their own interests, and their own interests can only be safe-guarded by playing a lone hand. The people of New Jersey, for instance, will not legislate against beer, unless beer is hitched up indissolubly with whiskey. We believe that the Local Option movement now gaining strength in this State would fall flat if whiskey were to be wiped out."—"Hudson Dispatch.")

INFLUENCE OF CATALYSTS ON YEAST FERMENTATION. By R. Somogyi in "Ant. Zeits. Phys. Chem. Biol." Small amounts of quinine and atropine accelerate the growth of yeast, whilst larger quantities inhibit it. With cocaine and pilocarpine, on the contrary, small amounts inhibit, whilst larger quantities have an accelerating influence on the fermentation. Basic dyes, such as malachite green and methylene blue, exert a toxic action on the yeast cells when present in moderate quantities. When, however, only a trace of methylene blue is added, the activity of the yeast appears to be enhanced and fermentation is accelerated. Most of the acid dyes examined did not materially influence the rate of fermentation even when present in considerable amounts.

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

WASHINGTON, D. C. Since the House Committee on the District of Columbia, by agreement, resumed consideration on February 6th of the Sheppard-Barkley bill for Prohibition in the District of Columbia, the subject has been thrashed out in a number of its phases, but at this writing seems to be as far from getting through the House, or even being reported by the committee, as ever it was. The opponents and proponents of the bill have been given ample opportunity for being heard, and the Washington Chamber of Commerce, Board of Trade, and many other representative organizations have strongly protested against the legislation being foisted on the District without allowing the people of Washington an opportunity to express their wishes in the matter. A number of members of the committee who are not ranked with the enemies of the measure have stated that they will vote against it in committee and on the floor of the House if it does not contain the referendum clause submitting the bill to the people of Washington to vote on. Many sharp clashes occurred between dry advocates and members of the committee and opponents of the bill in the hearings. The hearings terminated on February 21, and on February 23 the committee began the consideration of the bill by sections. Your correspondent has been informed by several members of the committee that it will be almost an impossibility for the bill to be acted on this session, and it is very doubtful whether the committee will report it to the House in any shape. Even in the event of the House passing the bill it must go back to the Senate, and Senators James and Martine are authority for the statement that it will not be agreed to by that body, even if filibustering has to be resorted to.

On February 15th the Webb bill for national Prohibition was reported favorably to the House by Congressman Carlin, of Virginia, on behalf of the House committee on the judiciary. This bill was agreed on by the committee several weeks ago. Congressman Webb, of North Carolina, is the author of the bill and is the chairman of the committee on the judiciary. To be sent to the States for ratification it must pass both Senate and House by a two-thirds vote, and to be made part of the constitution it must be approved by three-fourths of the States. If thirteen States disapprove it the bill is lost.

The post office appropriation bill was the subject of a violent fight in the Senate on February 15th, when Senator Reed, of Missouri, offered an amendment which would make those States where alcoholic beverages may now be sold "bone-dry." This was a little more Prohibition than the Prohibitionists themselves wanted. They thought it was a glorious victory until they thought the matter over, then they awoke to the fact that the provision was so radical and drastic and made Prohibition so completely prohibitive that they feared it might force a change of sentiment even among the Prohibitionists in States where a measure of Prohibition is already in force. So Senator Kenyon, of Iowa, one of the driest of Prohibition senators, moved to strike the Reed amendment from the bill. He said he was not quite ready to go so far. Senator Jones

also opposed the amendment, and said if it stayed in the bill Kentucky, who soon votes on Prohibition, would never vote for Prohibition. It was probably the barest, baldest example of inconsistency on the part of the Prohibition enthusiasts ever taking place in Congress. But the Reed provision stayed in the bill, the vote on it being 38 to 28. Before the final action was taken, however, Senator Reed accepted a modification of the amendment which exempted wines intended for sacramental, scientific and medicinal purposes.

The Reed amendment having been disposed of, the Senate agreed to the original Jones amendment to close the mails to newspapers or other publications containing liquor advertisements in States which have laws against such advertising.

Congressman Walsh, of Massachusetts, brought in a minority report in the House on the proposed Webb constitutional amendment. The report protested against what was termed an effort to convert the constitutional into a mere criminal statute. Mr. Walsh said the Supreme Court decision upholding the Webb-Kenyon law makes it possible to secure national Prohibition through legislative enactment and Federal and State enforcement.

Foster Gilroy, general manager of the New York publication, "Puck," was a strong witness against the Bankhead bill before the House post-office committee. Among other things, he told the committee that tobacco, candy and popular novels will follow liquor on the blacklist of the Prohibitionists if the Bankhead bill is passed by Congress. Mr. Gilroy opposed the bill strongly, which is intended to exclude from the mails all liquor advertisements going to States where such advertising is barred by local laws.

On February 16th Congressman Randall, of California, the lone and only Prohibition party representative, drafted a bill giving the President or Secretary of War power to take over all breweries and distilleries and to regulate all saloons in time of war. He says he will introduce the measure at the first sign of real trouble with Germany. The real design of the bill is the conversion of all breweries and distilleries into munition plants. "Good way to put them out of business," says Randall. Either the President or the Secretary of War is given power to commandeer all breweries and distilleries in time of national emergency. Power also would be given either to regulate the hours of saloons or to close them altogether.

The Senate has adopted an amendment to the Porto Rican bill granting the island the privilege of having a referendum on the subject of whether they want Prohibition. Strange to say this is the privilege the District of Columbia citizens are fighting for and which Congress will bestow unwillingly if at all. Makes all the difference where you live, that's all; all right for the Porto Ricans, but all wrong for the residents of Washington.

The Alaska "bone-dry" Prohibition bill has been passed by both houses.

The Senate "bone dry" amendment to the Post Office Appropriation bill, the so-called Reed amendment, which

would exclude from prohibition territory all liquor advertising and likewise absolutely prohibit the interstate shipment of intoxicants to dry States, even though State laws may permit shipments in limited quantities, was accepted without modification, February 21st, in the House by a vote of 319 to 72.

Many of the liquor advocates, particularly those with brewers among their constituents, also expressed themselves as much pleased with the outcome. They are understood to have been in favor of the resolution, both because it would curtail the so-called mail order business carried on by houses dealing in spirituous liquors and because it might prevent States now "wet" from going "dry" and indefinitely postpone nation-wide prohibition. Distillers and whiskey dealers, on the other hand, were vigorously opposed to the proposal. There were, Representative Sherley of Kentucky said during debate, more than 228,000,000 gallons of "liquor" in bond in the United States, and 40 per cent. of such "liquor" heretofore had been sold in partially "dry" territory. Under the amendment all of this must be sold in absolutely "wet" territory, probably, he argued at a great loss. The States to which the amendment will apply are Alabama, Colorado, Georgia, Iowa, Maine, Mississippi, Nebraska, North Dakota, North Carolina, Oklahoma, South Carolina, South Dakota, Virginia, and West Virginia. Most of these have set no limitation on the amount of liquor that can be brought in for individual use, but in several cases the amendment would nullify directly State statutes expressly permitting importation of stipulated amounts per capita. In addition, Michigan, Montana, and Indiana have enacted Prohibition laws which will put them into the prohibition column, subject to the provision of the Reed Amendment.

On February 22nd Representative Moon of Tennessee, Chairman of the Post Office Committee, introduced a resolution in the House postponing the effective date of the "bone dry" prohibition amendment to the Post Office bill until October 1st next, to give the trade a chance to adjust its business.

The chances that the Capital may be kept "wet" are growing as the House District Committee has incorporated in the District Prohibition bill not only a referendum rider but also a "bone-dry" rider such as the House has agreed to in connection with the Post Office appropriation. The Senate will not agree to this, and wrangling may result until Congress adjourns.

LITTLE ROCK, ARK. Governor Brough has signed the ARKANSAS "bone-dry" Prohibition bill.

SACRAMENTO, CAL. By the Rominger bill, now before the California Legislature, the manufacture and sale in this State of beverages containing more than ten per cent. of alcohol are to be prohibited.

SACRAMENTO, CAL. By the Carr-Dennett County Option bill, now before the CALIFORNIA Legislature, it is intended to "dry" up many cities and towns in California which are now "wet" and which will remain "wet" if allowed to decide the question for themselves. The county unit would give districts outside cities and towns the right to decide the question of Prohibition for the people within such municipalities. The people of the country desiring to be "dry" could force that condition on the unwilling people of the cities in many other instances.

DENVER, COLO. The Legislature of COLORADO has memorialized Congress to make the District of Columbia "dry" and to submit a nation-wide Prohibition amendment to the Legislatures of the States.

The Anti-Saloon League and W. C. T. U. lobbies are at

loggerheads, the league favoring "bone-dryness" for Colorado, while the women temperance people ask the lawmakers not to prohibit "liquor" for personal use, but to drive out the saloons.

HARTFORD, CONN. Two bills affecting hotels have been submitted to the CONNECTICUT Legislature by counsel for the Connecticut Hotel Association, one of the bills to permit hotels to serve "liquor" with meals, and the other to define the status of hotels in this State.

DOVER, DEL. The DELAWARE Senate has passed the House "Anti Shipping Bill" prohibiting the shipping of intoxicants from a "wet" into a "dry" county of this State.

ATLANTA, GA. Governor Harris has announced that he will call an extra session of the GEORGIA Legislature to pass a "bone-dry" Prohibition bill as soon as Congress has passed the nation-wide Prohibition resolution.

SPRINGFIELD, ILL. The Senate of the ILLINOIS Legislature has passed a bill ordering a referendum on State-wide Prohibition in this State to be voted upon in 1918. The bill provides that "whoever shall, by himself or another, either as principal, clerk or servant, directly or indirectly, manufacture, keep for sale, sell or take an order for, any alcohol or intoxicating, distilled, spiritous, vinous, fermented, or malt liquor in any quantity whatsoever, within the limits of this State, shall, upon conviction thereof, be fined not less than \$50 nor more than \$200 and imprisoned in the county jail for not less than ten days nor more than thirty days for each offense. It is provided that nothing in the act shall be construed to forbid the manufacture or sale of alcohol or intoxicating, distilled, spiritous, vinous, fermented or malt liquor for medicinal, sacramental, chemical mechanical or manufacturing purposes only under such restrictions and regulations as may be provided by law."

Representative G. A. Dahlberg, of Chicago, has introduced a bill to prohibit brewers and distillers from owning any interest in saloons in this State.

Representative George R. Bruce, of Chicago, submitted a bill to prohibit the sale of beverages containing more than 10 per cent. of alcohol. It would stop the sale of whiskey, gin, brandy, rum—in fact, of all alcoholic stimulants but beer and light wines. The brewers are in favor of this bill.

On February 13th, the Senate, by a vote of 31 to 18, passed the Prohibition referendum bill. The "wets" are depending on the house to stop the bill, which provides that in November, 1918, there shall be a vote by the people on the issue of prohibiting the sale of alcoholic beverages in Illinois. Alcoholic liquor could be used for medicinal, sacramental, chemical, mechanical or manufacturing purposes only under the bill. If ratified by the voters the State would be "dry" Nov. 1, 1919.

INDIANAPOLIS, IND. Both houses of the INDIANA Legislature have passed a state-wide Prohibition bill, to become operative April 2nd, 1918. The bill prohibits the sale, manufacture, or distribution in any way of alcoholic beverages, and would permit druggists to sell only pure grain alcohol for medicinal purposes. It would give clergymen permission to use wine for sacramental purposes, but it also permits individuals to bring into the State and possess at one time one gallon of whiskey and twelve quarts of beer. It also allows the manufacture of wine, cider, etc., for personal use, but not for sale.

The House passed the suffrage bill February 22nd.

DES MOINES, IOWA. The IOWA Legislature has passed a joint resolution submitting to a referendum vote a constitutional amendment providing for State-wide Prohibition.

The Whittemore bills prohibiting railroads from trans-

porting liquor from "wet" States into Iowa and even hauling of liquor on streets and roads, also prohibiting advertising of liquor for sale in newspapers and periodicals entering Iowa, have been passed.

TOPEKA, KAN. The lower House of the KANSAS Legislature has passed the Montee bill prohibiting the shipment of "liquor" into this State. Senator Montee, requested by clergymen to permit the shipment of wine for sacramental purposes, has refused to accept an amendment to that effect, saying: "If wine and other liquors are a bad thing for average humanity they are not a necessity for religious worship. If they are a necessity for the perfection of the church, let's all have a little perfection. There's no reason in the world why a religious organization should use intoxicating liquor even in the smallest amount for religious worship."

Both houses have passed a "bone-dry" Prohibition bill, and the governor has signed it.

AUGUSTA, ME. The Legislature of MAINE is discussing a bill providing for an amendment to the Constitution of the State giving the Governor power to remove sheriffs without the aid of the Legislature. The amendment, if passed by a two-thirds of both houses, is to be submitted to the people at a special election on the second Monday in September. Other bills provide that county attorneys shall without delay proceed to final judgment and sentences in liquor cases; also to prohibit the shipment into Maine of intoxicating liquors for personal use.

A resolution providing for a referendum in September on the question of woman suffrage was passed February 21st by the lower House by a vote of 113 to 35, and the Senate passed it unanimously on February 22nd.

LANSING, MICH. Although the Anti-Saloon League dominates the MICHIGAN Legislature, its leaders refuse to make the State "bone-dry," fearing that, if "liquor" shipments were prohibited, the people would very soon repeal their action of last year when they voted for State-wide Prohibition.

ST. PAUL, MINN. Counsel for the trade have stated at committee hearings upon the Prohibition bills before the MINNESOTA Legislature that the trade would not oppose Prohibition provided the law were to permit the manufacture and sale in wholesale quantities of beer and light wines, permit transportation of liquors, postpone the effectiveness of prohibition until Dec. 31, 1920. The saloon men desperately opposed the proposition.

Representatives A. O. Gullickson and James Cumming introduced bills in the house which would prohibit a resident of "dry" territory from ordering liquor through a friend in wet territory. One of the bills also prohibits the signing of a fictitious name to receipts for liquor shipped in packages. Carriers that permit such signatures and persons who sign would be guilty of a misdemeanor, under the terms of the bill. The other measure provides that bottles containing liquor for sale or in storage shall be labeled with the amount of alcohol contained.

In both houses State-wide Prohibition, to become operative July 1st, 1920, has been passed upon favorably.

The House of Representatives passed the woman suffrage bill on February 21st.

CONCORD, N. H. The Senate of the NEW HAMPSHIRE Legislature has rejected woman suffrage.

A favorable committee report on a bill providing for woman suffrage was presented February 21st to the lower branch of the Legislature. The Senate recently defeated a similar measure.

SANTA FE, N. M. Governor De Baca has signed the bill

passed by both Houses of the New Mexico Legislature providing for the submission to a vote of the people of a Constitutional amendment for State-wide Prohibition. The measure provides that Prohibition in New Mexico shall go into effect October 1, 1918. The question is to be voted on next November.

TRENTON, N. J. One more Local Option bill has been submitted to the NEW JERSEY Senate by Senator Kates, of Camden. It provides that 15 per cent. of the voters in any municipality may force the rest to vote upon the "liquor" question. As the House has a "wet" majority, there is no fear that any nonsense bill will be passed this year.

By a vote of 13 to 7 the Senate passed the committee substitute for the Gaunt-Mackay local option bills on Monday, February 19th. The measure provides for a vote on the excise question in municipalities upon presentation of a petition signed by 20 per cent. of the legal voters. A majority would then determine whether the territory should be wet or dry.

Assemblyman Singer of Hudson County has introduced an "Open Sunday" bill, which would permit entertainment, liquor selling, etc., during certain restricted hours of the first day of the week. It is understood that the measure was prepared at the instigation of people dissatisfied with "blue law" conditions in Jersey City.

Senator Pierce of Union County has introduced a bill to strengthen the license act known as the Bishops law by putting wholesale dealers on the same basis with retailers. The measure limits wholesale licenses and imposes restraints as to distances they may exist from churches. Another provision is for a review by the courts of decisions of excise boards and city councils relating to liquor regulations. The bill also strikes from the Bishops law the exception relating to bowling alleys, Senator Pierce believing that this exception has been harmful to boys and young men who are attracted to the alleys. In the Assembly Iobst, the Methodist preacher, member from Hunterdon County, has offered a State-wide prohibition bill for the Woman's Christian Temperance Union, which would forbid the manufacture, sale, and importation of all liquor in New Jersey after July 1, 1918.

ALBANY, N. Y. As the State of NEW YORK needs more money than the present taxes will yield, there are all sorts of schemes discussed by legislators how to fill the State treasury. One proposition is to increase saloon license fees. At first it was thought that the tax could be put at such a figure that the State revenue from this source might not be materially reduced because of the wholesale reduction in the number of saloons, but in view of the fact that the State secures an income of about \$12,000,000 from this source the bare condition of the State treasury would seem to operate against its adoption.

In both houses woman suffrage amendments have been passed.

The Senate Judiciary Committee, February 20th, decided definitely that no referendum or proposition should be submitted to the people this Fall, except suffrage. The Assembly passed the suffrage bill on the same day by a vote of 125 to 10; and the Senate passed it on February 27th.

On February 23rd, Senator James A. Emerson, Chairman of the Committee on Taxation and Retrenchment, introduced a bill to drastically amend the Raines liquor law. Under its provisions the number of saloons in the State are to be reduced by more than 3,000, while at the same time the revenues from the liquor traffic are to be increased

about \$1,500,000. The cost of liquor tax certificates in the Boroughs of the Bronx and Queens are to be raised to a maximum of \$1,200, while liquor dealers in Richmond will be forced ultimately to pay \$1,000. In Manhattan and Kings no increase in general taxes is made, but the liquor traffic there will be liable to a volume tax of 5 per cent. imposed in cases where the gross receipts amount to more than fifteen times the liquor tax certificates, or \$22,500 a year. The bill provides that after October 1st next, in towns and cities having less than 55,000 inhabitants, the number of liquor licenses held shall not exceed one for every 500 residents. This includes every place where liquor is sold except social clubs holding a liquor license, which must have been organized before the present date. The law at present allows one liquor license to every 750 persons, but when it was passed, in 1910, the existing saloons were not included in its provisions. At present there are 2,763 saloons in towns and cities having a population under 55,000 or an average of 1 to 313 inhabitants. For cities of the first class the ratio of 1 to 500 is not made applicable. In Manhattan, for example, there is one liquor license to 510 persons. The ratio is less in Kings. The bill provides that in all communities with populations ranging from 7,500 to 50,000 the license fee shall be increased from \$636 maximum to \$900; with populations from 2,500 to 7,500 from \$575 to \$700; with populations between 1,000 and 2,500 from \$375 to \$600, and in all smaller places from \$187.50 to \$350. A provision in the bill prohibits the extension of the liquor traffic in residential districts of a city or in the neighborhood of an educational or charitable institution. Under its terms, the Common Council, or similar governing body of the municipality, together with the Board of Estimate, may set apart certain portions of the city, not exceeding, in the aggregate, one-half the territory of the city, within which no new licenses shall be granted.

March 14th has been set for a hearing upon the various Local Option and Prohibition bills, none of which is to pass the Senate; but it is expected that the liquor-tax upon saloons will be largely increased, if not doubled.

BISMARCK, N. D. A "bone dry" Prohibition bill has been introduced by Senator Heckte, of Ransom county, in the NORTH DAKOTA Senate. The bill makes it illegal to ship liquor into the State for personal use.

COLUMBUS, O. The Anti-Saloon League wants the OHIO Legislature to pass a State-wide Prohibition bill, which provides that "The sale and manufacture for sale of intoxicating liquors as a beverage are hereby prohibited. The General Assembly shall enact laws to make this provision effective, but nothing herein contained shall prevent the manufacture for sale or sale for medicinal, industrial, scientific, sacramental or other non-beverage purposes. The amendment shall take effect one year and three months after the date of the election, at which it is adopted."

To comply with the suggestions made by Governor Cox, a bill has been introduced to change the liquor license law so as to set forward the date of issuing licenses from November to May or June, preferably. The grants come too near the election, and there is the two-fold danger of intimidation being practiced on deserving licensees and political service influencing undeserving licensees. The arm of government which forgets in the excitement of a campaign the proprieties that should rule can hardly be regarded as a safe agency to enforce legislation and respect for law afterward."

Both houses have passed the Reynolds bill giving Ohio women the privilege of voting for President.

Governor Cox signed the woman suffrage bill on February

21st. The Anti-Suffragists have announced that they will call for a referendum this Fall to have the law repealed by the people of Ohio.

OKLAHOMA CITY, OKLA. Both houses of the Oklahoma Legislature have passed the Ferguson "bone-dry" Prohibition bill and the Governor has signed it.

SALEM, ORE. Both houses of the OREGON Legislature have passed a "bone-dry" Prohibition bill, and Governor Witheycombe has signed it.

Memorials urging Congress to submit national Prohibition to a popular vote and to bar liquor advertisements from the mails, have also been passed.

HARRISBURG, PA. Representative Vickerman has again introduced the Local Option bill in the lower house of the PENNSYLVANIA Legislature. It fixes the county as the unit for voting. An election is to be held when a number of qualified electors, equal to 25 per cent. of the number of votes cast at the last preceding election, shall present a petition to the court verified by the affidavits of three of the petitioners. The court is to order an election in not less than 300, nor more than 60 days from the date of the filing of the petition. Elections may be held every three years. The bill specifies that it shall not be considered as repealing any special or local prohibitory laws now on the statute books.

Representative Lex N. Mitchell of Punxsutawney proposes to make Pennsylvania "dry" by act of Assembly. The bill introduced by him would become effective next New Year's day. The section of the measure which would wipe out the trade entirely reads: "That after the first day of January, 1918, it shall be unlawful for any person to manufacture, sell, barter, exchange take an order for give away, furnish or otherwise dispose of intoxicating liquor or to keep an intoxicating liquor with intent to sell, barter, exchange, take an order for, give away, furnish or otherwise dispose of the same. Provided, however, that druggists may sell intoxicating liquor in the manner and for the purposes allowed by law and provided further that druggists may sell wine for sacramental purposes to the authorized officer or clergyman of any regular church or religious organization, upon the written order of such officer or clergyman."

The State Department of Agriculture has had bills prepared to prevent the manufacture and sale of adulterated and misbranded intoxicating liquors.

NASHVILLE, TENN. Governor Rye has signed the TENNESSEE "bone dry" bill, which puts an end to all shipments of liquor as a beverage into the State after March 1st.

In the Senate, woman suffrage has been defeated.

The annual deficit in the Tennessee State treasury now amounts to over \$1,100,000.

AUSTIN, TEX. The house of the TEXAS Legislature has passed a resolution calling for an election on the fourth Saturday in July, 1917, setting March 1, 1918, as the date upon which it becomes illegal to manufacture, barter, sell or trade liquor in Texas except for sacramental, scientific or medicinal purposes. An amendment by Tillotson calling for an election on the question at the next general election to become effective January 1st, 1921, was voted down.

SALT LAKE CITY, UTAH. Both houses of the UTAH Legislature have passed the State-wide Prohibition bill, to become effective August 1st, 1917, and the Governor has signed it.

MONTPELIER, VT. The VERMONT House of Representatives on February 21st defeated the bill providing for woman suffrage by a vote of 114 to 111.

OLYMPIA, WASH. Governor Lister has signed the

WASHINGTON State "bone-dry" Prohibition bill which is to become operative 90 days after the Legislature's adjournment. Under this bill the possession of intoxicants is forbidden, except to clergymen for sacramental purposes and to druggists and chemists for industrial purposes.

CHARLESTON, W. VA. A bill aimed to stop the importation of intoxicating liquors into the State has been introduced in the WEST VIRGINIA Senate and House of Delegates. The bill would make it a misdemeanor for any person to bring into the State more than one quart of intoxicating liquor during a period of thirty days. Common carriers knowingly permitting a violation of the act would be liable to a fine of not less than \$2.00. It has been passed by the Senate.

Senator Coalter introduced a bill to amend the Prohibition law by allowing limited shipments of liquors for personal use which he says is necessary to stop bootlegging.

The "one quart" bill was passed in both houses. Before the vote was taken Senator Rosenbloom said: "Personally, I do not believe in Prohibition, but if the Senate will strike from this bill the provision allowing the importation of one quart of liquor during a period of thirty days there is an opportunity to make Prohibition prohibit, and it will give the people of West Virginia an opportunity to say whether or not they favor Prohibition after it has actually been tested. Under the present conditions in West Virginia, Prohibition has been a dismal failure. After two years of experience we can say that the manifold blessings we were promised have not come, but under the recent decision of the United States Supreme Court prohibition can be enforced. Let us give prohibition an honest trial."

Delegate Luther Jones of Boone county has introduced a bill in the House of Delegates which not only would make it an offense to smoke cigarettes, but would make it a misdemeanor to have any in one's possession.

MADISON, WIS. At the request of the Milwaukee Brewers' Association Senator Reinholdt has introduced the bill which provides for the compensation of persons who suffer loss by reason of the creation of no license territory under local option laws or by reason of loss or damage which may be sustained under any other law of the State creating such territory. Following are the provisions of the bill: "If any town, village or city or any other political subdivision of this State shall hereafter vote under the provisions of the local option laws, inclusive of the statutes of this State, for no license, or if under said sections or the provisions of any other act the sale or manufacture for sale at wholesale or retail of strong spirituous, vinous, malt or intoxicating liquors shall be prohibited, any person or corporation who by reason thereof shall be deprived of any property, real, personal, or mixed, or the use of any such property for the income therefrom, or if the value or income thereof shall be in any manner diminished, he shall be entitled to full compensation therefore, and for all such damage or loss as he shall sustain by reason thereof." The bill provides also how action shall be brought to compel payment under the law and further that if the legislature enacts any law prohibiting the manufacture or sale of spirituous or malt liquors, any person or corporation damaged thereby or deprived of property or use of property shall be entitled to full compensation therefor.

CHEYENNE, WYO. The WYOMING Senate has passed a bill submitting Prohibition as a constitutional amendment, to be voted on in 1918.

COLUMBUS, S. C. February 15th the SOUTH CAROLINA House of Representatives passed a bill prohibiting liquor advertisements in newspapers and periodicals or in any

other form in this State. The bill already has passed the Senate.

Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc. Action by Civic Bodies and Others For or Against Prohibition.

CALIFORNIA. In Los Angeles two movements are on foot to alter the present methods of distribution. One is to prohibit the sale of liquors containing over 21 per cent. of alcohol, and another is to wipe out the saloon entirely. The brewers, wine men and wholesale "liquor" dealers have combined in a movement to wipe out the saloon.

The trustees of the town of San Bernardino have adopted an anti-saloon ordinance, which is to be submitted to a referendum vote before long.

Attempts are being made to reduce the number of saloons in Eureka, Redding, Napa, Richmond and a number of other cities where there are too many saloons in proportion to the population.

GEORGIA. Representative progressive politicians recently held a conference in Atlanta agreeing to work for nationwide Prohibition.

ILLINOIS. The "drys" of Springfield have filed a petition bearing 6,917 signatures, 817 more than required, to make that city "dry" at the local option election to be held April 3rd.

INDIANA. Many of the highly moral politicians of Indiana who, but a few days ago, voted to make this State "dry" next year, apparently owe their election to fraud and corruption, as demonstrated by the fact that a Federal grand jury in Indianapolis has indicted 166 Democrats and Republicans of four big cities for conspiracy and glaring election frauds.

IOWA. Until the Iowa supreme court rules on District Judge Utterback's decision, holding private liquor shipments illegal, the railroads in Iowa will continue carrying intoxicants for private consumption. This was decided at a conference between Attorney General Havner and representatives of the roads.

KANSAS. The Salina "Union" recently said: "This State is waiting to hear something about the enforcement of the prohibitory law in those sections of Kansas where beer and whiskey are still regarded as necessities of life. Governor Capper has used the prohibitory law as a political argument and asset for a good many years. It is time for him to realize that the people of Kansas are in favor of a dry State, not in sections, but all over the State."

LOUISIANA. Since February 4th the police of New Orleans are enforcing the Sunday closing law.

MAINE. While the State authorities of Maine are wrangling over the question whether or not to enforce prohibition by applying the Webb-Kenyon law, the bootleggers throughout this State are doing a rushing business.

MASSACHUSETTS. The Brewers' Association of Massachusetts lately published a newspaper advertisement headed in large letters, "The Blue Peril." This, the article sets forth, was the peril of the blue laws. Prohibition laws, the advertisement urges, are a danger to good citizenship. "Men under such laws cease to exercise freedom of will; lose their sense of responsibility, and become no longer independent, responsible, self-controlling men. And without such men, what have we?"

After one year of drought in the clubs and hotels of Lenox the town has voted for license by a majority of 75. The "dry" year was disastrous to business, many old patrons of hotels giving up their reservations for last season on learning that the town would be dry, while a large Sunday luncheon trade was lost entirely. This year the voters were on hand to make the town wet. Men came to Lenox

from New York, Boston and other cities and won a victory for license by a vote of 288 to 213. Through twenty-five years before 1916, Lenox was an open town.

MICHIGAN. The Liberals of Michigan are waking up. They have started a determined campaign to reclaim the State from last year's disaster and they expect to compel the reactionaries to submit another referendum.

MINNESOTA. The Supreme Court of Minnesota, in revising a case where a man was convicted of purchasing liquors in Thief River Falls, a "dry" town, has held that the purpose of the local option law follows the general policy of the liquor statutes, making the seller a criminal and not the buyer.

MISSOURI. The Supreme Court of Missouri has ruled that railroads and other common carriers may not be prohibited from receiving or handling shipments of liquor to persons in "dry" territory in this State. This decision renders null and void the other injunctions pending in the Circuit Court in "dry" counties, as the court holds that the Circuit judges are without jurisdiction to issue these injunctions.

Judge Bulger, of the County Court in Kansas City, has ordered brewers and retailers to stop selling to cabarets and chop suey restaurants, saying: "I shall hunt up your best sellers of beer, and I'll revoke their licenses. And just don't forget that you wouldn't any more think of disobeying the orders of the police board than of flying, but when this court issues an order some of you act as though you believed we were a bunch of suckers around here. That's an idea you want to get over in a hurry. This court isn't out to persecute anybody, but it wants to see the liquor laws enforced and it's going to see that they are. This court doesn't believe in selling liquor to cabarets and we've been trying to stop it. Somehow, they keep getting the stuff. Now, if we catch you selling it to them, we'll consider it a distinctly unfriendly act."

NEW JERSEY. Declaring the plan suggested by G. Bart-ram Woodruff, president of the Elizabeth Board of Excise, to wipe out 72 saloons in that city or raise the license fee to \$1,000, to be "fanatical," Mayor Mravlag has publicly said: "I look with dismay upon the proposal of the president of the Excise Board, realizing that since the time of the late Comptroller A. B. Carlton and the late Mayor John C. Rankin the income from license money has been devoted to help liquidate the city's adjustment debt. Are we, for no other reason than the whim of the Excise Board president, to deprive the city of this income, and cause an addition of from ten to fifteen points in the general tax rate? At a time like this it is for the solid business element to say: 'Hold on, don't go too fast.'" Mayor Mravlag also took occasion to comment on the moral conditions of Elizabeth. "I don't believe that there is a city in New Jersey that is any cleaner," remarked the Mayor.

In Newark 132 applications for all-night licenses are being held up since the local excise board decided that saloons are to close at 1 A. M.

At a large manufacturing plant on the Hackensack meadows, near Kearney, the employes threatened to stop work unless they could obtain their beer and 14 of them actually did go on strike. The concern faced with the alternatives of being obliged to move or obtaining a beer supply, then appealed to the town authorities and were granted a license to sell beer to their workmen.

Sarantis Peters was recently acquitted in the Salem County Court of a charge of selling lager beer illegally at Carney's Point, but immediately was held in \$1,000 bail for the April term by Judge Waddington on a charge of selling "near" beer.

The antis of Asbury Park have appointed a committee of fifty which is to make the resort "bone-dry." In Bergen County about 60 saloon men and hotel proprietors have been indicted for violation of the excise laws.

NEW YORK. The Anti-Saloon League, in fact, all who favor Prohibition where it affects the sale of wines, were censured at the fourteenth annual dinner of the American Wine Growers' Association at the Waldorf, New York City, on the evening of February 15th. At a meeting of the association held in the morning a resolution was adopted to protect the sale of wines by table d'hôte restaurants and small wine dealers from heavy taxation by licenses. "The time has come," Hiram Dewey, president of the association, asserted at the dinner, "when men in this industry, if they would protect themselves from the pernicious attacks of the Anti-Saloon League must employ an effective means to enlighten public opinion in our regard. The American Wine Growers' Association is a strong believer in the spirit of American fair play. But we must expose the hypocrisy now arrayed against us, and the only means which seems open to us is an appeal to the public mind. If there are evils existing in our business we will take every method of eradicating them, thereby demonstrating that we are acting in good faith. If the public will stop to consider that the Anti-Saloon League is made up of men who are compensated for the work of agitating the liquor question, it will easily understand the motive behind the whole propaganda. I, for one, am certain that the American public is not so immoral as to desire to lay waste \$250,000,000 worth of property and to throw out of employment 1,250,000 persons now engaged in the preparation of wines."

Lawrence County voted against saloon licenses, February 14th.

OHIO. Additional local option elections have resulted in defeating the "drys" at Cuyahoga Falls, Summit County, and Union City, Darke County.

At the annual convention of the Ohio Liquor League, held in Cincinnati, resolutions were adopted, declaring, in part:

"Whereas, it has been the often repeated charge of self-appointed agitators, who now are engaged in denouncing brewers, distillers and liquor dealers, but who some day and even now are directing their unwarranted attacks against tobacco, motion-picture productions and the like, that these interests are undermining the character of national, State and local governments, we beg to submit the following:

"While these agitators contribute substantially nothing to the maintenance of the governmental units referred to, the interests they denounce pay one-third of the income of the national government and millions of dollars into the treasuries of the State and local governments.

"While they are engaged in levying tribute upon the churches and philanthropic organizations to pay their salaries and expenses, those they denounce are contributing freely of their means to the construction of churches and the support of charities.

"While they are urging the passage of laws repugnant to the average citizen, those they oppose daily are proving their good citizenship by compliance with the laws and are seeking the enactment of laws that meet with public approval.

"While they are trying to destroy property without compensation or regard for those who may be thrown out of work, those they oppose are investing their capital in the

upbuilding of communities and are giving employment to thousands of workmen.

"While they are denouncing liquor interests for participation in politics in which they themselves always are engaged, they constantly are striving to force the liquor interests into politics by promoting candidates with whom they have secret or open agreements to support their policies.

"While they are seeking to throw the burdens of taxation now borne by the brewers, distillers and liquor dealers upon the general taxpayers, they show no willingness to assume any of the burdens themselves.

"Therefore, be it resolved, That we submit these facts to the people of Ohio, together with the additional one that a successful trial for three years had been had of the license law adopted by the people, and urge them to oppose State and national prohibition, for it is the people alone who can determine whether they desire the open, regulated, taxpaying, licensed saloons, limited in number, to the illegal sale of liquors by those contributing nothing to the support of the government and in no way relieving the taxation burdens of the farmers, laboring men, merchants and manufacturers."

PENNSYLVANIA. Equity proceedings having been instituted by District Attorney Isaac W. Baum at Washington, Pa., against five breweries, three wholesale liquor dealers and their agents to prevent them from doing business in Washington County, judge McIlvaine has issued injunctions against the defendants, whereupon the Pittsburgh and Independent Brewing Cos., Pittsburgh, declared through their counsel that they would cease selling through agents and take out licenses as required by law. The breweries at Pottsville, Smithton, and other places have also been granted licenses.

Judge Singleton Bell, of Clearfield, has issued an order that in the future no hotel will be permitted to sell intoxicating liquors in bottles, and no treating will be permitted.

Judge Charles Corbett has refused all applications for liquor licenses in Jefferson county. This is the second successive year that all licenses were refused in that county.

Rev. A. S. Hunter, of Beaver, who is opposed to local option, has published a letter in which he says: "It is rather doubtful if local option would put above 10 or 12 per cent. of the Pennsylvania saloons out of business. Moreover, local option would not stop a brewery or distillery in Pennsylvania. It would not close the booze clubs, eliminate the speak-easies, nor prevent the beer trucks from 'delivering the goods' wherever wanted. Beaver county is semi-dry, and is a living witness of all the above. Lawrence and other counties which are or have been 'dry,' as local option would make them, prove the same."

Vigorously continuing its educational campaign, the Pennsylvania State Brewers' Association, in its cleverly edited "Bulletin" published the following articles last month: "Why 'Dry' Laws Are Adopted With a Loophole"; "Using Church Title to Mislead"; "One 'Dry' Factory's Financiering"; "No Sign of Nation Going 'Dry'; "Shows the Farce of 'Dry' Law"; "Countess Hits 'Dry' Hypocrisy"; "Making Washington Part 'Dry.'"

VIRGINIA. Judge D. C. Richardson, of the Hustings Court, at Richmond, has established a precedent in connection with the Prohibition law of this State, when he instructed a jury that an interstate passenger may have liquor in his possession in passing through Virginia, but the burden is upon him to prove that it was not brought into the State with a view to violating the Prohibition act.

WASHINGTON. Mayor Hiram C. Gill, Chief of Police

Charles L. Beckingham and former Sheriff Robert T. Hodge, all of Seattle, have been indicted by a Federal Grand Jury, charged with violation of the Federal liquor laws. Similar indictments were also returned against four city detectives and a former policeman. The defendants are charged with plotting to ship quantities of whiskey into Seattle. Mayor Gill is also accused of having accepted a \$4,000 bribe from one Logan Billingsley. Several instances where Chief Beckingham took bribes from Billingsley and in which, it is charged, he aided them to steal liquor consigned to other persons, are alleged by the Federal officers.

WISCONSIN. The brewers of Wisconsin are conducting an advertising campaign to create public sentiment in favor of compensating those engaged in the liquor traffic for the loss they would sustain in case the state went "dry." There is a feeling that the time is not far distant when such a condition will prevail throughout the country and men engaged in this line realize it as much as anyone, and are making arrangements accordingly.

CANADA. The Prohibitionists of Alberta have asked the Dominion Parliament to pass a war measure prohibiting the manufacture or importation of liquor, with a referendum after the war to make Prohibition permanent.

ARGENTINE REPUBLIC. Prohibition agitation having been revived in Buenos Aires the police of that city recently made an attempt to enforce a dead letter law against the sale of certain drinks on Sundays. The result was that the public became enraged and the police gave up trying to make the people obey the obsolete statute. Only about 5 per cent. of the drinking places obeyed the order of the police.

"THERE IS EVIL IN ALL THINGS. Granting for the sake of argument that abuses do exist in the liquor business, what lines of endeavor, we ask, no matter how praiseworthy or honorable in itself, is free from some abuse; and, as long as humanity is constituted as it is, abuses will continue to exist, if not to multiply."—(Chicago "Interurban Magazine.")

THROUGH MORAL SUASION. "Temperance in the use of alcoholic liquors has come about very largely through moral suasion directed to the person who drinks. Much has been done by this method. It has been the appeal to the intelligence of the individual that has worked and accomplished so great progress in temperance."—(Congressman L. C. Dyer.)

CONDITIONS IN TENNESSEE. At a Baptist convention recently held in Morristown, Tenn., the Rev. A. J. Carmack, chairman of the convention's temperance committee, said: "From the viewpoint of our own beloved State, prohibition presents a complicated and very unsatisfactory situation. The flagrantly open saloon is gone by reason of our statutes, but liquor is not gone, nor does temperance reign. After all, temperance has not made any marked progress. We submit that real temperance cannot be legislated into any people."

QUITE SIMPLE: ABOLISH THE DESIRE! "All that is necessary in order to establish a perpetual area of drought is that Congress should enact a law providing that the desire for liquor and the stimulation or relaxation that results from its use shall be forever abolished. This would immediately destroy the entire liquor traffic by cutting off the demand and would so change human nature that the coarse persons who now guzzle beer would find their highest enjoyment in foaming beakers of sarsaparilla."—"H. L." in N. Y. "Evening Sun.")

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, Room 1313, People
Life Building, Randolph and 5th Avenue,

CHICAGO, February 26th, 1917.

That the lower house of the Illinois Legislature, knuckling down to the dictates of back-country parsons and their political tools, has passed a Prohibition bill, is not taken seriously by the trade in this city. The Chicago brewers do not believe that the State of Illinois can be made "dry" for many years to come; but they are convinced that a crisis is near and they are determined to turn the legislative chariot into the right direction. They will not oppose the Bruce bill by which beverages are to be forbidden which contain more than 10 per cent. of alcohol. They have also decided to assist in driving out the undesirables among the retail trade. There is no need for 7,000 saloons in this city. One half the number would suffice. Therefore, the brewers are ready to support any legislative or administrative measure by which most of the small saloons, for which actually a necessity does not exist, might be eliminated. The Chicago brewers are ready to cut loose from the whiskey traffic. They do not say so openly, but it seems to be understood that they are no longer willing to sacrifice their own interests for the benefit of the distilleries and the wholesale liquor merchants. An investigation is now being made to see if the city council has sufficient power to order the changes which are to place the brewing industry in a position where it will no longer be made the catspaw of those whose doings are practically responsible for the impetus the parson-led Prohibition movement has lately gained.

There is another proposition which, however, is not likely to make much headway for some time to come, although it is quite rational and most plausible, and that is to cut Chicago away from the rest of the State and create the city a separate State. The first step toward this very desirable goal was taken when Senator John T. Denvir, of Chicago, introduced in the Illinois Senate a joint resolution to memorialize Congress to create the State of Northern Illinois, consisting of Cook county, the rest of the State to be known as Southern Illinois.

The trades' campaign of education and enlightenment, in the meantime, proceeds with renewed vigor. Entire pages of the daily newspapers are occupied by advertisements arguing for the interests of the entire people whose liberties and joys of life are threatened by Prohibition and the Manufacturers and Dealers' Association is continuing to flood the State with enlightening literature, among other things an interrogation blank to be filled out and the following questions to be answered and returned to the Association's headquarters, 36 West Randolph Street: "Do you want Prohibition for yourself? Do you want Prohibition to curb your own appetite or temptations? Do you want Prohibition for the other fellow? Can you morally or legally speak of the other fellow? Do you want the other fellow to speak for you?"

The Sunday closing question is becoming more and more

tangled. Chief Schuettler and Corporation Counsel Ertelson have had several conferences to straighten out the tangled which is being made worse by contradictory rulings of several judges and conflicting orders on the part of police captains, the latter having announced that all so-called "wet" restaurants must be closed on Sundays, while Municipal judges Barasa and Mahoney have ruled that they may keep open, an opinion which also has been sustained by Superior Court Judge Foell, who says that the city cannot compel "wet" restaurants to close at given hours. Another judge, Swanson, of the Municipal Court, has ruled that the presence of patrons in a café after 1 A. M. on Sunday is not proof of the law being violated. The Corporation Counsel holds that "wet" restaurants may remain open Sunday if the dining rooms are securely shut off from the barroom and no liquor is sold, and that they must close promptly at 1 every night and disperse their patrons at that hour.

One of the consequences of the tangle has been that a saloonkeeper named Henry W. Boener, of East Austin Avenue, has applied to the Supreme Court for an injunction to prohibit the Mayor from enforcing the Sunday closing law.

Members of the city council sought to remedy the situation as soon as the "wet" restaurants began to remain open all night. It was pointed out there was danger of closing the big down-town restaurants on Sunday if an amendment were passed to the dramshop ordinances. Therefore a special ordinance referring only to "wet" restaurants was prepared and passed.

B. McNichol, a saloonman on South Halsted street, was recently on trial before Judge Selck for selling to a habitual drunkard. He was convicted of selling two pints of whiskey and some beer on Sunday. The judge fined him \$100 and thirty days in jail.

The Peter Schoenhofen Brewing Co. recently made an important purchase of real estate. It covers the property in South Canal street, eighty-eight feet west of West Sixteenth street, adjoining the company's brewery. The lot is 154x101½ feet, east front, and it is improved with a four story building now occupied by the Marquette Piano company. The property was purchased from the estate of H. B. Peabody for a stated consideration of \$90,000. On the expiration of the piano company's lease the Schoenhofen company will occupy the building for warehouse purposes.

THE CHAMBER OF COMMERCE OF THE UNITED STATES has elected the following officers for the current fiscal year: President, R. Goodwyn Rhett, Charleston, S. C.; Honorary Vice-Presidents, Harry A. Wheeler, Chicago; John H. Fahey, Boston, Mass.; A. B. Farquahar, York, Pa.; Charles Nagel, St. Louis; Vice-Presidents, Willis H. Booth, Los Angeles, Cal.; J. H. Defrees, Chicago; Samuel McRoberts, New York; Treasurer, John Joy Edson, Washington, D. C.; General Secretary, Elliot H. Goodwin, Washington, D. C.; Chairman of the Executive Committee, J. H. Defrees, Chicago.

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, February 18th, 1917.

The first part of the Legislative Session in Sacramento has seen the introduction of a very large number of bills which vitally affect the liquor industry of California. The two most dangerous bills are the County Unit Bill and the Rominger Bill.

The County Unit Bill has the solid backing of the "Drys" and would certainly do the liquor interests almost as much harm as prohibition if passed. The bill provides for a change in the present voting unit from a city, town or supervisorial district to the entire county, so that an entire county may be voted dry at once. If this bill becomes a law, a very large number of important licensed cities and towns would at once be made dry. Among these would be included Fresno, Bakersfield, San Diego, Imperial, San Bernardino, Needles, Oxnard, Anaheim and a large number of smaller places. This amendment also makes some changes in other features of the Local Option act designed to make it easier to convict on charges of violation. For instance the possession of alcoholic liquors in a dry district or city is not specifically prohibited, but the amendment would make possession of such liquors in any public resort prima facie evidence of guilt.

The second dangerous measure—by dangerous is meant they have a chance of passing—is the much discussed Rominger Bill. This bill is also known as the Hearst Bill, as it is conceded that it was introduced at the suggestion of William R. Hearst. In its present form, the bill merely prohibits the manufacture or sale of any alcoholic liquor containing more than ten per cent. of alcohol. As very few California wines contain less than fourteen per cent. of alcohol the bill if enacted in its present form would have the result of limiting all drinking to beers and imported light wines.

The Rominger Bill has aroused opposition both from the Prohibitionist and the wine interests. The wine people contended that the percentage of alcohol should be raised while the Prohibitionists opposed it, because it allows the continuation of the saloons. As a result it is understood that the bill will be amended so that its own father won't know it. This amendment will provide for an alcoholic content of 21 per cent. and will also carry a provision absolutely prohibiting all saloons. The sale of mild beverages—wine and beer—will be limited to family liquor stores. Under this form the bill it is understood will receive the support of the "Drys."

Assemblyman Ashley has introduced a bill that provides for a very thorough and drastic regulation of the retail sale of liquor. The most important feature of the bill limits the saloon licenses in each city to one saloon or bar-room license to every 1000 population, with one license for cities containing 1000 population. This section would not affect restaurants, cafés, hotels and clubs. A tabulation of the number of saloons and population of the principal licensed cities of California shows that this provision would eliminate more than a thousand saloons outside San Francisco and practically 1000 in the city itself.

An interesting section of this bill provides that no firm owning or conducting a winery or brewery or wholesale liquor store shall own or be connected with any retail establishment or go on the bond of any establishment of that sort.

These three bills, although not the only ones by any means, are the ones that are keeping the interests on the

uneasy seat. The Legislature re-convenes February 26, and it is not expected that it will adjourn without taking some kind of a whack at the liquor interests. However, nothing very drastic is expected as there is a comfortable wet majority in the Assembly.

The Knights of the Royal Arch, the saloonmen's association, held a special session last week and changed their name to the California Wet Federation, as they decided that their old name was too unpopular with the public. The new organization has the same officers as the old and will follow along in the same lines.

The "bone-dry" law passed by Oregon and the possibility, or rather probability, that Washington will pass a similar law is affecting the mail-order houses here. Some of them are going out of business at once while others will hang on for a while yet. None of them have enough local business to pay expenses. Blumauer-Hoch, formerly the biggest wholesale house in Oregon and recently a mail-order house here, have secured the "Bevo" account for Oregon.

The California Brewing Association, a cooperative association recently formed of five breweries, have elected officers and will establish their office at the National Brewery, 766 Fulton street. The new officers of the corporation are J. P. Rettenmayer, president and general manager, H. Thode, C. O. Swanberg, and A. E. Buttner, vice-presidents, and C. J. Josue, secretary-treasurer. The directors are P. Schuster, H. Wreden, W. F. Adams and Fred Hansen. The heads of the different departments have not yet been appointed.

W. A. Remensperger and wife, of the Enterprise Brewing Company, are spending a few weeks in Honolulu on a vacation trip.

Joseph Grace, of Grace Brothers Brewing Company, San Jose, is also vacationing in Honolulu.

Hops continue to be one article that cannot be blamed for the high cost of living, they continue to be offered for about eleven cents. Many of the hop growers this year are planting potatoes in their hop fields.

"Regulating personal conduct and liberty by law is a tricky business. Just when the enthusiastic regulator is sure he has everybody in hand he is liable to go too far and startle the regulatees into sudden resistance and reaction"—("New York "Evening World.")

COLORADO HICCUPS. "Every now and then, in the cool of the day, you see a small group of the native Colorado yeomanry going home, stepping high upon the heaving and tossing sidewalk, and pausing occasionally, with arms intertwined and heads inclined toward a common center, to give three rousing hiccups for the resident constabulary. It is the close of a perf-hic day."—(Irvin S. Cobb.)

LITTLE BETTER THAN A FARCE. "If there is one fact demonstrated by experience it is that sumptuary legislation cannot be effective unless it has behind it the majority sentiment of a community. How, it is asked, can anybody expect a drastic prohibition law to be enforced in cities where it is found impossible to enforce the restrictive legislation now on the statute books? In many a city and State officially for prohibition the law is little better than a farce. Maine, the most ancient of all experiments, has become a byword for law-breaking. So-called prohibition laws in some of the Southern States are laws to promote the purchase of whiskey by the bottle instead of by the drink, and its consumption by the bottle instead of by the drink."—(New York "Herald.")

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., February 9th, 1917.

State purchase rumors are about once more, it being asserted that the government has elaborated a scheme which is to be made public very soon. So far nothing has been done—absolutely nothing. Sir Thomas Whittaker, M. P., is continuing to write in favor of State purchase, pointing out that if nationalisation of the liquor trade were carried out now, the financial scheme drawn up by the Committee which reported in April, 1915, would need some modification. The lapse of a period of nearly two years' war has lowered the value of Government securities. It has also, however, lowered the value of brewery shares and debentures; and if it be argued that these would appreciate again after the war, the same is true of Government securities. The fairest course, as he suggests, would be on the one hand to take the value of Government securities as it stands now, not as it stood in April, 1915; and on the other hand to measure it not against the values of 1916. Each class of interested persons—shareholders, preference shareholders, and debenture holders—should be compensated separately on this basis. It might indeed be asked why during war, when so many trades regarded as "unessential" are being shut down without compensation, this particular "unessential" trade should be compensated at all. The answer in England and Wales would seem to be, that the Balfour Licensing Act has definitely recognized liquor sellers as having a public vested interest; while as regards Scotland, to which that Act does not apply, the arguments which were adduced by the Unionist party for England when the Act was passed, would presumably be adduced again in the parallel circumstances, and would have to be conceded if nationalisation were to proceed by consent.

If the government really wants to purchase all breweries and distilleries, many owners will probably be agreeable, provided, however, dispossessed licensees and all employes of the trade who would thus be deprived of their positions and possessions be also compensated. Let the government state its terms and then the matter might be discussed in one definite and practical way.

The utter meanness and wickedness of the Prohibitionists may be illustrated by an article entitled "Drink and the War," recently published by Sir Harry Johnston, in which he said he believed it to be a fact, in regard to the operations at the front, that repeatedly some forward movement, some splendid enterprise which might have culminated in a colossal victory, had been marred of its full effect by the rum or the beer served out to the soldiers as rations. To comment upon contemptible slanders such as these would do too much to Sir Johnston and the rest of the Prohibition outfit, which has also recently been joined by the Clyde Shipbuilders' Federation, who, not satisfied with the work their mechanics are doing, are now loudly yelling for nation-wide Prohibition.

There is, says the "Civilian," one sane feature in the Government attitude towards agriculture: in spite of the clamor of the Prohibitionists, there is to be no interference with the growth of barley. Indeed, were barley omitted the land must stand fallow, and thereby entail grievous losses. As matters stand to-day, it is subject for serious regret that the 1902 corn duties were not allowed to remain; they offered a slight inducement to plough pasture, and they were worth 2½ millions to the Customs revenue.

The report of the Government Chemist (Mr. James J. Dobbie) upon the work of the Government Laboratory for the year ended March 31st last, states that the number of

samples examined in the course of the year was 239,706 as compared with 230,404 in the previous year, exclusive of those dealt with at the Chemical Stations, where the total was 144,186, compared with 134,640. The chemical work of, among other Departments, the Central Control Board, is now performed wholly or in part in the Government Laboratory. The total number of samples examined for the year in connection with the beer duty was 44,551. The number of samples examined was 316; of these 219 were samples of malt, corn, brewing sugars, and exhausted grains, and 97 were samples of yeast foods and miscellaneous substances used or proposed to be used in the preparation of beer. Three hundred and fifty samples of finished beer from brewers' premises were examined for saccharin, saponin, and other prohibited ingredients, but except occasional traces of arsenic, as mentioned below, nothing of a deleterious or illegal character was found to be present. The number of samples examined was 11,198, of which 8,469 were examined in the Government Laboratory and 2,729 at the provincial Chemical Stations situated at the principal ports and brewing centres. The original gravity was declared by the brewers at less than the true gravity in 2,931 cases. For the purpose of checking dilution and adulteration 4,964 samples of beer were taken from the premises of publicans and other retailers. The beer was found to have been diluted in 152 cases. The percentage of diluted samples (3.0) is slightly lower than that of last year, but some of the samples were diluted to the extent of 10 to 14 gallons of water in the barrel of 36 gallons. For comparison with the samples where dilution was suspected 264 samples of the beer as it left the breweries were examined, together with 55 others obtained for the purposes of a special investigation. The percentage of alcohol was determined in 191 samples. In 144 cases the alcohol did not exceed 2 per cent. of proof spirit; 31 samples contained between 2 and 3 per cent.; 7 between 3 and 4 per cent.; and 5 from 4 to 7 per cent. of proof spirit. Two imported samples were found to be non-dutiable.

The London magistrates have decided to impose one-half the maximum compensation levy in London, and a special committee was appointed to interview the Central Liquor Control Board to ascertain their policy in regard to the future administration of the licensing laws in the Administrative County of London and to take any necessary action thereon with a view to cooperation.

CABLED FROM LONDON

In order to reduce the consumption of foodstuffs by breweries, Baron Devonport, the Food Controller, has decided that the quantity of beer to be brewed for the year beginning in April shall be restricted to 70 per cent. of the output of the previous year. This means that only 18,000,000 barrels of beer will be produced, about half the output of the year preceding the war. Baron Devonport in explaining the object of his order said the restriction must not be deemed a measure of temperance or of social reform.

"The fact is," the Food Controller continued, "the barley, sugar and other ingredients used in brewing are required for food. In fact, it is really a question of bread versus beer."

The order of the Food Controller will withhold from brewers 286,000 tons of barley and 36,000 tons of sugar which otherwise would be used in making beer. The order will also effect a large saving in mercantile tonnage and land transport and increase the available supply of labor for industries of national importance.

The measure has received the approval of the War Cabinet, which has decided that corresponding restrictions shall be placed on the release of wines and spirits from bond.

It is understood that restrictions on the output on alcoholic liquors will, in the opinion of the authorities, obviate the necessity of recourse either to State purchase or Prohibition, at any rate in the near future. Still further restrictions in the same direction may be made during the progress of the war. While there is a very strong agitation among the temperance advocates for Prohibition or State purchase, the brewing interests are equally strong and respect for their susceptibilities is seen in Baron Devonport's repudiation of the motive for his order being temperance or social reform.

FEBRUARY 23RD. Premier Lloyd George has announced that "brewing will be limited to 10,000,000 barrels a year, thus affecting a saving of 600,000 tons of foodstuffs now used in that industry. Corresponding restrictions will be made as to distillation of spirits, in order that the public trade may not be driven from beer to spirits."

Brewing News from the European Continent.

More economy is being urged by the military authorities of Germany particularly upon the brewers of that unfortunate country, who have already been reduced to a point where economy is at a premium. We now hear that the allotments of barley to the brewers are hardly more than sufficient to produce beer for the army and for the laborers employed on heavy work for the army. Details are not available because the military censors prevent them from leaking out. The facts about the economic conditions of the German people are as carefully suppressed as any military secret.

Hundreds of Breweries have been closed in Germany, not only because there are no brewing materials from which to produce beer, but because the brewers could not brew, even if they had enough barley, as their plants have been stripped of most of their equipment, brew kettles and all other copper and brass apparatus having been made into ammunition, and other vessels etc., being used in the public soup kitchens established for feeding the tens of thousands who no longer are able to pay the enormous prices demanded for all food products.

What little beer there is still for sale is too dear for the poor to buy it. Beer has become a rare luxury, as costly as butter, eggs and meat. In some cities the price of one liter of beer has gone up to 80 pfennigs, and even to one mark.

"Reclam's Universum" reports that yeast from German breweries is now being worked into various industrial products, among them all sorts of things formerly made from bone, ivory, mother of pearl, etc. like buttons and similar objects. The yeast is dried and then pressed into shape by hydraulic pressure, the finishing being done by machinery. This form of yeast they are calling "ernolith."

They also economize in France, although conditions are not as severe as they are in Germany. And the beer produced by the French breweries is of a better quality as brewing materials are not as scarce. Malt costs now between 75 and 88 francs per 100 kilos.

The output of the French breweries in December last fell more than fifty per cent as compared with the output in December 1913, which readily appears from the fact that in December 1913 the taxes paid by the brewers amounted to 1,119,000 francs, while in December 1916 the amount was only 534,000 francs. The taxes paid by the French brewers

in 1916 aggregated 9,607,000 francs, as compared with the annual aggregate of 16,086,000 francs in normal years before the war. However, the beer production of 1916 has increased when compared with that of 1915, as the brewers' taxes in 1916 exceeded those paid in 1915 by 2,334,000 francs. In many cases brewers have advanced their prices 3 and 4 francs per hectoliter of beer, owing to the rising prices of brewing materials and higher taxes imposed by the government. The city of Paris has reintroduced its system of municipal taxes upon articles of food, abandoned years ago, so that now the municipality is obtaining about 25,000,000 francs per year from its taxes upon alcoholic beverages. The municipal authorities have also agreed to compensate those of the trade who sustained losses when the war broke out, particularly the retailers whose shops were demolished because the proprietors were Germans or Austrians, the city to pay 20 per cent. and the French government 80 per cent. of the damages officially ascertained.

The organized retailers have sent a petition to the French Parliament demanding that all bills introduced on behalf of the total abstainers' associations and other fanatical meddlers be rejected, as this is not a time when industries and commercial interests should be destroyed or reduced to distressing conditions. The petitioners say that they are Frenchman and patriots, that they are paying taxes to support the country's army and navy, that their sons and relatives are bleeding upon the fields of battle and that to destroy the "liquor" trade would mean to weaken the nation's means of defense.

The Golden Book of the French Brewing Industry contains the following additional names of members who have distinguished themselves at the front: Edward Lambert, son of M. E. Lambert, proprietor of a brewery at Saint-Folquin, Department of Pas-de-Calais, as commander of the 21st battery of the 110th Regiment of Artillery not only carried out a highly successful bombardment, but also repulsed a desperate attack of the enemy. Maurice Vandade, son of a brewery proprietor at Robecq, distinguished himself by leading the attack of a battalion of infantry near the fortress of Verdun.

In both houses of the Netherlands' Parliament the bill increasing the taxes on beer have been passed, against the united protests of the brewing industry and its affiliated trades. Among those who stoutly opposed the measure to the last was heer van Kol, Social Democrat, who declared that the bill was unfair and unjust, not only to the breweries, many of which would be ruined by it, but also to the consumers who would be compelled to pay higher prices for their beer.

The government of Sweden has decided to take possession of the barley crop in that country and the breweries will only be given part of what they need for malting.

The breweries of Moscow, Russia, have been converted into munition factories, says a cable despatch from Petrograd, dated January 13th.

THE NATIONAL BREWERS' ACADEMY, New York, tendered a farewell luncheon to the instructors and students of the Hantkes Brewers School, Milwaukee, who were on an excursion visit to the New York breweries. The pleasant event took place at Cavanagh's February 16th. When a delicious menu had been discussed there were toasts and speeches galore and a feeling of fraternity and co-operation prevailed among the hosts and their guests, the latter taking home to the West the good wishes of their comrades in the East.

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Akron Brewing Co., Akron, Ohio., are soon to install ten Upright Closed Fermenters to be built of Glass Enamelled Steel by the Pfaudler Co., at Rochester, N. Y.

—Alliance Brewing Co., Alliance, Ohio, have decided to enlarge their plant and equip several of its departments with up-to-date machinery.

—American Brewery, Altoona, Pa., recently ordered of the Pfaudler Co., Rochester, N. Y. two upright Glass Enamelled Steel Government Bottling Tanks.

—Magnus Beck Brewing Co., Buffalo, N. Y., have arranged to install six Horizontal Pfaudler Glass Enamelled Steel Government Bottling Tanks.

—Beverwyck Brewing Co., Albany, N. Y., have enlarged and newly equipped their power plant; four new 150 horse power boilers were installed.

—Valentine Blatz Brewing Co., Milwaukee, are installing five complete units of Barry-Wehmiller Soakers and Pasteurizers each 6,000 bottles per hour capacity. Arrangements have been perfected for the brewing of "near beer" which is to be known as "Parma."

—Birk Bros. Brewing Co., Chicago, have installed another Upright Glass Enamelled Steel Bottling Tank in their cellars.

—Peter Breidt City Brewery Co., Elizabeth, N. J. have ordered of the Pfaudler Co., Rochester, N. Y., two steel partition heads, enameled on both sides, with which they intend to convert two tanks previously purchased into compartment tanks. In addition to this order are eight Pfaudler Glass Enamelled Steel Upright Government Bottling Tanks.

—Citizens' Brewing Co., Antigo, Wis., have remodeled and newly equipped their chip-room and wash-house.

—Class & Nachod Brewing Co., Philadelphia, are enlarging their bottling plant and equipping it with additional modern machinery, to cost about \$6,000. The company also have arranged with The Pfaudler Co., Rochester, N. Y., for the addition of one tank to their present battery of Pfaudler Glass Enamelled Steel Government Bottling Tanks.

—Cleveland & Sandusky Brewing Co., Cleveland, Ohio, are enlarging and improving their Stang brewery at Sandusky, for which several new boilers, tanks and other equipment have been ordered.

—Compañia Cerveceria Internacional, Havana, Cuba, recently placed their third order for Glass Enamelled Steel Tanks with the Pfaudler Co., at Rochester, New York. The most recent item calling for thirty-four Horizontal Chip Tanks and two Compartment Storage or chip tanks, each having two compartments. When this new lot is installed, this up-to-date Havana Brewery will have a total of seventy Pfaudler Tanks.

—Consumers Brewing Co., Philadelphia, have arranged to increase the capacity of their bottling cellar with the addition of three Pfaudler Glass Enamelled Steel Upright Bottling Tanks.

—Diebolt Brewing Co., Inc., Cleveland, Ohio, have added to their refrigerating plant a 200-ton raw water ice making system.

—Excelsior Brewing Co., Cleveland, Ohio, are erecting a \$25,000 addition to their plant.

—Fauerbach Brewing Co., Madison, Wis., have placed

an order with The Pfaudler Co., for three Upright Glass Enamelled Steel Government Bottling Tanks.

—Christian Feigenspan, Inc., Newark, N. J., erect a distributing depot and refrigerating plant at Ansonia, Conn.

—Ft. Pitt Brewing Co., Sharpsburg, Pa., are arranging to increase the capacity of their bottling cellar in anticipation of the summer's trade by the installation of six Pfaudler Glass Enamelled Steel Horizontal Government bottling tanks.

—Philip Fresenius' Sons. Twelve Pfaudler Glass Enamelled Steel Horizontal Chip Tanks will be installed in the Brewery of the Philip Fresenius' Sons at New Haven, Conn., materially increasing their complement of Pfaudler Tanks.

—Frontenac Breweries, Montreal, Quebec, just closed an order with The Pfaudler Co., of Rochester, N. Y., for twelve Glass Enamelled Steel Horizontal Storage Tanks and three bottling Tanks of the same material for installation as quickly as possible.

—Jose Goehl is erecting a complete new brewery in San Pedro Sula, Honduras, S. A.

—Greensburg Brewing Co., Greensburg, Pa., recently installed a 15-ton freezing system, grease extractor, 100-ton distilled water cooling coil, distilled water filters, can filler, piping for storage tank, ammonia condensers, headers, oil separator, liquid coolers, condensers, etc., all furnished by the Frick Company, Waynesboro, Pa.

—M. Groh's Sons, New York City, have installed Ammonia condensers, freezing tank coils, accumulators, agitators, bulkheads, air lines for tanks, air conditioners and blowers, can dumps, etc., for use in ice factory; also 2 10-ton vertical single acting belt driven enclosed type machines, all made by the Frick Company, Waynesboro, Pa.

—Haberle Brewing Co., Syracuse, N. Y., have ordered another Pfaudler Glass Enamelled Steel Horizontal Bottling Tank, making a total of eighty-four Pfaudler Tanks in this brewery.

—Peter Hand Brewery Co., Chicago, is soon to install two horizontal government bottling tanks of glass enameled steel, furnished by The Pfaudler Co., of Rochester N. Y.

—The Hellman Brewing Co., Waterbury, Conn., have placed their seventh order with the Pfaudler Co., Rochester, N. Y., in the way of three horizontal chip tanks of Glass Enamelled Steel.

—James Hensler Brewing Co., Newark, N. J., recently purchased of The Pfaudler Co., Rochester, N. Y., two more Horizontal Glass Enamelled Steel Bottling Tanks. This makes a total of 58 Pfaudler Tanks in the Hensler Brewery.

—Jacob Hornung, Philadelphia, Pa., has ordered an Upright Government Bottling Tank, of Glass Enamelled Steel, from The Pfaudler Co., Rochester, N. Y.

—Frank Jones Brewing Co., Ltd., Portsmouth, N. H., are enlarging and newly equipping their lagerbeer department.

—Gottfried Krueger Brewing Co., Newark, N. J., after having operated the Barry-Wehmiller Brushless Washing Machine in connection with their equipment of the same manufacture since March 15th, 1916, have placed their order with the same company for a duplicate B-W. Brush-

less Washing Machine to be erected at once in connection with the B-W equipment of machinery in their bottling department addition. The company are also arranging to substantially increase the capacity of their bottling cellar by the installation of twelve Pfaudler Glass Enameled Steel Upright Government Bottling Tanks.

—W. Kuebler's Sons, Easton, Pa., are arranging to increase the capacity of their government bottling cellar by the additional of seven Pfaudler Glass Enameled Steel Upright Bottling Tanks.

—McAvoy Brewing Co. Eight Horizontal Glass Enameled Steel Bottling Tanks are to be installed in the plant of the McAvoy Brewing Co. Chicago, by the Pfaudler Co., Rochester, N. Y.

—Muhlenberg Brewing Co., Bernharts, Pa., are rebuilding that part of their plant which was destroyed by fire nearly one year ago.

—National Brewing Co., Chicago, will increase the capacity of their Pfaudler Glass Enameled Steel Tanks already installed by the addition of four more rings or sections.

—National Brewing Co., Syracuse, N. Y., have added to their storage capacity three Horizontal Pfaudler Glass Enameled Steel Tanks. This is the National Brewing Co's., third installment of Pfaudler Tanks.

—New England Brewing Co., Hartford, Conn., have purchased the Harris property on Windsor Street, adjoining the brewery, with a view to enlarging the latter by the erection of additional buildings.

—New State Brewing Association, Oklahoma City, Okla., erect a one-story brick ice house, to cost about \$1,000.

—Niagara Falls Brewing Co., Niagara Falls, N. Y., will increase the capacity of their Pfaudler Glass Enameled Steel Tanks already installed by the addition of four additional rings, this order also includes one complete Horizontal Tank.

—Obermeyer & Liebmann, Brooklyn, N. Y., are enlarging their bottling department.

—Old Colony Breweries Co., Fall River, Mass., are building and equipping a large new bottling house.

—Orange Brewery, Orange, N. J., have ordered four Glass Enameled Steel Government Bottling Tanks from The Pfaudler Co., at Rochester, N. Y., also one compartment tank having three compartments, divided by steel heads which are enameled upon each side.

—Pabst Brewing Co., Milwaukee, have added one more Upright Closed Pfaudler Glass Enameled Steel Tank to their equipment.

—Pittsburgh Brewing Co., Pittsburgh, who have several hundred Pfaudler Glass Enameled Steel Tanks installed in their various branches, recently ordered nine horizontal chip tanks and ten extra rings or sections for their Eberhardt & Ober Branch. The extra rings are to be used for the extension and re-arrangement of Pfaudler Tanks previously installed.

—Popel-Giller Co., Warsaw, Ill., have placed an order with The Pfaudler Co., Rochester, N. Y., for three Upright Government Tanks and seven Upright Closed Chip tanks for their brewery; also two upright closed jacketed tanks for the manufacture of non-alcoholic beer—all to be of Glass Enameled Steel.

—E. Porter Brewing Co., Joliet, Ill., are enlarging their bottling works at a cost of about \$35,000.

—Premier Brewing Co., Philadelphia, has ordered fourteen Horizontal Glass Enameled Steel Chip Tanks of The Pfaudler Co., Rochester, N. Y., also two partition heads

enameled on both sides with which they will convert two of their old chip tanks into Boilers.

—Geo. Renner Brewing Co., Akron, Ohio, are to have six more Pfaudler Glass Enameled Steel Upright Chip Tanks.

—Rieger & Gretz Brewing Co., Philadelphia, will soon install fourteen Pfaudler Glass Enameled Steel Tanks, of which two will be Upright Closed Chip Tanks.

—Jacob Ruppert, Inc., New York City, have arranged to increase the capacity of certain of their Pfaudler Glass Enameled Steel Cylindrical Tanks by the addition of sixteen new rings or sections. References have been made from time to time to the glass enameled steel rectangular fermenters and cylindrical tanks which have been placed in the Ruppert Brewery—one of the largest installation of tanks in recent years.

—Jacob Schmidt Brewing Co., St. Paul, Minn., erect a new two-story brick and concrete wash house, to cost about \$35,000.

—Peter Schoenhofen Brewing Co., Chicago, have purchased a large site adjoining their plant on Canal Street, a 100x132 feet structure there located to be remodeled as an addition to the company's bottling works.

—A. Schreiber Brewing Co., Buffalo, N. Y., will increase the capacity of Pfaudler Tanks previously installed by the addition of two more rings or sections and of two partition heads which are to be enameled upon both sides.

—Schuster Brewing Co., Rochester, Minn., have placed their eleventh order for Glass Enameled Steel Tanks with The Pfaudler Co., Rochester, N. Y.; this last installment calling for 4-Upright Closed Chip Tanks.

—William Simon Brewery, Inc., Buffalo, N. Y., have arranged to install two Pfaudler Glass Enameled Steel Upright Closed Tanks.

—Standard Brewing Co., Cleveland, Ohio, erect an additional stock cellar at a cost of about \$20,000.

—Stark-Tuscarawas Breweries Co., Canton, Ohio will equip their Canton Branch with eight Pfaudler Glass Enameled Steel Upright Storage Tanks, and their Stark Branch with four Horizontal Storage tanks of the same make.

—The Weibel Brewing Co., New Haven, Conn., have placed an order with the Pfaudler Co., at Rochester, N. Y., for four Glass Enameled Steel Horizontal Chip Tanks. This is the Weibel Co's., third order of the Pfaudler Tanks.

—The Western Brewery Co., Belleville, Ill., have arranged to increase the capacity of their Pfaudler Enameled Steel Bottling Tanks by the addition of six new rings or sections.

—Geo. W. Wiedenmayer, Inc., Newark, N. J., have placed their fourth order with The Pfaudler Co., for Glass Enameled Steel Tanks; this last order calling for three Upright Government Bottlers.

—Worcester Brewing Corporation, Worcester, Mass., have placed their fifth order with The Pfaudler Co., Rochester, N. Y., this last order calling for eight Glass Enameled Steel Upright Government Bottling Tanks.

BRISBANE APPLYING SCHOPENHAUER'S PHILOSOPHY.
 "Remember that to stop drink requires an effort of the will—a very great effort—one that the sober man cannot conceive. And that effort must be made by the drunkard himself. You can't make it for him. All your fine moralizing, scolding, bullying and contempt are in your brain—not in his. The drunkard's will alone can cure him of drink. Therefore, to help him you must strengthen that will."—
 (Arthur Brisbane.)

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

Officers have been elected by brewery companies as follows:

Acme Malting Co., Chicago: President and treasurer, Robert H. Lanyon; vice-president, A. M. Lanyon; secretary and general manager, W. P. Rice; additional director, Carl M. Mohr.

Antigo Brewing Co., Antigo, Wis.: President, Albert Fish; vice-president, Albert Koles; treasurer, Joseph Hoffman; general manager, Wm. Krier; secretary, Frank Reindl.

Atlanta Brewing & Ice Co., Atlanta, Ga.: President, Albert Steiner; vice-president, E. S. McCandless; secretary and treasurer, Ira R. Steiner; brewmaster, Geo. Silber.

Aurora Brewing Co., Aurora, Ill.: President, John F. Thorwart; vice-president, superintendent and brewmaster, John Knell; secretary-treasurer and general manager, H. A. Berthold.

Franz Bartl Brewing Co., La Crosse, Wis.: President, Edward C. Bartl; vice-president, Mrs. Mary Bartl; secretary-treasurer and general manager, Joseph Bartl.

Berkshire Brewing Association, Pittsfield, Mass.: President and general manager, John W. White; vice-president, David Gimlich; treasurer, George H. White; secretary, John A. White; superintendent and brewmaster, Carl Fuchs.

Berlin Brewing Co., Berlin, Wis.: President, C. C. Welensgard; vice-president, M. R. Campbell; treasurer, John Rosa; secretary, F. W. Sackett.

Wm. Bierbauer Brewing Co., Mankato, Minn.: A. G. Bierbauer, president and manager; W. C. Bierbauer, vice-president and brewmaster; R. A. Bierbauer, secretary and treasurer.

Bowler Brothers, Ltd., Worcester, Mass.: President, John Bowler; vice-president, Herbert K. Sparrell; treasurer, Alexander Bowler; secretary, Edward F. McCabe; superintendent and brewmaster, Archibald K. Stace.

Bowman-Harman Brewing Co., Cincinnati, Ohio: John H. Bowman, president and treasurer; L. L. Bowman, secretary, general manager and brewmaster.

Brandon Brewing Co., Ltd., Brandon, Manitoba, Can.: President, Alex Ferguson; vice-president and treasurer, H. F. Maley; secretary, E. M. Maley; superintendent and brewmaster, W. Schwartz.

Broadway Brewing and Malting Co., Buffalo, N. Y.: President, Frank X. Binz; vice-president, Joseph O. Binz; treasurer and general manager, Charles W. Belzer; secretary, Frank W. Adolf; brewmaster, Charles Weber; additional director, Carolina Binz.

Bruckmann Brewing Co., Inc., Cincinnati: President, William N. Bruckmann; vice-president and general manager, Chris Bruckmann; secretary and treasurer, John Dreman; brewmaster, Karl Klink.

C. L. Centlivre Brewing Co., Fort Wayne, Ind.: President, Louis A. Centlivre; treasurer, Charles F. Centlivre; secretary and general manager, John B. Reuss; Assistant secretary, Charles J. Reuss; brewmaster, Frank Kloer.

Citizens' Brewing Co., Antigo, Wis.: President and general manager, Chris. Wunderlich; vice-president, John Sipek; secretary-treasurer, W. F. Mehne; additional director, L. P. Tradewell; brewmaster, William F. Forster.

Cleveland Home Brewing Co., Cleveland, Ohio: Ernst Mueller, president; Joseph Beltz, vice-president; Carl F. Schroeder, secretary and treasurer; Gottlieb Kuebler, superintendent and brewmaster.

Cold Spring Brewing Co., Lawrence, Mass.: Treasurer and general manager, Walter A. Singer, succeeding Louis K. Siegel, who resigned as his health is failing.

Compafia Cervecera Internacional (S. A.), Havana, Cuba: President, Emitterio Zorilla; vice-president, Jose Marimon; treasurer, Victor Orgill; Jesus Mandulay; general manager, Rafael Espin; brewmaster, Gustave Varrelmann.

Consumers Brewing Co., Newark, Ohio: President, Charles André; vice-president and superintendent, H. J. Schneidt; secretary-treasurer, Jul. A. Kremer; brewmaster, Geo. Beck; additional directors, W. N. Baker, Chas. Nogelmeier, D. M. Smith.

Copland Brewing Co., Ltd., Toronto, Ont., Canada: President, Robert Davies; vice-president, George T. Davies; secretary, F. D. Porter; brewmaster, Constant Wild.

Daeufer-Lieberman Brewing Co., Allentown, Pa.: President and treasurer, Martin E. Kern; vice-president and general manager, Joseph F. Gehringer; secretary, William H. Fulton.

Dayton Breweries Co., Dayton, O.: President, Adam Schantz; vice-president, George Schantz; secretary and treasurer, Louis L. Wehner; assistant secretary-treasurer, William A. Kreidler; additional directors, W. A. Keyes, Charles Wahlen, R. V. Burkhardt, Harry Wagner, William Breidenbach, Chris Jamison, E. T. Hall, George P. Sohngen, Judge Clarence Murphy, Edward P. Sohngen, Charles Heiser, James Flynn. Schantz-Thomas Plant: Manager, Wm. F. Breidenbach; Brewmaster, C. Lins. Schantz & Schwind Plant: Manager, J. E. Oehlschlager; Brewmaster, Anton Haas. Schwind Plant: Manager, Adolph Schwind; Brewmaster, Emil Feigle. Bottling Department: Manager, C. Jamison; superintendent, Bernard Baumann.

Peter Doelger Brewing Co., Inc., New York: President, Peter Doelger; vice-president and treasurer, Charles P. Doelger; secretary, Frederick J. Feuerbach; general manager, John M. Geiger; brewmaster, Jean E. Blaise.

Du Bois Brewing Co., Du Bois, Pa.: President, Frank Hahne; vice-president, J. Weil; treasurer, Frank Schwem; secretary, M. I. McCreight; superintendent, Frank Hahne, Jr.; brewmaster, Charles Waldbisser.

Eagle Brewery, Inc., San Jose, Cal.: President, John W. Bourdette; vice-president, Georgiana Scherrer; secretary-treasurer and manager, Joseph A. Hartmann; secretary and general manager, Julius A. Stirn; brewmaster, R. H. Menzel; additional directors, Mrs. L. A. Hartmann, J. A. Hicks.

East St. Louis-New Athens Brewing Co., New Athens, Ill.: President, Isfried Probst; vice-president, Theodore Probst; secretary-treasurer and general manager, George C. Probst; brewmaster, Herman Wellenkotter.

Eberle Brewing Co., Jackson, Mich.: President, treasurer and general manager, Carl Eberle; vice-president and brewmaster; Carl Eberle, Jr.; secretary, Sophie Eberle.

John Ehresman & Co., Binghamton, N. Y.: President, treasurer and manager, Jacob Schwab; vice-president, John J. Ehresman; secretary, J. F. McDonald; brewmaster, Henry J. Ullmann.

Ekhardt & Becker Brewing Co., Detroit, Mich.: President, August Ekhardt; vice-president, secretary, treasurer and manager, C. H. Ritter; brewmaster, August H. Ekhardt.

Eldredge Brewing Co., Portsmouth, N. H.: President, F. H. Ward; vice-president, Robert Kirkpatrick; general manager and treasurer, Ira A. Newick; additional director, E. L. Stockbridge.

Henry Elias Brewing Co., New York: President, William J. Elias; 1st vice-president, Frederick W. Kroehle, Sr.; 2nd vice-president, Arthur E. Duerr; treasurer, Fred W. Kroehle, Jr.; secretary, George H. Elias; brewmaster, Adolph Steinhart.

Elgin Eagle Brewing Co., Elgin, Ill.: President and treasurer, Louis J. Althen; secretary, Edward C. Althen; superintendent, Emil Althen; brewmaster, John Hartl.

El Paso Brewing Association, Sucrs., El Paso, Tex.: President and general manager, R. Walter Long; vice-president, George G. Sauer; secretary-treasurer, W. H. Long. The brewmaster is Frank Brenk.

Empire Brewing Co., Brandon, Manitoba, Can.: President, Peter Payne; vice-president and general manager, R. E. Trumbell; secretary and treasurer, W. M. Tyndall; brewmaster, J. A. P. Clarke.

Erie Brewing Co., Erie, Pa.: President, Fred Koehler; vice-president and general manager, A. L. Curtze; secretary and treasurer, F. A. Brevillier; J. M. Magenau, assistant manager; E. W. Kink, assistant secretary-treasurer; brewmaster, Edward A. Kern.

Evansville Brewing Association, Evansville, Ind.: President, Chas. F. Hartmetz; vice-president, Gustav C. Meyer; treasurer, Chas. W. Ullmer; secretary, Otto C. Hartmetz; brewmaster, Gus J. Werner.

James Everard Breweries, New York: President, Mary M. Everard; treasurer, Daniel M. Tracey; secretary, James D. Freeman; superintendent and brewmaster, Frederick Kreusler; additional directors, Robert Hilliard, William B. Cardozo, James F. Horan, William M. K. Olcott.

Excelsior Brewing Co., Brooklyn, N. Y.: President, John Reisenweber; 1st vice-president, Herman Reher; 2nd vice-president, William Volk; treasurer, Fred D. Fricke; secretary, Charles P. Faber. John Knoll is brewmaster.

Excelsior Brewing Co., Cleveland, O.: President, Louis Kurzenberger; vice-president, G. J. Maurer; treasurer, Jacob Haller; general manager and brewmaster, Jacob F. Haller; secretary, Joe Schenkelberg; additional directors, John Kitzerow, W. Luehny, Charles Heintel, John Schneider.

Farmers' Brewing Co., Shawano, Wis.: President, John Popp; vice-president, Fred Kuhn; general manager, secretary and treasurer, Conrad Volland; assistant secretary, Aug. Kroening; brewmaster, Ulrich Santner.

Fayette Brewing Co., Uniontown, Pa.: President, James McCrath, vice-president and general manager, W. A. McHugh; secretary and treasurer, J. W. Ralston.

Fecker Brewing Co., Danville, Ill.: President, treasurer and manager, Col. Ernst Fecker, Jr.; vice-president, C. Fecker; secretary and brewmaster, Geo. Sedlmayr.

Christian Feigenspan, a Corporation, Newark, N. J.: President, Christian W. Feigenspan; vice-president, Edwin C. Feigenspan; treasurer, J. August Stengel; secretary, William H. Rose; general manager, Albert S. Koenig; brewmasters, Jacob D. Baer, John S. Eggert and Anthony Schueler.

Fleischmann Malting Co., Buffalo, N. Y.: Maltmaster, R. B. Prinz.

Florida Brewing Co., Tampa, Fla.: President, Ygnacio P. Castañeda, Sr.; vice-president and treasurer, S. V. M. Ybor; assistant treasurer, Y. P. Castañeda, Jr.; secretary, Peter O. Knight; additional director, Mrs. M. R. M. Ybor. The brewmaster is Geogre Swemmer.

Frankenmuth Brewing Co., Frankenmuth, Mich.: President, Leon J. Veitengruber; vice-president, John Martin Weiss; treasurer and general manager, George J. Rummel; secretary, William Stromer, brewmaster, M. J. Schachtner.

Fresno Brewing Co., Fresno, Cal.: President and manager, W. J. Eilert; vice-president, Delia Eilert; treasurer, Mary E. Huntzicker; secretary, S. J. Heilberg; superintendent, S. J. Heilberg.

Galveston Brewing Association, Galveston, Tex.: President, Louis A. Adoue; vice-president, George Sealy; secretary-treasurer and general manager, I. A. Stein; brewmaster F. C. Reuel.

Gambrinus Brewing Co., Columbus, Ohio: President, general manager and brewmaster, August Wagner; vice-president, E. L. Taylor, Jr.; secretary-treasurer, Frieda Wagner; additional directors, J. G. Obermayer, T. G. Dundon.

Grand Island Brewing Co., Grand Island, Neb.: President, Albert von der Heyde; vice-president, Wm. Scheffel; treasurer, Wm. Veit; secretary, R. W. Schumann; additional directors, Hy. Faldorf, and Richard Goehring.

Gund Brewing Co., Cleveland Ohio: President and treasurer, George Gund; vice-president, Anna M. Gund; secretary, L. F. Roether. The brewmaster is Conrad Werner.

Adam Haas Brewing Co., Houghton, Mich.: President, Joseph Stroebel; vice-president, Michael Messner, Sr.; secretary, treasurer and manager, W. F. Miller brewmaster, Peter Moeller.

Hartmann & Fehrenbach Brewing Co. (Brandywine Lager Beer Brewery), Wilmington, Del.: President and general manager, John G. Hartmann; vice-president, Charles Fehrenbach; secretary and treasurer, J. George Fehrenbach. The brewmaster is Walter Pochnow.

Hastings Brewing Co., Hastings, Neb.: President, H. C. Hansel; vice-president, Emile Polenski; treasurer, manager and superintendent, Louis Kraus.

Hennepin Brewing Co., Minneapolis, Minn.: President, R. J. Cheney; vice-president, S. M. Klarquist; treasurer and managing director, H. P. G. Coates; secretary and general manager, H. K. Richardson; brewmaster, L. Scholl.

Henze-Tollen Brewing Co., Iron Mountain, Mich.: W. A. Henze, president and manager; Gustav Tollen, vice-president; A. R. Henze, secretary and treasurer; brewmaster, M. Kriegl.

Joseph Herb Brewing Co., Milan, Ohio: President, treasurer and manager, John F. Ging; vice-president, Frank Stang; secretary, L. Lobenthal; brewmaster, Joseph Herb.

Hollenkamp Brewing Co., Dayton, Ohio: President and manager, Theo. D. Hollenkamp; vice-president and superintendent, Bernard C. Hollenkamp; secretary and treasurer, E. Hollenkamp; assistant secretary, G. A. Moehlman.

Home Brewing Co., Canton, Ohio: President and general manager, J. H. Foley; vice-president, F. S. Benskin; secretary-treasurer, F. W. Lisch; brewmaster, Charles J. Hauer.

Home Brewing Co., Indianapolis: President and brewmaster, Peter Lawall; vice-president, Charles Nuerge; secretary and treasurer, George W. Tracy.

Home City Brewing Co., Springfield, Ohio: President, James J. Wood; vice-president, M. M. Berry; secretary-treasurer and general manager, Thomas L. White; brewmaster, Julius Bossert, Jr.

Home Brewing Co., Toledo, Ohio: President, A. J. Smith; vice-president, L. J. Metzger; treasurer and general manager, Charles A. Hipp; secretary, Martin G. Smith; additional director, Owen Davis; brewmaster, Fred Krause.

Hoster-Columbus Company, Inc., Columbus, Ohio: President, Carl J. Hoster; vice-president and treasurer, C. Christian Born; secretary, John Zuber; additional directors, W. S. Hayden, E. V. Hale, C. A. Otis, R. B. Aldcroft, S. B. Fleming; brewmasters, Alexander Hostettler, Hoster Branch, and Reinhard Merz, Columbus Branch.

A. J. Houghton-Co., Boston, Mass.: President, Henry A. Rueter; treasurer, Ernest L. Rueter; secretary, Conrad J. Rueter; brewmaster, Charles F. Russert; additional directors, Fred T. Rueter, Wm. G. Rueter.

Houston Ice & Brewing Association, Houston, Tex.: President and manager, Hugh Hamilton; vice-president and treasurer, R. L. Autrey; secretary, Jas. H. Studdert; brewmaster, Charles Daab.

Hudson County Consumer's Brewing Co., West Hoboken, N. J.: President, Carl H. Ruempler; vice-presidents, William von Twistern and Adam A. Stecker; secretary and treasurer, E. Bergmann.

Huebner-Toledo Breweries Co., Toledo, Ohio: President, James E. Pilliod; vice-president, Edward J. Grasser; secretary-treasurer and superintendent, John J. Huebner; assistant secretary-treasurer, Carl Siegrist; additional directors, Gerard J. Pilliod, Joseph M. Grasser and Henry E. Huebner. The brewmasters are Henry E. Huebner, for the Huebner branch, and Franz Keller, for the Finlay branch.

Humboldt Brewing Co., Eureka, Cal.: President, George Zobelein; vice-president, John Graf Zobelein; treasurer, Philip Zobelein; secretary, Edward Zobelein; general manager, John R. Hagen; brewmaster, Fritz Kurz.

Independent Brewing Association, Chicago: President, Leon Ernst; vice-president and treasurer, C. E. Ernst; secretary and general manager, Leo E. Ernst; brewmaster, F. W. Boldenweck; brewmaster East St. Louis Branch, J. L. Hirschel; manager East St. Louis Branch, Frank Griesedieck.

Independent Breweries Co., St. Louis: President and treasurer, Hugo A. Koehler; vice-president, Alexander T. Gast; secretary and assistant treasurer, Ferd Gast; superintendent, H. C. Griesedieck.

Jackson Brewing Co., New Orleans, La.: President, Lawrence Fabacher; vice-presidents, Adolph Dumser and Lawrence B. Fabacher; secretary, Gus. Oertling; superintendent, L. B. Fabacher; brewmaster, Michael Jacob; additional directors, John W. Fairfax, Albert Fabacher, Irving R. Saal, John J. Fabacher and J. Henry Edwards.

Jamestown Brewing Co., Jamestown, N. Y.: President, general manager and treasurer, P. F. Simon; vice-president, H. H. Cooper; secretary, Francis Dunn; additional directors, Fred Bauer, James A. Hughes, C. W. Mace and F. R. Hemphill.

Joliet Citizens' Brewing Co., Joliet, Ill.: President, Oscar Weinbrod; vice-president, William Myler; secretary-treasurer, Joseph G. Heintz; brewmaster, Adolph A. Buchler.

Jung Brewing Co., Milwaukee: President, Phillip Jung, Jr.; vice-president, John B. Bommersheim, Jr.; treasurer, Ernst Jung; secretary and general manager, Fred

Schneider; additional directors, Mrs. Anna Daniels and Mrs. Elizabeth Aiple. The brewmaster is Otto Roesch.

Simeon Jones, Ltd., St. John, N. B., Canada: President and general manager, R. Keltie Jones; vice-president, F. Caverhill Jones; secretary-treasurer, Simeon A. Jones; brewmaster, Thos. Campbell Dickson.

Kalispell Malting & Brewing Co., Kalispell, Mont.: President, Edward R. Gay; vice-president, M. A. Gay; secretary-treasurer, John C. Hogl; brewmaster, Richard Best.

Kansas City Breweries Co., Kansas City, Mo.: President, Joseph J. Heim; vice-president, Henry G. Oppmann; secretary-treasurer and general manager, Conrad H. Mann; brewmaster, Carl Kreidler and Adam Hammann.

Kewanee Brewing Co., Kewanee, Ill.: President, Frank F. Whiffen; vice-president, D. O'Donnell; treasurer, R. H. Lamb; secretary, David Pollock, Jr.; general manager, Charles F. Whiffen.

Knapstein Brewing Co., New London, Wis.: President, Theodore Knapstein; vice-president, H. T. Knapstein; secretary and treasurer, M. W. Knapstein; superintendent and brewmaster, W. Knapstein.

Krantz Brewing Co., Findlay, O.: President, George Altmeyer; vice-president, W. S. Altmeyer; treasurer and general manager, William J. Altmeyer; secretary, Peter G. Altmeyer; additional director, N. E. Altmeyer. The brewmaster is Ernest Hafenbrack.

Liberty Brewing Co., Pittsburgh; President, C. J. Hoffmann; treasurer, William Herb; secretary and general manager, Edward F. Kredel; brewmaster, John Biesinger.

Simon Linser Brewing Co., Zanesville, Ohio: President, Simon Linser, Sr.; vice-president, Charles A. Linser; secretary-treasurer and general manager, Simon Linser, Jr.; additional directors, H. H. Linser and Adolph A. Linser. The brewmaster is William Weisman.

V. Loewer's Gambrinus Brewery Co., New York: President, Jacob Loewer; secretary and treasurer, Henry D. Muller; additional director, Katherina Muller. The brewmaster is Ludwig Schueler.

Lone Star Brewing Association, Incorporated, San Antonio, Tex.: Henning Bruhn, Charles Grossmann, Louis Fink, F. W. Cook, and Otto Meerscheidt, trustees.

Los Angeles Brewing Co., Los Angeles, Cal.: George Zobelein, president and general manager; John Graf Zobelein, vice-president; Philip Zobelein, treasurer; Edward Zobelein, secretary. Henry F. Gutsch, brewmaster and superintendent; additional director, R. M. Lick.

Manilla Anchor Brewing Co., Dobbs Ferry, N. Y.: President, Edward Lauterbach; treasurer and general manager, Herman J. Katz; brewmaster, William Fix.

Medicine Hat Brewing Co., Ltd., Medicine Hat, Alberta, Can.: President and general manager, C. V. Drazan; vice-president, H. C. Yuill; secretary, M. B. Drazan; brewmaster, E. A. Bradley.

Menominee River Brewing Co., Menominee, Mich.: President, Wolfgang Reindl; vice-president, Michael Bohman; secretary-treasurer, Frank Erdlitz; brewmaster, John G. Reindl.

Moerschel Brewing Co., Sedalia, Mo.: President and general manager, Franz O. Moerschel; vice-president, Marie Moerschel; secretary and treasurer, S. Urban; brewmaster, F. F. Moerschel.

J. & A. Moeschlin, Inc., Sunbury, Pa.: August Moeschlin, president; Edw. A. Moeschlin, vice-president and brewmaster; Reinhart J. Moeschlin, treasurer; John H. Otto, secretary and manager.

Montana Brewing Co., Great Falls, Mont.: F. G. Thompson, president; S. R. Jensen, secretary, treasurer and manager; G. J. Siebel, superintendent.

National Capital Brewing Co., Washington, D. C.: Albert Carrey, president, manager and superintendent; Chas. A. Carrey, vice-president; Philip Schwartz, secretary and treasurer; Carl Rossbach, brewmaster.

New Braunfels Brewing Co., New Braunfels, Tex.: President, William Kühler; vice-president, Carl Saur; secretary and treasurer, Chris Herry, Jr.; brewmaster, George Walter, Sr.

Newfoundland Brewery, Ltd., St. Johns, Newfoundland: President, James C. Baird; vice-president, James J. Tobin; secretary, J. V. O'Dea; general manager, John Flynn; brewmaster, J. C. Jardine.

New Orleans Brewing Co., New Orleans, La.: President, John McCloskey; vice-president, Jos. W. Frankenhush; secretary-treasurer, R. B. Rordam; brewmaster, August Gronstedt; additional directors, Chas. J. Babst, Eugene E. Dyer, Seymour J. Gonzales, F. L. Martin, W. J. Rand, and Geo. G. Westfeldt.

Niagara Falls Brewing Co., Niagara Falls, N. Y.: President, George F. Nye; vice-president, R. V. Rose; secretary and treasurer, John C. Jenny; brewmaster, Ferdinand Daegelow.

Northampton Brewing Co., Northampton, Pa.: President, P. J. Laubach; secretary and treasurer, E. H. Laubach; general manager, Ray Weisel; brewmaster, John Schumm.

North Star Malting Co., Minneapolis, Minn.: President and treasurer, A. C. Loring; vice-president, Jacob Kunz; secretary, Titus Mareck; general manager, Paul G. Sukey, Sr.; superintendent, Paul G. Sukey, Jr.

Oakland Brewing & Malting Co., Oakland, Cal.: Secretary and general manager, Carl S. Plaut; vice-president and treasurer, Henry Wieking; secretary, J. M. Bonner; brewmaster, A. Dolenz; additional directors, C. M. Gay, A. Krueckel.

Ohio Brewing Co., Columbus, O.: President and general manager, Edward Prior; vice-president, Charles Andre; treasurer, O. F. Wiechers; secretary, A. E. Schenck; brewmaster, John Schott; additional directors, Edward Prior, Jr.

Old Colony Breweries Co., Fall River, Mass.: President, George D. Flynn; vice-president, Herman G. Meyers; treasurer, R. F. Haffenreffer; clerk, Cornelius Sullivan.

Ortlieb Brewing Co., Mauch Chunk, Pa.: President and general manager, Hugo Ortlieb; vice-president, James Smitham; treasurer, C. Curtis Doak; secretary, D. E. Purell; brewmaster, Gustav R. Rose.

Oshkosh Brewing Co., Oshkosh, Wis.: President, treasurer and general manager, William J. Glatz; vice-president, Otto C. Horn; secretary, Arthur L. Schwalm; brewmaster, Frank Menzel; additional directors, Mrs. Emma Pfotenbauer, and Miss Elizabeth Kuenzel.

Ottawa Brewing Association, Ottawa, Ill.: President, Theo. L. Grot; vice-president, Max Stahl; secretary-treasurer, manager and brewmaster, John Damgard.

Pabst Brewing Co., Milwaukee: President, Gustave Pabst; vice-president, Henry Danischewsky; secretary and treasurer, Henry J. Stark; assistant secretary, William F. Schad; additional directors, Fred Pabst and William O. Goorich; brewmaster, Fred Bock.

Peru Beer Co., Peru, Ill.: President, treasurer and general manager, Andrew Hebel; secretary, Charles Bulfer; brewmaster, Anton Hebel.

William Peter Brewing Co., Union Hill, N. J.: President, William Peter; vice-president and general manager, William Peter, Jr.; treasurer, William Braunstein; secretary, Emil Peter; assistant secretary-treasurer, August Peter. The brewmaster is Wendelin Maennle.

Petersen Brewing Co., Inc., Grand Rapids, Mich.: President and brewmaster, Julius J. Petersen, Jr.; vice-president and treasurer, Julius R. Petersen; secretary, Phillip J. Petersen.

C. Pfeiffer Brewing Co., Detroit, Mich.: President, Louisa Pfeiffer; vice-president, Lillian Pfeiffer; treasurer and general manager, William G. Breitmeyer; secretary, Martin Breitmeyer; superintendent and brewmaster, Andrew Freimann.

Pilsen Brewing Co., Chicago: President and general manager, John A. Cervenka; vice-president, Thomas J. Seidl; treasurer, Alois F. Jiruska; secretary, Roman Sedlacek; additional directors, Vaclav Houser, John J. Kastner, Joseph Havacek, Frank Koranek, Joseph Dusak; brewmaster, Anton Cifka.

Plymouth Brewing & Malting Co., Plymouth, Wis.: President and general manager, J. E. Curtiss; vice-president, John U. Kraft; secretary-treasurer, C. A. Lamm; brewmaster, F. M. Kraft; additional directors, Mrs. J. E. Curtiss, H. J. Goelzer.

F. A. Poth & Sons, Philadelphia: Additional director, Louis F. Knecht, succeeding George J. Roesch.

Prospect Brewing Co., Philadelphia: President, Charles A. Wolters; vice-president and general manager, Gustav Ludwig; treasurer, Martin Quenzer; secretary, Charles P. Borzner; brewmaster, John Wolters.

Anton Reck Brewing Co., Alton, Ill.: Anton Reck, president and treasurer; Herman J. Reck, vice-president and manager; Bertha Reck, secretary; superintendent and brewmaster, John J. Jehle.

Record Brewing Co., Elmira, N. Y.: President and general manager, Ben Record; vice-president, Daniel Pugh; secretary and treasurer, Jacob L. Fisher; brewmaster, James G. Vashbinder.

Rubsam & Horrmann Brewing Co., Staten Island, N. Y.: General manager, Henry Brendgen; brewmaster, Fred Balz.

Geo. Ruder Brewing Co., Wausau, Wis.: General manager, Herman Ruder; brewmaster, Anton Baum; additional director, Al. Hunger.

Ruehl Brewing Co., Chicago: President, Philip Bartholomay; vice-president, R. C. Bartholomay; treasurer and general manager, Frank H. Bartholomay; secretary, William G. Ruehl; brewmaster, Adam Mader.

Ruff Brewing Co., Quincy, Ill.: Henry Ruff, president; Wm. J. Ruff, treasurer and manager; Edgar H. Ruff, secretary; brewmaster, Edgar J. Ruff.

Sacramento Brewing Co., Sacramento, Cal.: C. J. Mathews, president; F. L. Martin, vice-president; E. C. Roeder, secretary and manager; F. C. Wallner, brewmaster.

William Sebald Brewing Co., Middletown, O.: President and general manager, George H. Sebald; vice-president, Charles A. Sebald; secretary and treasurer, G. A. Guehring.

San Diego Consolidated Brewing Co., San Diego, Cal.: President, J. Henry Zitt; vice-president and superintendent, Arnold Bloedt; secretary, C. E. Bailey; brewmaster, Jacob Wilmer; brewmaster, Conrad Rebmman.

San Rafael Brewery, Inc., San Rafael, Cal.: President and treasurer, T. Henry Chapman; vice-president and secretary, E. J. Fryman.

Savannah Brewing Co., Savannah, Ga.: Directors, A. S. Guckenheimer, J. F. Minis, M. A. O'Byrne, J. J. Raders, George F. Tennille, L. P. Hart, H. E. Dreeson, R. M. Beytagh and W. W. Starr.

F. & M. Schaefer Brewing Co., New York: President and treasurer, Rudolph J. Schaefer; vice-president, William H. Klenke; secretary, superintendent and brewmaster, Frank W. Rickers.

Schaller Brewing Co., Cincinnati: President and general manager, J. Edward Sohn, Sr.; vice-president and general manager, J. Edward Sohn, Jr.; treasurer, Michael Keck, Jr.; secretary, Carl Schall; brewmaster, Fred Herrmann.

Wm. Schellhas Brewing Co., Winona, Minn.: Augusta Schellhas, Sr., president; K. P. Schellhas, vice-president; Margaret Schellhas, secretary and treasurer; Hans W. Haveman, manager; Wm. J. Schellhas, brewmaster.

Schibi Spring Brewing Co., St. Charles, Mo.: Chas. Schibi, Sr., president and treasurer; Chas. Schibi, Jr., vice-president; Henry F. Schibi, secretary, manager and brewmaster.

Konrad Schreier Co., Sheboygan, Wis.: President, Herman Schreier; vice-president, Alfred P. Steffen; treasurer, Konrad Testwuide; secretary, Louis Zimmermann; brewmaster, Arthur P. Ende.

Schuster Brewing Co., Inc., Rochester, Minn.: F. W. Schuster, president and treasurer; Henry Schuster, vice-president and secretary.

Silver Spring Brewery, Ltd., Victoria, B. C.: H. Maynard, president and manager; L. Cumberland, secretary.

Wm. Simon Brewery, Buffalo, N. Y.: William Simon, president; Wm. J. Simon, vice-president and superintendent; Jos. G. Schoff, treasurer and manager; Gerhard J. Simon, secretary; brewmaster, Charles Mayer.

Soo Brewing Co., Sault Ste. Marie, Mich.: President, L. S. Dunbar; secretary-treasurer and general manager, R. R. Reinhart; brewmaster, Leonard Stroebel.

South Bethlehem Brewing Co., South Bethlehem, Pa.: President and treasurer, M. J. Malone; vice-president, D. F. Malone; secretary, J. M. Malone; brewmaster, Robert Tobler.

Springfield Breweries Co., Springfield, Mass.: President, John W. Glynn; vice-president and general manager, James Q. Doyle; 2nd vice-president, Richard J. Rahar; 3rd vice-president, John Heydt; secretary and treasurer, James A. Gibbons; assistant secretary and treasurer, Felix Kohn; auditor, Wm. H. Mannix; additional directors, Christian Kalmbach, Michael H. Curley; branch managers, James Q. Doyle, Springfield branch; Thomas J. Flanagan, assistant manager Springfield branch; John W. Glynn, manager Highland branch; Theodore R. Geisel, manager Hampden branch; Edward J. Glynn, manager Liberty branch and bottling shop; brewmasters, Springfield Branch, Albert Kuhn; Highland Branch, Geo. Hofbauer; Hampden Branch, Edw. Lenigan; Liberty Branch, Christian Schwender.

Star Brewery Co., Belleville, Ill.: President, Bernhard Hartmann; vice-president and manager, Hubert Hartmann, Jr.; secretary-treasurer, Hans W. Hartmann. John N. Birsner is the brewmaster.

Standard Brewing Co., Cleveland, Ohio: President and manager, S. S. Creadon; vice-president, C. Renz; secretary-treasurer, J. T. Feighan; brewmaster, J. H. Pavlik.

Standard Brewing Co., New Orleans: President and general manager, Charles Wirth; vice-president, H. W. Armbruster; secretary-treasurer, J. David Wirth; additional directors, Charles Bacher and Adam Wirth. The brewmaster is August Bissner.

Star Union Brewing Co., Peru, Ill.: President, treasurer and general manager, Henry Hoerner; secretary, Jacob L. Link; brewmaster, Rudolph Bender.

Ste. Genevieve Brewing & Lighting Association, Ste. Genevieve, Mo.: President, Frank J. Huck; vice-president, Joseph Vorst; secretary, Henry C. Petersen.

Frank Steil Brewing Co., Baltimore: Frank Steil, president and general manager; Henry Buchsbaum, vice-president and secretary; Frederick Steil, treasurer; brewmaster, Fred H. Stobel.

Steuben Brewing Co., Steubenville, Ohio: President, Wilbert A. Meyer; vice-president, Thomas W. Porter; secretary treasurer, Charles T. Buehler; general manager, John Buehler; brewmaster, Fred Lusky; additional director, Peter J. Kropp.

Strathcona Brewing & Malting Co., Edmonton, Can.: J. G. Gross, president; A. Schmid, secretary and treasurer; A. Dow, general manager.

Stroh Brewery Co., Detroit, Mich.: President, Julius Stroh; vice-president and treasurer, C. F. Raiss; secretary, John W. Stroh; superintendent, Otto Rosenbusch; brewmaster, Herman A. Rosenbusch, additional director, Bernhard Stroh, Jr.

Texas Brewing Co., Fort Worth, Texas: Brewmaster, Mathias Auer, formerly with the Shreveport Brewing and Ice Co., Shreveport, La.

Tube City Brewing Co., McKeesport, Pa.: President, Jacob Weiskircher; vice-president and general manager, W. O. Weiskircher; treasurer, George Altmeyer; secretary, W. S. Altmeyer.

Upper Peninsula Brewing Co., Marquette, Mich.: President, treasurer and general manager, Charles Meeske; secretary, Albert S. Hememann; brewmaster, Fred Haas.

Voigt Brewery Co., Detroit, Mich.: President, Edward W. Voigt; vice-president and brewmaster, Henry Zimmermann; treasurer and general manager, Otto Reinvaldt; secretary, Emil Landsberg.

Wacker & Birk Brewing & Malting Co., Chicago: President, Adam Ortseifen; vice-president, George Ortseifen; treasurer, Carl Trick; secretary, P. J. Heveran.

Walkerville Brewing Co., Ltd., Walkerville, Ont.: President and manager, S. A. Griggs; vice-president and assistant manager, E. H. Collins; secretary and treasurer, E. C. Griggs.

Wausau Brewing Co., Wausau, Wis.: President, F. W. Krause; vice-president, August Marquardt; treasurer, Ernst Baumgardt; secretary, John King; superintendent and brewmaster, W. Aug. Steinmann.

West Bend Brewing Co., West Bend, Wis.: Additional director, Henry A. Schmitz.

West End Brewing Co., Utica, N. Y.: Vice-president, Fred J. Roemer; additional directors, Hezekiah Elting, Charles Roemer, and Francis Milton Matt.

Willow Springs Brewing Co., Inc., Omaha, Neb.: President, H. V. Hayward; vice-president, Henry Schroeder; secretary and treasurer, Olive M. Olsen; brewmaster, Henry Schulz.

Yonkers Brewery, Inc., Yonkers, N. Y.: President, Edwin M. Jackson; vice-president, Charles H. Bevers; secretary, Arthur D. Underhill; additional director, Andrew H. Barr; brewmaster, Martin K. Groepler.

BLUE LAWS always provoke men to secret license. They enjoy it hugely when they baffle the meddlesome state. No state laws were able to save great races, such as the Babylonians and the Romans, from annihilation through such vices."—(Rev. Fr. Dwyer, Quincy, Ill.)

Personal Mention.

William Bertschinger, brewmaster of the David Stevenson Brewing Co., New York, celebrated his fiftieth birthday, January 28th, and on the same day his daughter, Mrs. John H. Hirschberg, attained the twenty-fifth year of her age.

George Bruckmann, son of the president of the Bruckmann Brewing Co., William Bruckmann, Cincinnati, Ohio, recently married Miss Bessie Herrold, also of Cincinnati.

August A. Busch, president of the Anheuser-Busch Brewing Association, St. Louis, January 16th subscribed \$1,000 to the Missouri branch of the League to Enforce Peace.

John J. Christopher has been re-elected president of the Brewery Administrative Branch of the Ohio Liberal League, with headquarters at Cincinnati.

George Ehret, New York, and his daughter, the Baroness Anna von Zedlitz, have decided to leave Berlin for Switzerland, as reported by cable from Berlin, February 13th.

George J. Gracie, brewmaster for the Consumers' Brewing Co., Providence, R. I., has recovered from his recent severe illness which had necessitated his undergoing a surgical operation.

Louis Gress, superintendent and brewmaster of the Ebling Brewing Co., New York, who is very popular among the social circles of German-Americans in New York City, celebrated his birthday February 15th.

Louis J. Hauck, president of the John Hauck Brewing Co., Cincinnati, Ohio, and his wife, have announced the engagement to be married of their daughter, Miss Katharine Hauck, to James Robert Gibson, of Mount Vernon, N. Y.

C. W. Henning, after forty years' faithful service to the Pabst Brewing Co., Milwaukee, has tendered his resignation as vice-president of that corporation. He began his career as assistant bookkeeper for the company February 14th, 1877, and went to Kansas City as manager of the company's branch the latter part of 1879. He returned to Milwaukee in 1882 to take the position of general office manager, in which capacity he served until 1892, when he was elected secretary. In 1906 he became vice-president, at the same time assuming the duties of treasurer. Hale and hearty at 75, he now retires from work to enjoy a well earned vacation. The board of directors in accepting Mr. Henning's resignation passed the following resolution:

"Resolved: That the company extend to C. W. Henning its grateful appreciation of his long and faithful services rendered as director and officer of the company, and to express full recognition of his loyalty to promote the welfare and interests of the company, and its sincere regret for his severance from the active management of the company's affairs, and to declare with unanimity the company's felicitations for a long life of health, happiness and prosperity well deserved."

John G. F. Hieber of Spokane, Wash., former head of the Inland Brewing & Malting Co., and at present a stockholder in the Inland Products Co., Spokane, is among the Americans now in Germany. Word from Congressman Dill at Washington, D. C., states that Mr. Hieber's name was handed to him among others. Mr. Hieber left Spokane four months ago for New York and sailed shortly thereafter for Germany. It is not known in what part of Germany he is living.

E. Clemens Horst, the leading hop grower of California, has suggested the following plan for the nation-wide fight against the fallacy of Prohibition: "The brewers should agree that the present number of saloons in every given district should not be increased from what it now is, or

that there should not be more saloons than at the rate of one to a given number of people. If a saloonkeeper misconducts his establishment his license should be taken away and forever canceled, and no new license issued in its stead. This means that as fast as saloons are improperly run the number of saloons in a given district is automatically and permanently reduced. There ought be started either or all of Federal, State and local commissions to tabulate and publish results of investigations as to what particular class of drink was responsible in all cases where evil results are blamed to drink. If such commissions are composed of high-class men, prominent in the various walks of life and particularly of men that are not connected with brewers or allied interests, and also not stubborn prohibitionists, then the reports of such commissions would carry great weight with the public. There can be no doubt but what the results of a disinterested investigation will show that there are no bad results from the use of beer, and that beer gets the blame for whatever bad results there are from heavy liquors. To clear up this situation would, in my opinion, result in beer being excluded from prohibition laws, but the matter would have to be taken up on these lines before it is too late. The brewers being partners with the distillers in the prohibition elections naturally makes the brewers carry equal blame with the distillers. This partnership should be ended and it can not be ended too soon if the brewers do not wish to be closed up by national prohibition."

Bernard T. Kearns, president of the Central Brewing Co., New York, has gone South, to stay until the winter is over.

Martin Kottler, brewmaster of the Chartiers Valley Branch of the Independent Brewing Co., Pittsburgh, has been bereaved by the death of a promising daughter, who departed this life at the age of twenty-one years.

Albert Lieber, president of the Indianapolis Brewing Co., Indianapolis, is resting from arduous labors in Cuba, from where he is expected to return early in the Spring.

Henry J. Luebbert, brewmaster of the Eagle Brewing Co., Utica, N. Y., and his wife celebrated the fifty-first anniversary of their wedding day on Friday, February 9th.

Julius Liebmann, president of the S. Liebmann's Sons Brewing Co., Brooklyn, N. Y., was the principal speaker at a debate before the Civic Club, February 2nd, the subject under discussion being, "Shall New York Go Dry?" Among other telling sentences convincingly uttered by Mr. Liebmann were these: "I oppose prohibition and so do the States that have tried it. Prohibitory laws which in the past, after an exhaustive test and trial, were found to be worse than ineffective in Massachusetts, Rhode Island, Connecticut, New Hampshire and Vermont, and other States had to be expunged from the statute books because they led to evils far greater and more destructive than those they were designed to remedy, cannot prove other than fruitful of evil in our time. We brewers maintain that prohibition does effectively prohibit one thing—the brewing of beer. That answers the question why we brewers oppose prohibition. Prohibition does not prohibit the drinking of alcoholic beverages. Until now people have their choice in the selection of the kind of alcoholic drinks—fermented beverages, like beer and wine, or distilled liquors. Prohibitory laws abolish their choice, for beer, such as the American people have been accustomed to, can only be produced in a well-equipped brewery. Anyone can distill liquor in his own cellar. National prohibition in the United States would mean that people who want any alcoholic beverages could only get whiskey, and only moonshine

whiskey at that. The whole country would be placed on a whiskey basis. The Prohibitionists are not pressing to get State prohibition in New York State right now. They tell you very frankly, as Mr. Anderson did last year, that they do not think New York State or New York City is ready for absolute prohibition. The demand, 'let the people vote on the license question,' is only in favor with the Prohibitionists in so far as it helps to remove obstacles to county option and to State prohibition. The anti-saloon people want to go one step at a time, and the extension of local option is only a stepping stone to State prohibition, and after State-wide prohibition has been obtained local option is opposed by the same people, who clamored for it."

Louis F. Neuweiler, head of Louis F. Neuweiler & Sons, Allentown, Pa., and his wife, have announced the marriage of their daughter, Miss Anna Barbara Neuweiler, to Mr. John K. Detwiller, of Easton, Pa. The wedding ceremony was performed February 8th, at the Hamilton Grange Church, New York City, by the Rev. Paul S. Leinbach.

Thomas F. McNierney, vice-president of the Aetna Brewing Co., Hartford, Conn., who recently had to undergo a serious operation at St. Francis hospital, Hartford, has fairly recovered from his ailment.

Rudolph J. Schaefer, president of the F. & M. Schaefer Brewing Co., New York and Brooklyn, celebrated his fifty-fourth birthday on Wednesday, February 21st. Mr. Schaefer was born in New York in 1863, the son of Maximilian and Ernestine Schaefer, née Mathesius. Having been apprenticed to the trade in his father's brewery, founded by the elder Schaefer, in partnership with his brother, in 1842, Mr. Schaefer became not only a practical and scientific brewer, but also an eminent business man and financier who developed the Schaefer brewery into one of the foremost and most successful in the United States. Since October 15th, 1890, Mr. Schaefer is married to Frederica Villette Beck, and they have three children, F. M. Emile, Edna Eloise, and Rudolph J. Schaefer, Jr.

Col. Jacob Ruppert, New York, has been awarded eleven prizes for St. Bernard dogs, exhibited by him at the Westminster Kennel Club's Show, held in New York City last month.

Charles A. Spaeth, assistant brewmaster of the Deppen Brewing Co., Reading, Pa., and his young wife, the former Miss Sadie Horan, celebrated their cotton wedding, January 25th.

Louis Suess has resigned as brewmaster for the National Brewing Co., Chicago, and his son, George P. Suess, succeeded him to the position. Mr. Suess is also treasurer of the Master Brewers' Association of the United States, an office which he has held for many years.

Gustav H. L. Varrelmann, superintendent of the Compañía Cervecería Internacional, Havana, Cuba, who recently visited the United States to purchase new equipment for the plant of his company, has returned to his post of duty.

Hon. Charles J. Vopicka, founder and, for many years, president of the Atlas Brewing Co., Chicago, who had to leave his post as United States Minister for the Balkan States, in Bucharest, arrived in Copenhagen, Denmark, February 17th, and he is now on his way to this country, his ship not to touch Kirkwall, according to arrangements made by the British government.

Sam S. Brewer has been elected secretary of the New York State Brewers' Association, to succeed the late Charles J. Warner, and also of the Brewers' Board of Trade.

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. Owing to the serious illness of William J. Lemp, president of the Wm. J. Lemp Brewing Co., St. Louis, national president Wm. F. Carthaus could not keep his engagements with several Districts of the Master Brewers' Association of the United States to visit and address their members, and National Secretary Carl A. Nowak had to act in President Carthaus's place.

District Meetings.

ALBANY. The Albany District has made suggestions relating to the saving of money in preparing the publications of the National Association, the German language to be eliminated; the appropriating of money for entertainments at the annual conventions to be abandoned. Arrangements were made for a special meeting to be held at Keeler's Hotel, Albany, when National President Carthaus is expected to be present. Peter Stammberger, brewmaster for the West End Brewing Co., Utica, N. Y., has been admitted to membership.

BALTIMORE. The Baltimore District has now sixteen enrolled members. The officers were re-elected as follows: President, George Neumeister; vice-president, John Kresslein; treasurer, Carl Brohmeyer; secretary, Carl Wanke; directors, John Brehm, Franz Schleining, and Theodore Wienert; delegate to the National Board, Carl Wanke; delegate to the Citizens' Society, Theodore Wienert. The annual dues have been raised from \$12 to \$18 and to the secretary an annual salary of \$50 has been voted.

CLEVELAND. The newly elected officers of the Cleveland District are: President, J. F. Haller; Vice-President, J. Pavlick; Secretary and Treasurer, Alf. Graf, 1903 W. 28 St., Cleveland, O.; Director, Gotthold Kuebler; Delegate, National Board of Directory, Alf. Graf; Delegate, German School Society, L. Lezius; Delegate, Am. Stadt-Verband, A. Graf.

DAYTON. The Dayton District protests against the recommendations of the Finance Committee and is entirely in accord with the views of the Philadelphia District. The officers were reelected for another year: President, John Haas; Vice-President, Robt. Loewenthal; Treasurer, Christ Lins; Trustees: Jul. Bossart, Con. Rebman; A. Haas, Secretary. George Wattles, malt master for the Piqua Malt Co., Piqua, Ohio, has been admitted to membership.

DETROIT. The Detroit District has endorsed the views of colleagues Maegerlein and Silberschmidt in regard to the management of the national publications. For the benefit of war orphans the sum of \$50 has been appropriated. The annual ball will not be held this year.

NEW ORLEANS. The members of the New Orleans District have commenced making preparations for this year's national convention to be held in New Orleans. They also expect president W. F. Carthaus to visit them.

NEW YORK. The District New York held its regular meeting on Saturday, February 3rd. In the absence of the President, Vice-president Max Papai presided. The advice from Secretary Nowak, that President Carthaus is compelled to postpone his scheduled trip to the East, was received and arrangements made for his reception at the March meeting cancelled. Colleague Fred Glatz of the Obermeyer & Liebmann Brewery, 67 Bremen St., Brooklyn, N. Y., an "Individual" member, has applied for transfer to the New York District. Colleague Geo. Gress, chairman of the Banquet Committee, reported everything in readiness for this festival to be held Feb. 10th. The affair was a grand success, both socially and financially.

JOHN KOENIG, Secretary.

PITTSBURGH. The Pittsburgh District favors the German language reports in the "Communications" being continued. John Geisler, brewmaster for the Hill Top Brewery, Mt. Oliver, Pa., was admitted to membership and the resignation of Colleague August Schneider, of Spangler, Pa., was accepted.

ST. LOUIS. The St. Louis District has reconsidered its intention of making arrangements for this year's annual ball. The ball will not be held.

SAN FRANCISCO. The San Francisco District has canceled its arrangements for the reception of National President Wm. F. Carthaus, whom the members expect to visit them shortly before the national convention to be held in New Orleans. Colleague Al. Hieronimus has been added to the Technical Committee.

Ohio Brewers' Association.

The annual convention of the Ohio Brewer's Association, held at its headquarters, 22 Garfield Place, Cincinnati, Ohio, January 24th to 25th, was attended by sixty-six delegates from every brewing center in Ohio.

President Adam Schantz, of Dayton, conducted the proceedings, which, after the transaction of the regular routine business and a protracted discussion of the trade's interests in Ohio and other States, resulted in the adoption of the subjoined resolutions:

"Be it resolved by the brewers of Ohio, in convention assembled. That we exert every lawful and honorable means to defeat the alleged prohibition amendment sought to be foisted upon the people of Ohio by that self-appointed, self-perpetuated hierarchy, the leaders of the Anti-Saloon League. This amendment has already been styled the 'bootleggers' amendment,' for the well-known reason that the Anti-Saloon League, in furthering this amendment, has as its allies the bootleggers, the speak-easies and the blind tigers of this state.

"Be it further resolved, That we bring to the attention of the electors of this state the conditions surrounding our industry, as well as the motives and designs of those attacking it, which conditions and motives we consider to be as follows:

"1. The proposed amendment means confiscation of property without compensation, and, if adopted, will be the entering wedge for the confiscation of the property of other industries in this state.

"2. That by permitting the importation of liquor into this state, and, at the same time, abolishing our industry, the amendment works a discrimination against the thousands of wage earners in this and other legitimate industries of this state and in favor of the industries and workingmen of other states.

"3. That the Anti-Saloon League, while inveighing against the liberals, of this state for opposing officeholders who were using the influence and power of their political offices in the interest of that league, through their paid agitators and orators, now appeal to the masses to get control of all the political parties. In this way they propose to place into political office the servants of the Anti-Saloon League, who, while serving that league, will draw their salaries from the Treasury of the state.

"4. In the employment of the Anti-Saloon League of repudiated politicians, ex-Governors, ex-Congressmen, ex-ministers, ex-prize fighters and ex-convicts in the advocacy of what they style a moral issue, the Anti-Saloon League is offering a deliberate insult to the electorate of this state. The motive of the leaders of the Anti-Saloon League is to

bring about a condition which will, in their judgment, make further legislation necessary, and will thus perpetuate them in their comfortable and well-paid jobs.

"We reaffirm our faith and confidence in the Ohio license law and urge its strict enforcement. No law can serve the purposes it sets out to serve when in the hands of its enemies. Its enforcement must be in the hands of administrative officers who are in sympathy with its purposes."

The Executive Board was re-elected as follows: Adam Schantz, President, Dayton; S. Fishel, Vice President, Cleveland; William F. Hess, Secretary-treasurer; G. F. Burkhardt, Akren; Paul Esselborn, Portsmouth; Louis J. Hauck, Cincinnati; John Unverzagt, Columbus; John F. Weiss, Canton.

It was announced that in the event of a "wet" and "dry" contest, L. H. Gibson, Cincinnati, is to be campaign manager.

An incident of the convention was the presentation of a gold watch to Carl Burger, who has been active in the Ohio Home Rule Association four years. Mr. Burger has resigned and will enter business in Chicago.

Internal Revenue Decisions.

Shipments of Alcoholic Liquors:—David A. Gates, Acting Commissioner of Internal Revenue, has formulated the subjoined "Instruction to revenue officers in regard to shipment of alcoholic liquors, section 240 of the Criminal Code," addressed to internal-revenue agents and others concerned:

Reports now being received covering shipments into "dry" territory indicate that there is some misunderstanding relative to the duties of internal-revenue officers with respect to shipments in violation of section 240 of the Criminal Code.

The said section is not part of the United States internal-revenue laws, though it is closely akin in nature and purpose to section 3449, Revised Statutes, which is internal-revenue legislation.

The two sections should be compared by revenue officers in order that the scope of each and the difference between them may be clearly distinguished. It will be seen that the shipment of alcoholic liquors without any description whatever is not a violation of section 3449, it being necessary in order to come within the provisions of this section that alcoholic liquors shall be erroneously described. However, it is not necessary that the erroneous description shall be on the packages or containers; if it is in the bill of lading it is sufficient. Neither is it necessary that the shipment shall be to a point outside of the State, Territory etc., where it originated.

On the other hand, section 240 of the Criminal Code is not violated unless the shipment is from one State, etc., to another, but it is not necessary that there shall be an erroneous description. A mere failure to show on the outside covering of a package the name of the consignee or the nature or quantity of the contents is sufficient, while an erroneous description in a bill of lading does not constitute a violation. Therefore a shipment of liquor as baggage, for instance, with no description whatever of the contents, is not in violation of section 3449, and, unless the shipment is to another State or Territory, etc., neither is there any violation of section 240 of the Criminal Code, although an interstate shipment of such character falls within the provisions of the latter section.

It will, of course, frequently happen that in seeking to discover violation of section 3449, Revised Statutes, some shipments will be found by revenue officers involving viola-

tions of both that section and section 240 of the Criminal Code, and others where section 240 of the Criminal Code only has been violated.

Where a shipment is discovered by internal-revenue officers involving violations of both sections, seizure should be made, etc., in the same manner as though section 3449, Revised Statutes, only was involved, but, of course, all the facts should be disclosed in any report submitted either to this office, collectors of internal revenue, or United States attorneys.

However, when a case is discovered involving only section 240 of the Criminal Code, revenue officers should distinguish between their functions as such on the one hand and as private citizens on the other. (See in this connection T. D. 1610.) It should be realized that section 240 of the Criminal Code falls not within the jurisdiction of the Internal-Revenue Service, but within that of the Department of Justice and that it is the duty of the officers of such latter departments, rather than that of revenue officers, to see that the said section is enforced. A revenue officer who attempts to perform the official functions of officers of the Department of Justice exceeds his authority.

It is not intended, of course, that revenue officers should ignore shipments involving violations of section 240 of the Criminal Code only, but they should act in regard thereto as citizens rather than in their capacity as revenue officers. It has been held that any person is authorized to make seizure where section 240 has been violated, and revenue officers should make detention accordingly. However, such cases should be immediately brought to the attention of the appropriate officers of the Department of Justice, who only have the right to officially adopt the seizures for the Government.

Baggage will very seldom come within the purview of the internal-revenue laws, and investigations in regard thereto should not be originated by revenue officers except where affirmative evidence is received that such laws have actually in some manner been violated. In other cases, parties furnishing information relative to baggage or the information itself should be referred to the officers of the Department of Justice for necessary action.

There is no legal duty of revenue officers to report cases involving violation of section 240 of the Criminal Code only to this office or to collectors of internal revenue. Certainly reports of seizure on Form 117 are quite out of order. If reports of such cases are made at all, they should only be for the purpose of furnishing general information showing the activities of field officers, etc. Such cases should not be reported in expectation of action by this office or collectors.

While it is by no means intended to discourage cooperation between officers of the various departments or to create a spirit of indifference among revenue officers with regard to matters pertaining to other departments of the Government, it is desired that internal-revenue officers will realize the necessity of the various laws and sections thereof being administered by the officers whose legal duty it is to do so, and that attempts by officers of one branch of the Government to perform the functions of others tend to produce friction and confusion.

DAVID A. GATES,
Acting Commissioner of Internal Revenue.

"PREACH TEMPERANCE. Punish the drunkard. Punish the adulterator of pure spirits. But respect the rights and opinions of those who do not agree with you."—(Lord Bramwell.)

Obituary.

Simon Fishel, president of the Cleveland and Sandusky Brewing Co., Cleveland, who was also vice-president of the Ohio Brewers' Association, and a member of the Board of Trustees of the United States Brewers' Association, died in Cleveland, January 31st, a victim of pneumonia. Mr. Fishel was born in Bohemia, in December, 1845, and came to the United States when a boy. His first position in America was with the old Bohemian Brewing Co. This later was consolidated with several other Cleveland companies and the Cleveland and Sandusky Company formed with W. J. Gehring as president. In 1909, Mr. Fishel was chosen president of the company. A year ago he planned to resign, but the call of the business life was too great and he continued as president of the company. His survivors are his widow and five children, Theodore, Morris, Oscar, Sophie and Mrs. H. H. Ensheimer, all living in Cleveland.

Peter Hauck, founder of the brewery owned by Peter Hauck & Co., Harrison, N. J., died at his home, 518 Harrison ave., Harrison, February 21st, aged seventy-nine years. He was a native of Klein-Muenster, Bavaria, born there June 9th, 1838, and came to the United States with his parents in 1844, going to school in New York City where his father, Adam Hauck, had built a brewery on Wooster street. When he had been apprenticed to the trade the family moved to Harrison. That was in 1869. A new brewery was erected, the partner in the business being Frederick Kaufmann. The latter withdrew and Peter Hauck continued to manage the brewery, which was destroyed by fire in 1879. Then the present large plant was built in Harrison Avenue. The deceased was ever active in politics, and in 1871 he was elected a member of the Harrison Town Council, subsequently serving in the County Council. He also was made a member of the Passaic-Valley Sewer Commission, and a director of several banking institutions, also a trustee of the Harrison Public Library. His widow, with whom Mr. Hauck had celebrated his golden wedding in 1904, one son, three daughters and several grandchildren and great-grandchildren survive him.

Albert Hergenrother, brewmaster, who for more than thirteen years rendered faithful and loyal service to the Jos. Laurer Brewing Co., Binghamton, N. Y., died at his home, 19 Davis street, Binghamton, January 17th. The officers of the company say that "his efficiency and splendid character shall ever be remembered by us and his numerous friends here, and throughout the allied trade with whom he came in contact." He was born in Kleinwaldstadt, Bavaria, February 15th, 1870, and came to the United States with his parents when a child. Having been apprenticed to the trade at the Bay View Brewery, Baltimore, Md., he was employed in various plants holding his position until death claimed him. His survivors are his widow, three sisters and two brothers.

Jacob Mohl, who was brewmaster for Obermeyer & Liebmann, Brooklyn, for twelve years and then resigned on account of ill health, died at his home in Mountville, Pa., February 19th. He was born in Wurttemberg, Germany, in 1863, and came to the United States when quite young. He was a member of the Master Brewers' Association of the United States.

John B. Moritz, secretary-treasurer and general manager of the Bay City Brewing Co., Bay City, Mich., died at his home there, January 28th, at the age of sixty-one years. Mr. Moritz was born in Port Washington, Wis., and came to Milwaukee with his parents when a boy.

He left Milwaukee shortly after his marriage in 1885 to make his home in Bay City. He had been connected with the brewery for many years. Besides his widow, he is survived by two sons, Adolphus and Louis, and five sisters and three brothers.

George W. Schimminger, of Wilhelm, Schimminger & Ramsey, proprietors of the Altoona Brewery, Altoona, Pa., died at his home in that city, January 24th. He was born in Philadelphia, fifty-nine years ago, and entered the Schimminger firm in 1902.

Clara Stifel, eldest daughter of the late Charles G. Stifel, and a sister of Otto F. Stifel, president of the Otto F. Stifel's Union Brewing Co., St. Louis, died in that city February 3rd, from heart trouble, having been a sufferer for a long time.

Joseph Tippmann, Sr., founder of the plant now owned by the Yough Brewing Co., Connellsville, Pa., of which he was secretary-treasurer until a few years ago, when he retired, died in Connellsville February 20th. He was born in Carlsbad, Germany, September 8th, 1845, and in 1866 came to the United States, settling at Beatty Station, Westmoreland county. There he entered the employ of John Hogl, a brewer. Soon afterward he moved to Greensburg, continuing in Mr. Hogl's employ until 1885, when he moved to Connellsville, where he built and operated the first brewery in Fayette county. This was known as the Tippman Brewery, bearing that name until it was purchased by the present owners. On April 6th, 1869, he married Mary Hogl, daughter of John Hogl, his former employer, and Jennie Hogl, of Beatty Station. Their children are: John, of Wheeling, W. Va.; Joseph G., of Connellsville; Mrs. W. E. Finn, Baltimore, Md.; Mrs. F. Moore, Gary, Ind.; Mrs. William Logan, Connellsville; Agnes, Harry and Eugene, at home. In addition to his children he is survived by 15 grandchildren, one brother, Matthew Tippman, and one sister, Miss Lena Suchie.

John E. Weyand, Sr., one of the founders of the Weyand and Jung Brewery, now owned by the Jung Brewing Co., Cincinnati, died at his home in Bellevue, Ky., January 22nd, at the age of seventy-one years. When he withdrew from the partnership with his friend Jung, Mr. Weyand organized the Banner Brewing Co. The deceased was active in the social and political affairs of Cincinnati, and for several years he represented the old Twenty-third Ward in the common council. From 1881 to 1884 he was chairman of the Citizens' Flood Relief Committee. Two sons survive him, one a resident of Boston, and the other living in Baltimore.

Deaths in Foreign Countries.

Col. William Allison, partner in the Monkwearmouth Brewery, Sunderland, and High Brewery, North Shields, England, aged 90.

Wilfred Bailey, of Bass, Ratcliff & Gretton, Ltd., Burton-on-Trent, aged 35.

Henry Bilson Blandy, former head of Blandy, Hawkins & Co., Castle Brewery, Reading, England, aged 88.

John Edwin Crisp, head of John Crisp & Son, Maltsters, Beccles, England, aged 77.

J. Hopcraft, formerly partner in Hopcraft & Norris, brewers, Brackley, England.

Honoré Outters, proprietor of brewery at Bergues, Department Nord, France, aged 62.

W. I. Rowell, head of S. S. Rogers & Co., Stansted Brewery, Essex, England.

Rowland Taylor, formerly of Danill & Sons' Breweries, Ltd., Colchester and West Bergholt, England, aged 83.

Revenue Decision.

Drawback on Beer.—Assistant Secretary of the Treasury Andrew J. Peters on February 10th decided in favor of drawback being allowed on pasteurized beer bottled by Fred. Hollender & Co., New York, from beer imported in bulk for their own account or for the account of Schaap, Brandjes & Co., Hoboken, N. J., adding that "A record shall be kept, showing, in the case of each lot of pasteurized bottled beer produced for exportation with benefit of drawback, the lot number and date of manufacture thereof, the number of bottles of pasteurized bottled beer of each size produced, the quantity and identity of imported beer used, and the quantity and value of the waste resulting. A sworn abstract from such record shall be filed with the drawback entry. The allowance shall not exceed the quantity of imported beer used in producing the pasteurized bottled beer exported, as shown by the record prescribed above."

One of the principal reasons why Prohibition will really never prohibit consists in that the Prohibition agitators will not permit it to do so. As soon as Prohibition were to become actually prohibitory, the trade of the agitator would be gone and he would be compelled to perform honest labor for his living. And that he is not willing to do.

THE OHIO LIBERAL LEAGUE has elected Louis Rinkenberg, Cincinnati, president; Nicholas Dutle, Dayton, secretary; Fred Fortlage, Cleveland, vice-president; Fred. Felt, Toledo, treasurer. Executive board, B. J. Stagge, Norwood; M. J. Lynsky, Bellaire; T. T. Donevan, Columbus; Frank J. Elk, Chillicothe; H. D. Smart, Gallion; Joseph Curran, Youngstown; Harry C. Lowther, Akron.

BRITISH-AMERICAN BREWERIES. The City of Chicago Brewing & Malting Co., Ltd., during the year ended Sept. 30 increased their sales by 14,236 barrels. The bottled beer business has developed and all indications point to rapid growth in this part of the business, with probable continued decline in the keg business. A preference dividend is in sight.

VALUABLE BUSINESS DIRECTORY. The classified Business Directory of the Manufacturers and Dealers League of the City and State of New York, 1916-1917, has just been published. Its copious information upon all kinds of trade and commerce makes it invaluable for everybody engaged in the brewing industry and its affiliated trades. But no business man can get his address into that Directory without joining the League, thus protecting himself and greatly advancing his own interests. Join the League!

The NATIONAL RETAIL LIQUOR DEALERS' ASSOCIATION OF AMERICA, at its 24th annual convention held last month in Washington, D. C., elected the following officers: President, William Seckel, of Ohio; 1st Vice-President, P. H. Keefe, Pittsburgh; 2nd Vice-President, George T. Carroll, Elizabeth, N. J.; Secretary, Robert J. Halle, Chicago; Treasurer, Thomas C. Hayes, Newark, N. J. Congressional Committee: William D. Barry, Washington, D. C., Chairman; Frank P. Quinn, New Haven, Conn.; Jas J. Kane, Wilmington, Del.; D. J. O'Connell, Washington, D. C.; Ernest Kunde, Chicago; Ed. J. Kaindl, Chicago; John C. Heinlein, Indianapolis, Ind.; George P. Gahan, Grand Rapids, Mich.; J. P. Pansa, St. Louis; Ed. F. Duffy, New Bedford, Mass.; M. J. Quinn, New York; Louis Rinkenberg, Cincinnati; Thomas J. O'Conner, Erie, Pa.; Neil Bonner, Philadelphia; John F. Good, Providence, R. I.; Jerry Gahlman, Watertown, Wis.

Who Pays? A Glance at the Other Side of the Prohibition Question.

By ALFRED T. MARKS.

John Stuart Mill, in one of his writings on political economy, says: "That governmental attribute or function which, of itself an essential and integral part of government, is eliminated must either leave a hiatus or be superseded by that which adequately takes its place."

It would be illuminating at this stage of development of the prohibition fallacy to know what its promoters propose to offer as supplying the revenue necessary to the conduct of local, State and National government which is lost by the curtailment of the liquor traffic such as prohibition aims to accomplish.

This subject has been touched upon frequently, but never, as far as the writer is aware, has the remedy been submitted or even suggested. True it is that some of the prohibition stump speakers have claimed that once prohibition comes the people will be able to greatly increase their savings, they will have more earning power, their indebtedness will decrease, and by reason of all these radiant theories they will be better able (and supposedly abundantly willing) to meet any deficiency in revenues suffered by State and National government. The above statement was actually heard by the writer.

Just here—that we may get the correct premises on which to base what we are about to say—it should be noted that these assertions are not true. According to United States Census Bureau reports, savings bank deposits in the State of Kansas, in the past ten years, have decreased nearly 30 per cent., the per capita wealth has decreased 19 per cent., and the per capita indebtedness has increased 26 per cent. In Maine an even worse showing is made, for there the savings bank deposits are fully one-third less in the aggregate than they were ten years ago, and noticeably decreasing; the per capita wealth is 29 per cent. less than it was ten years ago, and the per capita indebtedness is 18 per cent. more than it was a decade ago. Besides, there has been a decrease of nearly 9 per cent. in population in Maine in the past ten years—a rather striking commentary on the much-vaunted "prohibition prosperity."

These are United States government figures, and prove that in these States where prohibition has been on the statute books for many years, and has long passed the experimental stage, the oft-repeated claims of the prohibitionists are not borne out by the facts—in fact, just the reverse is true.

Encouraged by the apparent victories of prohibition in the past election, a determined effort, so we are told, is to be made at this session of Congress to force through an amendment to the constitution prohibiting the manufacture, sale, importation or exportation of liquors.

We have no kind of doubt but that such legislation will be attempted—nor do we doubt that it will again meet with summary defeat, just as was the case in the last session of Congress. But the question of government revenue emphatically thrusts itself into the prohibition issue, and must of necessity be threshed out to a satisfactory conclusion before the country will stand for the consideration of the issue.

Practically one-third of the net revenue of the United States government is derived from the tax and duty on liquors! The internal revenue from liquors amounts to about \$250,000,000, and the import duties on liquors amount to over \$20,000,000.

If the liquor tax is to be abolished, we want to know what will take its place. Already the income tax has been doubled, other taxes have been imposed and bond issues have been

authorized, and the treasury is empty. The demands for government appropriations are more insistent than ever.

Getting down to cases: the State of Michigan went dry. The internal revenue on liquor which the government has derived from that State is to be cut off. Will Michigan accordingly cease its demands for governmental appropriations? We rather think not. Michigan has received more money for river and harbor improvements than has any other State in the Union. It has received more money than the whole Pacific Coast and Alaska.

Some other States are shutting down on the sources of government revenue from liquors, without providing or thinking of any substitute. One western Senator boasted to his constituents just before the past election that he had obtained \$3,500,000 in appropriations, while his State had paid only about \$350,000 in internal revenue.

Where will this process end? There may be some wisdom in divorcing the government from the liquor traffic, but it would surely be unwise and disastrous to do so without also providing other and sufficient ways of maintaining the government. And this is a phase of the question which is apparently left to settle itself.

If the States would forego their demands for appropriations, and the government expense be reduced by the amount lost in the sacrifice of liquor traffic revenue, a partial solution might be found.

But who expects Michigan to cease its demands for river and harbor improvements? What State will be the first to renounce its quota for good roads? Which member of Congress will be the first to declare that the farmers in his district must go without the benefits of agricultural appropriations? What patriot will stand up in the House of Representatives and assert that the demand for public buildings in his district is nothing but a desire for graft?

Briefly, here's the point: The States which contribute to the revenue of the government through the tax on liquors are almost absolutely certain to enter a fierce protest against the distribution of government money to States which refuse to contribute.

Then something is going to happen!

"WHEN MEN AND WOMEN are really governed by the principles of morality, when their own consciences restrain them, when the strong respect the weak, when those who have not succumbed to temptation hold out aid and comfort to those who have, the reformation of the world will have been begun. The law may offer a palliative for social diseases; it cannot cure them. And whenever it invades the domain of morals it does more harm than good."—("Public Ledger.")

THE NEW INCENTIVE. "Men who drink now merely from habit will find a new thrill in it when it is forbidden. Something that is as dull as duty to them will suddenly become a delight once more through being surrounded with difficulties and hazards. Prohibition will bind with a new warp of color the drab woof of alcoholism. Especially to boys and young men who are not now drinkers will liquor appeal when once it has been outlawed. The adolescent male of the human species dwells amidst perpetual mental and spiritual excitements, not able from moment to moment to determine whether he would rather be a picturesque criminal or a religious hero. The thing he does not want to be is the thing which he perceives the majority of his commonplace elders, whose instinct for protective coloring has made them neutral and negative, have become."—(Don Marquis, in N. Y. "Evening Sun.")

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

FIRM CHANGES

- CALIFORNIA—Petaluma United States Brewery (Wm. Miller & Bert C. Sousa), succeeds United States Brewery. (Geo. J. Griess, Adm'r of Geo. Griess.)
- PENNSYLVANIA—Madera Amos Caushun Hensal, succeeds Edward Lutzen Binder.
- TEXAS—Galveston Galveston Brewing Association, succeeds Galveston Brewing Co.

BREWERIES CLOSED

SOUTH CAROLINA—Charleston. The Germania Brewing Co.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1917 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, also in all other American countries where breweries exist, alphabetically arranged, with postal addresses, corrected to January 15, 1917.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries, firm changes and breweries closed recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

FIRES. The storage depot at Rockford, Ill., of the Valentine Blatz Brewing Co., Milwaukee, was destroyed by fire January 15th.

In the plant of the Boylston brewery, owned by Haffenreffer & Co., Boston, Mass., fire broke out during the night of January 20th, causing a damage of about \$150,000.

The Davenport, Iowa, storage depot of the Des Moines Brewing Co., Des Moines, Iowa, was destroyed by fire January 16th; damage, about \$15,000.

Part of the plant of the Willow Springs Brewing Co., Inc., Omaha, Neb., was consumed by fire originating in a pitch kettle; loss nearly \$100,000.

About \$1,500 damage was done by fire, February 15th, in the plant of the Badger Brewing Co., Black River Falls, Wis.

Fire damage was done in the bottling plant of the Bierbauer Brewing Co., Inc., Canajoharie, N. Y., February 9th; loss trifling.

There was a fire in the bottling plant of the Goebel Brewing Co., Detroit, Mich., February 10th; loss about \$300.

—Walters Trinidad Brewing Co., Port of Spain, Trinidad, W. I., have dissolved and are out of business.

—Beer prices have also been increased last month at Providence, R. I.

—M. Stallmaier, of Cincinnati, has purchased the plant of the New South Brewery & Ice Co., at Middlesborough, Ky.

—The Fond du Lac Malt & Grain Co., Fond du Lac, Wis., have notified us that they have gone out of business and sold their real estate.

—The National Brewing Co., Stevens Point, Wis., have closed their plant, preparatory to converting it for other manufacturing purposes.

—The brewers of Rochester, N. Y., have notified their customers that prices have been raised to \$7.50 net per barrel. The last recorded price in Rochester was \$6.25 for ale and \$7 for lager beer.

—The business of the Kennedy & Murphy Brewing & Malting Co., Troy, N. Y., has been purchased by the Citizens Brewing Corporation, Albany, N. Y., the deal having become effective February 8th.

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,213,307. Bottle-washing machine. Walter Wachs and Rockwell L. Gallup, Chicago.
- 1,213,308. Bottle-conveyer. Walter Wachs and Rockwell L. Gallup, Chicago.
- 1,213,381. Mash and strainer tank machine. Andreas R. Keller, Chicago.
- 1,213,445. Bottle-cleaning device. Frank C. Altpeter, Chicago.
- 1,213,545. Method of extracting and modifying proteins or albuminous matter. Charles C. Ringler and John Beerhalter, Duluth, Minn., assignors to 33.33 per cent. of Fitger Brewing Co., Duluth, Minn.
- 1,213,926. Facing material for cork or other disks for bottle caps. Charles E. McManus, New York.
- 1,214,160. Maltose and process of making the same. Fred J. Hemig, Chicago, assignor to Crown Maltose Co., Chicago.
- 1,214,278. Bottle-washing machine. Ira Cole, Delphos, Ohio, assignor to The Rapid Bottle Washer Co., Delphos, Ohio.
- 1,214,504. Machine for making bottle seals; Alfred H. Braecklein, Baltimore, Md., assignor to the Sanitary Seal Mfg. Co., Baltimore, Md.
- 1,214,518. Process of preparing beverages. George Defrew, Newton, Mass.
- 1,214,729. Process of producing beverages. Max Wallerstein and Leo Wallerstein, New York.
- 1,214,730. Extract having the flavor and aroma of malt and process of producing the same. Max Wallerstein and Leo Wallerstein, New York.
- 1,215,561. Pasteurizer. Charles H. Loew, Lakewood, Ohio.
- 1,215,736. Closure for bottles, jars, etc. George Emil Stahl, Jersey City, N. J.
- 1,215,812. Bottle-capper. Jacob J. Illian, Milwaukee.
- 1,215,864. Apparatus for carbonating beer, ale, etc. Otto P. Rindelhardt, London, Ont., Canada.
- 1,216,036. Bottle filling and capping machine. Erastus E. Winckley, Lynn, Mass.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

1915.

- 17,292. Scott. Casks and the like.
- 12,441. Kuhn. Manufacture of temperature stout.
- 17,383. Nicolson, and Distillers Co. Mash tuns.

1916.

- 102,362. T. S. Chapman. Apparatus for raising and forcing liquids by means of compressed air.
- 102,452. W. Scott. Casks and the like.
- 102,458. F. Evans. Bottle caps.
- 102,648. E. A. Matthias. Stoppering devices for bottles and the like.

—The Claus Wreden Brewing Co., Inc., San Francisco, Cal., have decided to retire from active business.

—On February 6th, the Gottfried Krueger Association, Newark, N. J., celebrated the 25th anniversary of its existence. It now has 482 members.

—Inland Products Co., is the new name of the former Inland Brewing and Malting Co., Spokane, Washington, and its plant has been converted into a vinegar factory.

—The Ebling Brewing Co. New York, have purchased several lots adjoining their property at the northeast corner of Eagle Avenue and 156th Street, New York City.

—August, Charles and Ernest Zoller, of the Independent Malting Co., Davenport, Iowa, have announced that their plant is to be converted into an automobile truck factory.

—The management of the Henderson Brewing Co., Henderson, Ky., have donated the equipment of a room to the new tuberculosis sanitarium recently established at Henderson.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.

Lifestaff

Ser. No. 93,872. Hemrich Bros. Brewing Co., Seattle, Wash. Filed March 25, 1916.

Particular description of goods.—A Non-Alcoholic Beverage Made from Selected Grain and Sold as a Soft Drink.

Claims use since January 1, 1916.

AMBERLIN

Ser. No. 98,978. Gipps Brewing Co., Peoria, Ill. Filed October 30, 1916.

Particular description of goods.—Beer.

Claims use since June 5, 1888.

Tempura

Ser. No. 99,465. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed November 22, 1916.

Particular description of goods.—A Cereal Food Beverage Sold as a Soft Drink.

Claims use since July 20, 1916.

The following Trade Marks have been definitely Registered:

115,080. Beer. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed October 7, 1916. Serial No. 98,494. Published November 21, 1916. Registration granted, January 23rd, 1917.

115,081. Beer. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed October 7, 1916. Serial No. 98,495. Published November 21, 1916. Registration granted, January 23rd, 1917.

115,183. Non-alcoholic cereal beverage, put up in bottles and in kegs. Theo. Hamm Brewing Company, St. Paul, Minn. Filed October 14, 1916. Serial No. 98,676. Published November 28, 1916. Registration granted, January 30th, 1917.

—The Minneapolis Brewing Co., Minneapolis, have closed their storage depot at Escanaba, Mich.

—Burglars entered the office of the Florida Brewing Co., Tampa, Fla., January 17th, cracked the safe and got away with \$86, of which \$50 belongs to one of the company's clerks.

—It is reported from Hartford, Conn., that Wm. V. Burke, assistant superintendent of the New England Brewing Co., and several others are considering the purchase of a \$75,000 site whereupon to erect a large addition to that company's plant.

—Among those who recently appeared before Governor Whitman in Albany, N. Y., to protest against the amended Hewitt Motor Truck bill, which is considered to be unfair and unjust to truck owners, were counsel representing the New York State Brewers' Association.

—Attorney O. J. Denny, receiver for the Mercer County Brewing Co., South Sharon, Pa., who had been charged by some of the stockholders with alleged mismanagement, has been acquitted by a decision of Judge J. A. Mc Laughry, January 25th, the judge refusing to oust Mr. Denny from the receivership.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, February 27th, 1917.

Barley. The Barley market is firm, at a moderate demand; shorts light, but a little more coming in. Limiting certain imports to foreign countries may have the effect of weakening the market for grains, but it does not seem to effect Barley very much. Prices, \$1.20½@ \$1.36½; this wide range depending upon quality.

BUFFALO, February 24th: "The Buffalo Barley market is very firm at prices, ranging from \$1.32 for Standard, to \$1.37 for Choice grade of Malting Barley."

CHICAGO, February 24th: "Trading in barley during the last month has been in a moderate way, because of the generally small receipts. Good Malting Barley has, at all times, been in demand and prices have averaged very steady. The country shippers are still having difficulty in obtaining cars for loading and there have been embargoes in effect at different times by two of the roads, who handle a large percentage of the barley, against shipments of grain to Chicago. We quote: Low Grade Malting, \$1.10@ \$1.14; fair-to-good, \$1.15@ \$1.20; good-to-choice, \$1.21@ \$1.27,—with fancy commanding a premium."

MALT. Sales of Malt are quite heavy. Shipping orders are also very large. Prices: Standard Malt, \$1.45 cash, New York; Bottle Beer Malt, about \$1.53.

BUFFALO, February 24th: "Standard Malt is quoted here at \$1.43, and Choice at \$1.48, f. o. b. Buffalo."

CHICAGO, February 24th: "Quotations Malt, \$1.38; California, \$1.36; Bottle Beer Malt, \$1.43; Fancy Bottle Beer Malt, \$1.50."

Corn Goods. Conditions are tight due to shortage of sugar, as on account of the railroad congestion the sugar does not reach the factories. Nobody taking goods at stated price, preferring to take goods at open prices. There is a shortage of goods. Quotations: Grits, \$2.72@ \$2.75; Meal, \$2.71@ \$2.74; Flakes, \$3.10; Corn Syrup, \$3.34; Corn Syrup, \$3.41 in barrels, \$3.43 in bags.

CHICAGO, February 24th: "Grits are quoted here at \$2.54; Meal, \$2.53."

Rice. The Brewers Rice market has been encountering nothing but difficulties and uncertainties since our last report. The recent embargoes and stoppage of Westward business from the Atlantic Coast in addition to the Eastward embargo by the Western roads, which has prevailed for some time, as well as the Coastwise embargoes from the Gulf are causing a precarious situation which appears as though it might enforce a stoppage of all shipments if the traffic situation throughout the country is not adjusted shortly.

Whatever supplies peter through, therefore, are eagerly awaited by purchasers who placed orders for them months ago. New supplies are extremely scarce and prices nominal at the figures of \$2.75 at the Pacific Coast, \$3.25 Chicago and \$3.50 New York for Imported, while domestic is quoted at about \$3.00 in Chicago and in New York.

Hops. The hop market on the Pacific Coast the last few weeks, has been more active than usual. Growers became anxious to sell and made concessions in price. In consequence, lower figures are now being quoted.

The New York State market is only nominal, because most all of the small crop raised in this State has been sold. Business with brewers is very quiet, but it is anticipated, with the advent of warmer weather and heavier brewing, that some of them will be induced to lay in a larger supply of hops, at the tempting prices at which they are now selling. The stocks of 1916 hops remaining unsold on the Coast are rather small for this time of the year, amounting to about 23,000 balés in California, 14,000 bales in Oregon and 3,000 bales in Washington, or total about 40,000 bales. This, considering that the annual consumption of hops in the United States is 200,000 bales, and it will be seven months before the new crop is harvested, is certainly not a large quantity. If it was not for war conditions, and if hops could be exported to England as usual, much higher prices would prevail. We quote: 1916 Pacific Coast hops, 11@13½c; 1916 New York State hops, 43@48c; 1915 Pacifics and States, 9@11c; 1914 Pacifics and States, 6@8c.

AN EYE TO THE FUTURE. "What's the idea of your working so hard for Prohibition?" "I want to be recognized as one of the deserving patriots who helped to elect the ticket," replied Uncle Bill Bottletop. "Maybe they'll give me the job of hunting around for any illegal liquor and destroying it."

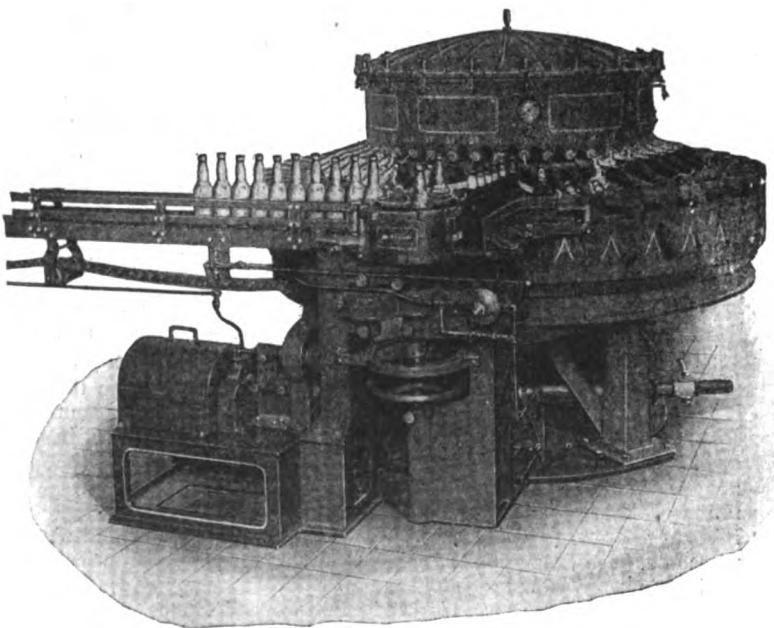
Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

The New Arrow Rotary Bottle Filler.

Below appears an illustration of the new Arrow Rotary Bottle Filler, the announcement of which has just recently been made by the Arrow Bottlers' Machinery Co., Chicago. The manufacturers state that this Filler is the result of several years' work on the part of the designer, but, following the well-known policy of this company, to make no announcements until the machine had been perfected in every detail, the announcement has been withheld until this time. The original machine was in operation in the bottling department of one of the Chicago breweries for about one year, during which time the operation was closely watched by the designer, with a view of overcoming any imperfections that might develop. Within the past month this experimental machine has been replaced by a re-designed machine such as they now propose to offer the trade. In re-designing this machine, all of the imperfections of the original machine have been overcome. It has been simplified very much and the results are in every way satisfactory.

In general design, this machine differs very materially from other automatic fillers. It is much lower in design, being only five feet in height over all, while it is slightly larger in diameter than other fillers of the same capacity. It has forty filler spouts and will fill 120 pints per minute with ease. The bottle-holders are carried on a spider consisting of an adjustable inclined carriage. The rests for the bottles are fitted with inclosed compression springs to allow for the greatest possible variation in length of individual bottles. This is fitted with an adjustable fork-shaped top in which the neck of the bottle rests and which has two important functions, viz., positive centering of the bottles, regardless of shape, and withdrawing of bottle from sealing rubber, should it for any reason adhere to same. The bottles are fed into the machine through a chain conveyor and star wheel and are gently brought to a reclining position on the bottle-holder. This bottle-holder is then raised in contact with sealing rubber by means of a cam, in which position it is locked by pawl and rack. After being filled, it is unlocked by means of another cam,



and discharged from the machine. As the bottles are discharged, they are raised to a vertical position and delivered direct to the crowner.

No filler tube enters the bottle; it simply comes to the mouth of the bottle, and the liquid flows gently down the edge of the bottle, without the slightest agitation. A short air tube enters the bottle, and the length of this tube determines the height of filling. As soon as the liquid reaches the end of the air tube, the flow of air from the bottle ceases, and the liquid shuts off automatically. By this method the bottles are filled absolutely uniform, and may be

filled to any desired height, as there is no displacement of filler tubes with which to contend. The air valve has a ground seat and may be lifted out of place to brush out the tubes, if necessary. The liquid valve is of an original counter-weighted check valve design, with ground seat. There are no rubber washers, gaskets or diaphragms used in the machine. The only rubber used on the machine is the sealing rubber, located on the outside of the tank. The valves are individual units and are located inside the tank. This permits of the sterilization of all parts of the Filler with which the liquid comes in contact by means of hot water or solution without doing the slightest injury to any part of the machine.

The complete drive is located under the star feed and feed conveyor. All gears and motor are inclosed and well protected. A few of the advantageous features of this machine are as follows:

Ease with which it may be sterilized—no rubber washers or diaphragms to be injured by the sterilizing agency; large capacity—will handle 120 pints per minute with ease; all parts easily accessible; no filling tubes to maintain; no air lifts to maintain; no air used excepting such as may be required for counter-pressure; perfect counter-balance between air and liquid at all times; will not fill broken or chip-necked bottles; short travel of liquid from tank to bottle—only 3 inches from tank to mouth of bottle and about 2 inches gravity; uniform height of filling in all bottles.

Many Installations by The Frick Company.

The Frick Company, Waynesboro, Pa., recently installed their refrigerating machinery in seventy-two different plants of manufacturers, dealers, public and private institutions, etc., among them: F. W. Hallam, Brooklyn, N. Y., for Oetjen Brothers, Brooklyn, N. Y.—1 8-ton vertical single acting belt driven enclosed type refrigerating machine; Horstmann & Plomert, Los Angeles, Cal., for George A. Binney Company, Los Angeles, Cal.—1 8-ton vertical single acting belt driven enclosed type refrigerating machine; Koellner Refrigerating & Ice Machine Company, Chicago, Ill., for Stearnes Steel Range Company, Chicago, Ill.—1 3-ton and 1 5-ton vertical single acting belt driven enclosed type refrigerating machine; Frid Engineering Company, Philadelphia, for Martin Bower, Vineland, N. J.—1 5-ton vertical single acting belt driven enclosed type machine; M. H. Goodlet, Greenville, S. C.—1 10-ton vertical single acting Corliss machine and high side, for use in abattoir; Bushwick Machine Works, Brooklyn, N. Y., for Fred Klein, Brooklyn, N. Y.—1 5-ton vertical single acting belt driven enclosed type refrigerating machine, for use in meat market; Utica Investment Company, Jacksonville, Fla., for Seminole Hotel, Jacksonville, Fla.—1 15-ton horizontal double acting Corliss refrigerating machine and high side with water storage tank; Ottenheimer Bros., Baltimore, Md., for Broadway Market, Baltimore, Md.—1 3-ton vertical single acting belt driven enclosed type refrigerating machine and high side; Wishart-Fetzer Company, Springfield, Ill., for A. B. C. Bakery, Alton, Ill.—1 12-ton vertical single acting belt driven enclosed type machine and high side; Miami Fish Company, Miami, Fla.—1 30-ton vertical single acting Corliss machine and high side with water storage tank and distilled water cooler for use in ice factory; San Antonio Machine & Supply Company, San Antonio, Texas, for Mission Ice Company, San Antonio, Texas.—1 12-ton vertical single acting belt driven enclosed type machine and high side; Shreveport Ice Cream Company, Shreveport, La.—Duplex brine pump, ammonia receiver, connections, etc.; Shreveport Dressed Beef Company, Shreveport, La.—1 6-ton vertical single acting belt driven refrigerating machine and high side for use in meat market; Shreveport Dressed Beef Company, Shreveport, La.—1 23-ton vertical single acting Corliss refrigerating machine and high side for use in abattoir; Huntington Hotel, Pasadena, Cal.—1 10-ton vertical single acting belt driven enclosed type machine; Flat River Ice & Cold Storage Company, Flat River, Mo.—Gas and liquid headers, accumulator connections, agitator, etc., for changing present tank to Frick flooded system, for use in their ice factory; Pottsville Hospital, Pottsville, Pa.—1 5-ton vertical single acting belt driven machine and high side; Hanbury Company, Portsmouth, Va.—1 12-ton vertical single acting belt driven enclosed type refrigerating ma-

chine and high side; The Ten Eyck Company, Albany, N. Y.—1 30-H. P. Corliss engine for attaching to present belt driven machine; Urbana Packing Company, Urbana, Ohio.—Room piping for the curing room; John Cuthrell, Berkley, Va.—1 50-ton double pipe ammonia condenser; Brinkley Ice & Coal Company, Brinkley, Arkansas.—1 18-ton horizontal double acting Corliss machine and high side for use in ice factory; Elizabeth City Market, Elizabeth City, N. C.—1 8-ton vertical single acting belt driven enclosed type machine and high side; Dodwell & Company, New York City, for Yokohama, Japan.—1 20-ton vertical single acting belt driven refrigerating machine and high side and 10-ton freezing system; San Antonio Machine and Supply Company, San Antonio, Texas, for Roy Campbell, San Benito, Texas.—1 20-ton vertical single acting belt driven refrigerating machine and high side with 12-ton raw water freezing system for use in ice plant; George H. Soffel & Company, Pittsburgh, Pa., for Union Arcade Building.—2 25-ton horizontal double acting belt driven refrigerating machines and high side with 1 25-ton water cooling system; E. A. & A. F. Stein, Baltimore, Md.—1 8-ton vertical single acting belt driven enclosed type machine; Asheville School, Asheville, N. C.—1 3-ton vertical single acting belt driven machine, compressor, ammonia receiver, ammonia accumulator and connections; C. L. Robinson Ice & Cold Storage Corporation, Winchester, Va.—Direct expansion piping for apple storage; R. E. Huthsteiner, El Paso, Texas, for A. Frederickson, Columbus, New Mexico.—Double pipe ammonia condenser, coils and framework for freezing tank, agitators, can hoist, storage tank and coils, direct expansion piping, etc.; Carolina Hotel Company, Salisbury, N. C.—1 2-ton vertical single acting belt driven enclosed type machine and high side; J. M. Kavanaugh, Harrisonburg, Va.—1 3-ton vertical single acting belt driven enclosed type machine and high side; Von Hamm-Young Company, Honolulu, T. H., for Boys' Industrial School, Honolulu.—1 5-ton vertical single acting belt driven enclosed type machine, freezing tank with coils and framework, etc. Installations made in breweries are mentioned elsewhere in these columns.

Rauh's Ideal Pitch.

Robert Rauh, 310 Elizabeth Avenue, Newark, N. J., who imports modern brewers' labor-saving machinery, also manufactures Rauh's Ideal Pitch, the standard of which is universal. This brewers' pitch has a reputation of over sixty years of manufacture and its excellent qualities are testified to by brewers throughout the world, while "Durit," also furnished by Mr. Rauh, is declared to be superior to varnish and enamel for coating casks, vats and tanks of concrete, steel or wood. It is easily applied, cannot explode and costs but little.

Casualty Reciprocal Exchange.

The Reciprocal Exchange and Casualty Reciprocal Exchange, operated by Bruce Dodson, manager, and a number of assistants at the Home Office, 28th and Wyandotte streets, Kansas City, Mo., have for many years provided fire insurance for brewers, and they are now enlarging their scope by branching out into all fields of business, providing for workmen's compensation, protecting teams and automobiles etc., etc.

On January 1st, 1917, these two exchanges had available for the payment of losses a total of \$1,729,733.65, which is a remarkable showing, since the policyholders have not paid one dollar more to the office than they would have paid the public insurance companies for similar protection. Yet, they have received in the aggregate actual cash savings to the amount of \$1,317,144.68.

Jenkins Bros.

At a recent meeting of Jenkins Bros., manufacturers of valves, packing and rubber specialties, 80 White Street, New York, Farnham Yardley, son-in-law of the late Alfred B. Jenkins, and formerly vice-president, was elected president of the company to fill the vacancy caused by the death of Mr. Jenkins. Frank T. Swain, general manager of the company, was elected vice-president. Samuel Laird, manager of the Philadelphia business, has been elected a director to fill the vacancy in the board.

With these exceptions, the officers and directors are the same as heretofore.

The interests of Mr. Jenkins as a stockholder of the company will remain intact, under a trust created by his will, for the benefit of his descendants.

The policy of the company as laid down by Mr. Jenkins will be adhered to and maintained in all departments of the business.

Motor Trucks of America.

The B. F. Goodrich Company, Akron, Ohio, has just published its fifth volume of its splendid "Motor Trucks of America," the first volume having made its appearance in 1912. Many of our readers will be interested in the great amount of information which this book contains and they will do well to apply for a copy as the demand for them is enormous, coming from men in all walks of life: students, mechanical engineers, insurance companies, schools, colleges, magazine editors, export houses, city efficiency commissions, libraries, army officers, foreign war departments, secretaries of state and the United States Government. In writing for the book, the applicant should mention the fact that, in doing so, he was actuated by having read the above notice in "THE BREWERS' JOURNAL," as that will help him in obtaining the book at once.

Joseph Dixon Crucible Company.

The Joseph Dixon Crucible Co., Jersey City, N. J., manufacturers of graphite products, paints, lubricants, etc., have elected Julian H. Schermerhorn, who was treasurer for many years, to the position of vice-president, and William Koester, credit manager, was made treasurer.

When the Dixon Company, as it did on the first of January, handed to each employee, great and small, an extra pay envelope containing a month's salary, or a week's pay, as the case happened to be, it was only another evidence to the minds of all the employees of that spirit which protects in dull times and remembers in good times.

Furthermore, the Dixon Company carries life insurance for all of its employees, safeguarding them against want and distress so that in case of death the family or beneficiary will receive equivalent in cash to a full year's pay of the employee.

"THE SPIRIT OF BATTLE for a great cause, the cause of liberty and just law, is in this line. Oppression comes in various ways—sometimes by the stealth of ignorant, but determined fanatics bent on imposing their crooked views of public policy upon a people; and sometimes by imperial decree in countries that have barely tasted the fruits of government under an enlightened democracy."—(Henry C. Maine.)

ABOLISH POVERTY AND SOLVE THE LIQUOR PROBLEM. "To abolish the liquor problem, it is only necessary to abolish poverty. This automatically follows freedom of opportunity. Freedom of opportunity is the national condition, and can be restored by requiring opportunity, that by nature belongs to all, to bear the burden of all. Remove the burden from industry and place it upon the earth, out of which all that supports life must be drawn by industry."—"Western Star.")

CLASSIFIED ADVERTISEMENTS.

Wanted to Buy.

Two second-hand Sterling Water Tube Boilers. Address: Jacob E. Decker & Sons, Mason City, Iowa.

Wanted.

One Barry-Wehmiller Pasteurizer. State capacity and price. Address: W. Ihnken, 1031 Clinton Street, Hoboken, N. J.

Brewery for Sale.

Brewery for sale or for rent in Central Pennsylvania, selling 3,000 barrels at good prices. Address: M. P. T. 21, care of THE BREWERS' JOURNAL, 1 Hudson Street, New York

For Sale.

For sale at a bargain: 8 glass enameled steel chip casks, 150 bbls. capacity, horizontal type and good as new. Address: H. C. B., care of THE BREWERS' JOURNAL, 1 Hudson Street, New York.

Brewery for Sale or Rent.

In eastern Pennsylvania. Capacity, 15,000 bbls. Ice Plant. Artesian Well. Price and terms on application. Address:

M. E. 1039, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Copper Kettle 4' 6" diameter by 34" deep, two 1" steam inlets, 1" exhaust outlet, 8" outlet in center. Open top, tinned inside. Address:

August Roos' Son,
429 East 91st Street, New York, N. Y.

Wanted.

Second-hand Labeling Machines, Barry-Wehmler Pasteurizers, Revolving Rinsing Machines, Sectional Roller Conveyors. Address:

Loudon Packing Co.,
Terre Haute, Ind.
[Apr 17]

Position Wanted.

A good brewmaster, one who is not afraid to put his shoulder to the wheel, is open for a position. Also good on temperance beers of all kinds. Address:

A. G. S. 464, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.
[May 17]

For Sale.

Stock Tubs. Four (4) new tubs; capacity, 112 bbls. each; all 10 feet high outside measure, or 103" deep inside measure; bottom diameter, 9'x7'9". Address:

K. K., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Tanks Wanted.

Second-hand Tanks wanted. Capacity 100 to 500 Gallons, round or rectangular. Must be of solid wood. Required for chemical purposes. State price and particulars. Address:

616 West 39th St., New York.

For Sale.

Beer Filters; Loew Blitz Blank, Loew Improved, Theurer with press, Goldman Double Cell with press, Karl Kiefer with press; large Cyclone Filtermass Washer; all in excellent condition. Address:

N. H. Heyman,
438 East 59th Street, New York, N. Y.

For Sale.

One Copper Round Hole False Bottom, 45,000 holes per square yard, 15' 9" diameter, number of plates 18, center hole 26" diameter, Brass Bars and Studs, in good condition. Price reasonable. Address:

August Roos' Son,
429 E. 91st Street, New York.

Wanted.

Foreman for a large brewery bottling department in the East. Only applicants with experience in large bottling shops will be considered. Applicants must give age, full experience, references and salary expected. Address:

A. B. C., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

A small brewery of 3,000 bbls. capacity, with ice machine, located at Hortonville, Wis., is for sale at a reasonable price. The territory is good. Would take in an experienced brewer with \$1,000 or more stock as manager. Address communications to

Peter Oik,
Hortonville, Wis.
Jan 17]

Soaker and Washer for Sale.

For sale, one Twentieth Century Soaker, capacity about 3,000 bottles per hour; can be seen in good working condition. Also one Universal Washer, used with it. Cost of above, about \$4,600, but will sell for \$1,200 and \$500 f. o. b. Boston. Address:

F. M. Doyle & Co.,
38 Hanover St., Boston, Mass.

Position Wanted.

Practical and theoretical brewer with long experience as brewmaster; thoroughly familiar with every modern innovation in American as well as German brewing systems. I guarantee full and perfect extract, producing goods of superior quality. Address:

A. B., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.
Mar 17]

For Sale.

Brewery, in first-class condition, with modern up-to-date equipment. Capacity 20,000 barrels, and output always readily sold. Newly installed Ice Machine with 50 per cent. over capacity. Population served within 10 miles, 75,000; big iron industries. Best reasons for selling. Small amount of cash will secure controlling interest.

E. J., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewery for Sale or Rent.

Brewery in the anthracite coal region: has railroad siding and its own water. A good proposition for a good business man to push ahead. Present owners cannot operate because of other interests. Will be sold or rented reasonable. For particulars, address:

G. F., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale—Cheap.

15 Large Storage Tanks, double headed, 2" Cypress, 8 ft. diameter, 15 ft. high, Est. Capacity 150 bbls. each; 12 Fermenting Tanks, single headed, 2" Cypress, 8 ft. diameter, 6 ft. high, Est. Capacity 60 bbls. each; 15 Chip Casks, 2" Oak, 200 bbls. Capacity. These tanks are new, having never been used. For further information write to

J. B. Lagomarsino,
Sheffield, Ala.
Apr 17]

Situation Wanted.

An experienced brewmaster with good practical and theoretical ability and good references, and inclined to use caution in obtaining the best product, seeks engagement as brewmaster in a lager beer or ale and porter brewery; he also is disposed, if it is desired, to invest some capital or accept stock as a part of his salary. Address:

S. M. 15, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewmaster Wants to Make a Change.

Experienced brewmaster, for many years in the trade, and graduate of two brewers' academies, at present employed, for certain reasons must make a change within one or three months. Has thorough knowledge of American and German brewing methods. Prefers large brewery where several kinds of beer and ale are produced; position to be permanent. Address:

J. C. F., care of THE BREWERS' JOURNAL,
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Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....
November	4,386,268	4,474,950	88,682	.....
December	4,299,591	4,487,910	188,319	.....
	1916.	1917.	Increase.	Decrease.
January	3,591,781	4,009,066	417,285	.....
February	3,730,615	3,675,243	.....	55,372
Total	38,033,152	40,976,140	3,148,189	205,201

Net increase for the first eight months of the fiscal year 1916-19172,942,981

"IMPOSSIBLE TO PROPHECY." W. Frank Persons, Director of General Work of the Charity Organization Society, New York, says: "No informal person now attempts to assign a single cause for any such social evil as poverty. The causes are many. They lie deeply rooted in complex social and industrial factors, in environment, heredity and character. Alcoholism, accordingly, is no longer assigned that rôle of chief responsibility with which some years ago it was commonly charged. Nevertheless, the belief is becoming increasingly intense that alcoholism is an intolerable evil. Its responsibility for much suffering and need is ever more clearly realized. As an illustration of the degree to which alcoholism accompanies poverty it may be of interest to say that a study recently made of 3,000 families consecutively, under the care of a single organization, disclosed serious moral and physical conditions due to the use of alcohol in approximately one-fifth of these families. Just when those interested in business, in social work and in the public welfare generally shall determine that prohibition is the necessary and desirable remedy in New York State it is impossible to prophesy from any information in my possession."

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Manufacture of Ethyl-Alcohol.

From a paper read before the Master Brewers' Association of the U. S.,
District New York,

by DR. LEO. STEIN

Alcohol as such is found in nature. It is contained in certain fruits, namely, *Pastinacia Sativa*, *Heracleum giganteum*. The atmosphere contains traces of Alcohol. Alcohol is present in humus, in fresh bread, and is found wherever sugar comes in contact with the ever present yeast cells, which produce alcohol and carbonic acid. Therefore all fermented beverages contain it, and it can be obtained therefrom through distillation.

All technical Alcohol can be used for drinking purposes, when purified.

Alcohols for drinking purposes are distinguished by their aroma. Cognac is produced from wine, rum from molasses, arrak from rice, whiskey is made with the aid of malt, and there is a pure malt whiskey and others, which are made from malt and unmalted cereals. Scotch whiskey is characterized by a peculiar aroma, which is caused by the kiln-drying of the malt with peat (peat flavor). Alcohol when leaving the still is colorless. The color of cognac, apple-jack, whiskey, is either due to extracted matter from the storage barrels or to the addition of caramel, burnt sugar.

The production of alcohol is simple, whenever sugar is the raw material. When starch is used, this must be converted into sugar. For this purpose diastase is necessary. With the manufacture of alcohol the production of malt is, therefore, often associated. Alcohol from starch is produced without the use of malt, according to the amylo process, with Taka-diastase, by conversion of starches with acids, by conversion of saw-dust with acids, fermenting the resulting sugar and final distillation.

The malt used in the distillery is preferably green malt. It would be non-economical to use kiln-dried malt, as this has lost parts of its diastatic power; many however use kiln-dried malt. As in the brewery, barley malt is used in the distillery, rye only for rye whiskey. Preference is given to barley, which is rich in albumen, poor in starch, having a low bushel weight, and showing at least 95 per cent. germinating capacity.

The malting is done in the usual manner, either on the floor or in drums. Frequently lime water is used for steeping, as a better germination is obtained, especially with young barley. The object is to obtain the highest possible amount of diastase; in Germany so called long malt (*langmalz*) is made. While malt for brewing is kiln-dried after five or six days, the distiller permits the malt to grow for about 14 days. Naturally the losses through germination are high, but the diastatic power of long malt, compared with short malt, according to Hayduck, is almost double. The temperature during sprouting shall not exceed 15 deg. C.

To save labor, so-called felt malt (*Filzmalz*) is also made. The barley sprouts in boxes, is not turned, acrospire and rootlets become entangled, forming a felt-like mass. The length of the acrospire in the case of long malt is two to three times that of the grain. Before using green malt it is

crushed in special machines, and in order to destroy bacteria, it is treated with antiseptics.

The mashing process is similar to that used in the brewery, the distiller making first beer, as he calls it. The principal difference being the small amount of malt used (excepting the pure malt whiskey), and above all the mashing temperatures employed.

For gelatinizing the starch of the adjuncts, cookers are used. When making alcohol for beverages open and closed cookers are used; for technical alcohol the closed cooker is preferred, as the yield is greater. It is assumed that the closed cooker disadvantageously influences the taste. Just as the brewer the distiller adds some malt to the cooker mash to better liquify it. Usually the cooker is also used as a mash tub. Nevertheless we find in the distillery just as many various methods of operation as in the brewery. For saccharification the cooker mash is cooled, and at 56 deg. to 60 deg. C. (45 deg. to 48 deg. R.) the malt is gradually added while stirring.

The distiller employs exactly those temperatures which the brewer evades. While the brewer wants to produce unfermentable dextrines, the distillers' object is to produce fermentable substances only. The worts employed for fermentation weight 18—22 deg. Balling.

The amount of malt used varies. In Germany where potatoes are used principally, 4.5 to 6 parts of long malt, representing 3 to 4 parts barley are used to 100 parts of potatoes. Corn mashes are produced with 10 to 15 per cent. of malt.

It is customary to add disinfectants to the mash in order to prevent the growth of bacteria. The distiller fears the bacteria as much as the brewer. Bacteria causes false, often stormy fermentation, produces off-taste, and decreases the yield in alcohol, for bacteria consume sugar the same as yeast does. For the disinfection of the wort, such quantities of fluoric acid or formalin are used that the yeast may not suffer.

After ending the mashing process the mash is cooled and fermented with yeast. Formerly a surface cooler was used, to-day the counter current cooler has generally superseded it. The mash is cooled to 30 deg. C. (24 deg. R.), at which temperature the mash, containing all the grains, is pitched with yeast.

The yeast employed is cultured yeast (*Kunsthefe*). Only special high fermenting types are used which are obtained from a scientific station at the beginning of the distilling campaign. The yeast must have a great resistance against certain disinfectants and must retain its activity in the presence of large quantities of alcohol. The production of distiller's yeast (*Kunsthefe*) is a sort of propagating process in a previously acidified medium. Usually the acidification is done with a lactic acid culture, lately also with sulphuric or fluoric acid. The presence of acid is necessary, as acids support the fermentation, while bacteria are suppressed. Wherever lactic acid cultures are used, the lactic acid bacteria are destroyed by heat before the yeast is added to the medium.

The sulphuric and fluoric acid process is more and more adopted, as time is saved. Lately an addition of rosin is employed; rosin acts as an antiseptic, similar to the hop rosins in beer wort.

We distinguish the primary, the main, and the after fermentation. During the primary fermentation the yeast multiplies; after twelve hours the vigorous main fermentation sets in and lasts about twelve hours. Wherever compressed yeast is made the rising yeast foam, which forms after twelve or sixteen hours, is collected, washed, mixed with starch and sold in cakes. In the United States compressed yeast is made with filtered wort in copper fermenting vats. This yeast is free from grains and is generally sold without the admixture of starch.

During the after fermentation, the more difficult fermentable dextrins are worked up and the entire fermenting process is completed after 48 hours, mostly after 60 hours. The revenue authorities of the United States prescribe a maximum of 72 hours for the fermentation. The highest permissible temperature is 20 deg. C. (23 deg. R.) At higher temperatures a loss of alcohol takes place, and the growth of bacteria is encouraged. For controlling the temperatures of the fermenting mash, as in the brewery, cooling apparatus is used in the distillery.

In the United States a large amount of alcohol is made from cane sugar molasses. The cheapest grades are used. (Black strap.) Beet sugar molasses is also used, however, the resulting alcohol is characterized by a bad taste and odor. The working method is simple because ready sugar is present. The molasses is boiled, diluted to 20 deg. Balling; sulphuric or phosphoric acid is added and fermented with a special molasses yeast.

The production of ethyl alcohol from saw-dust is yet in its infancy. At present only one concern is operating this process in the United States. The saw-dust is treated under pressure in closed converters with acid, by which sugar is formed from cellulose. Beside the fermentable "Hexoses" many unfermentable "Pentoses" are formed. This method is, therefore, characterized by a poor yield, which is about 20 gallons of alcohol from one ton of saw-dust.

In every case the fermented mash is brought to the distilling apparatus which varies in construction. The more modern are heated with steam, work continuously and are often of gigantic proportions. They are connected with charcoal filters. Some have a capacity of 15,000 bushels of corn per day. The product in one operation is alcohol of 96 per cent. strength and of great purity. Simultaneously the valuable fusel-oil is obtained. The residue is slops, which is used as fodder, either in wet or dried form. Potash can be gained from molasses slops.

The yield of alcohol stands in direct proportion to the equipment and the efficiency of the plant. Depending on the market and the season different raw materials are used in the same distillery.

One (1) bushel of corn (56 lbs.) yields on the average 16.56 lbs., equal to 2.5 gallons absolute alcohol. (The theoretical quantity is 26.66 lbs.)

One bushel of rye (56 lbs.) yields 2.38 gallons of alcohol, on an average.

One gallon of molasses (11.75 lbs.) with 50 per cent. fermentable sugar yields on an average 2.81 lbs. of alcohol or 0.425 gallons.

For labor, fuel, depreciation of machinery, etc., 12c. to 13c. is figured per gallon of alcohol of 190-proof, when made from corn; 10c. when made from molasses.

The production of 1 gallon of alcohol of 190-proof costs in normal times, from corn, about 40c.; from molasses, about 33c.

The consumption of alcohol in the United States for drinking purposes was 146 million gallons in 1916.

The production of denatured alcohol was about 35 million gallons and is rising rapidly. The manufacture of this alcohol has the greatest possibilities for the future owing to the rapid depletion of our oil fields.

The Chemical Composition of Commercial Glucose and its Digestibility.

From a Paper by J. A. WESENER and G. L. TELLER.

The term commercial glucose has been applied to a product obtained by the action of certain catalytic agents upon refined starch, until the starch has lost its identity as such and has been converted into a series of products, consisting of *d*-glucose, maltose and different forms of dextrin. The dilute liquid thus produced is clarified by passing over bone-black and is then carefully evaporated, either to a solid substance or to a syrupy condition known as glucose syrup. The glucose thus produced in this country is made entirely from corn starch and, for this reason, the syrup is designated as corn syrup. It consists of about one-fifth its weight of water, very minute traces of nitrogenous bodies, a very small amount of ash and a group of carbohydrate bodies, consisting of dextrose, maltose and probably several forms of dextrin, and paralleling closely the bodies of a similar nature obtained by the action of malt diastase and other diastases upon starch.

There is apparently a border line between the bodies commonly known as dextrin and that known as maltose, which has led to great confusion in the minds of the chemists who have investigated this subject, largely because of the difficulties attendant upon the separation of such bodies from maltose on the one hand, and the different forms of dextrin, on the other, and the consequent confusion with these bodies and with mixtures of them. This confusion of ideas concerning glucose syrup has been participated in by a large number of investigators, extending in time over a period of 20 or 30 years, and has led to the introduction into the literature of such terms as "gallisin," "iso-maltose," "malto-dextrin" and others.

It has been the purpose of the work upon which this article is based to clear up some of these points, especially with reference to the assumed presence of an unfermentable body which is not hydrolyzable by enzymes and which consequently would not serve as an article of food.

Samples Used in Experiments

In carrying out this work we have made about 600 comparative fermentation tests upon glucoses, starches, food-stuffs and various substances used in control experiments and have supplemented many of these by more or less complete analytical determinations to show the nature of the residual products after the fermentation has been completed. It should be borne in mind in this connection that yeast used for fermentation is necessarily of a more or less variable character, as are also the various diastatic enzymes available for investigations of this kind. While recognizing that there are more or less differences in glucose of different manufacture and also in different lots of glucose of the same manufacturer, we have confined our work largely to a few lots of glucose, purchased in the market, and apparently suitable for this purpose because of fulfilling the conditions exhibited by the glucoses experimented upon by those who have claimed the presence of the unfermentable body known as "gallisin" or "iso-maltose." The solids in the samples examined varied from 79.8 to 83 per cent.

Ash.—The ash of glucose, while minute in amount, is always present. Its course is partly the grain from which the starch is derived, and partly certain ingredients used in the manufacture of glucose. For these reasons, the composition as well as the amount of ash will necessarily vary. Phosphoric acid is present in small amounts and very probably comes from the grain. The same is true of minute traces of potash and possibly also of the lime. Soda is added during the process of manufacture. Traces of iron are accidentally present.

Nitrogenous Bodies.—While starch used in the manufacture of glucose is freed as far as possible from nitrogenous matter, it is practically impossible to remove the last traces, so that very minute amounts of these bodies still remain in the finished product.

Carbohydrates.—The results of the work of various investigators during the past 20 years has been to establish in glucose the presence of dextrose, maltose and dextrans.

Fermentation of Glucose After Digesting with a Cold Water Extract of Malt for the Purpose of Converting Dextrans into Sugars.

The malt used for this purpose was a good quality of distillers' malt, selected because of its being rich in diastase. In preparing the cold water extract for use the practice was to grind 200 g. of the malt moderately fine and digest it in 1000 cc. of cold water for a period of 2 to 6 hrs. The mixture was then filtered and the clear water extract taken for use. The amount of solids extracted in this way naturally varies to some extent, depending upon time of extraction and amount of stirring during the time of extraction. Glucose was treated with extracts of this kind under various conditions, at different temperatures, and for different lengths of time, and then subjected to fermentation with compressed yeast.

The most favorable temperature for the action of the malt extract was 50° C. When using compressed yeast from different manufacturers the amount of gas produced from the glucose mashed with malt extract is closely related to the comparative amount of gas obtained with the same yeast acting upon cane sugar. Where yeast acts upon pure cane sugar and upon pure dextrose, the amount of gas produced during the fermentation with like quantities of the same compressed yeast is closely proportional to the amount of sugar present. Some things have been found in our experiments which have shown that where certain starches, or starch products are acted upon by malt and the result of the mashing is subjected to fermentation, a larger quantity of gas will be obtained than is directly proportional to the amount of sugar which we should expect to be produced from the starch present; thus in treating the prepared starch known as Mazam, with malt extract, a considerably larger proportion of gas is obtained than we should expect from the amount of starch used, assuming that the usual amount of dextrose was eventually obtained from the starch by the combined influence of the malt extract and the maltase secreted by the yeast itself. Mazam is a starchy preparation obtained by hydrolyzing starch much the same as by gelatinizing it with boiling water, except that in the Mazam the starch is subsequently dried and flaked. The amount of gas produced from the dry starch present in Mazam has been found in several experiments to correspond to as high as 122 to 128 per cent. of the starch used, calculating on the basis of pure dextrose, to which the starch must be eventually converted before fermentation.

What has been found to be true of Mazam with regard to an unexpectedly large proportion of gas production has

been found to be true in a like manner of other starches and similar carbohydrates present in foodstuffs. Accordingly, to determine to what extent the glucose was converted into fermentable bodies, it was necessary to determine the amount of unfermented matters still present in the fermented solution as well as the nature of these bodies. After fermentation the fermented liquor was made up to a definite volume, filtered and an aliquot part taken for determination of the total solids and the reducing sugars, and in some instances for various other determinations.

Fermentation Experiments with Starch for the Purpose of Determining to What Extent the Results Obtained by the Fermentation of Glucose After Action of the Diastase of Malt Extract, Pancreatin and Taka-diastase is Paralleled by the Action of These Same Reagents on Well-cooked Starch.—Several series of experiments were made, using different starches in parallel with glucose. The starches used included Kingford's corn starch, a good sample of wheat starch, ordinary rice starch, arrowroot starch (manufactured by Taylor Bros., London), ordinary Potato starch, potato starch made soluble by digesting in the cold with hydrochloric acid (according to the method of Lintner—the samples used being a product of Merck's) and a sample of Mazam (previously described). In the use of these several starches the quantity taken for the test (usually 5 g.) was put in the fermenting bottle with 100 cc. of water and placed in a water bath, which was subsequently brought to boiling so that the starch in the bottle was maintained at the boiling temperature for at least 15 minutes after it has become thoroughly gelatinized. Great care was taken in gelatinizing the starch to avoid lump formation. This method of preparation gives the starch a more thorough cooking than it ordinarily receives during the cooking of cereals for table use, so that it may be assumed that the starch was in the best possible condition for the working of the diastase.

A parallel series of experiments was made in which starches and glucoses were boiled with dilute hydrochloric acid, as described in the Official Methods of the Association of Official Agricultural Chemists. The amount of hydrochloric acid used in tests of this kind was 2.5 per cent. on the liquid used. After boiling with hydrochloric acid, the solution was cooled, exactly neutralized with a sufficient quantity of normal sodium hydroxide, and subjected to the following tests: amount of dextrose present; polarization of the solution in the 200 mm. tube; amount of gas produced in fermentation; and presence or absence of reducing sugars after fermentation was completed.

(To be continued)

"LAW WILL NEVER PREVENT the people from getting liquor as long as there is a large number of them who want it. The Prohibition States have shown this. It would be well to draft an efficient law before carrying further an idea of this kind which makes a nation of lawbreakers out of the people."—(Wilkes-Barre [Pa.] "Daily News.")

"THUNDERSTORM COMING. With Mexico on the south, Germany on the east, Japan on the west and Canada on the north, these United States of America are likely soon to have something more important to think about than cigarette laws and prohibiting beer. After carefully observing the wonderfully-shaped heads of those leading citizens, God save the mark, we send to make our laws, we are doubtful if many of them have brains capable of thinking about any important subject. By the way, can anybody name a business man of any substance in the Legislature?"—("Wholesalers and Retailers Review.")

Low Alcoholic Beers.

From a paper read at a meeting of the North of England Section of the Institute of Brewing,

by O. OVERBECK, F.C.S.

The term "low alcoholic beers" may be held to include those containing less than 3 per cent. of alcohol. Whether the limit of original gravity may or may not be stated depends entirely upon the process, i. e., whether the fermentation has been naturally or artificially limited, or even stopped by some subsequent process, or, lastly, the alcohol subsequently removed by some method. Excluding for a moment the last, the final percentage of alcohol will depend upon the number of degrees of gravity fermented away, the few last remaining degrees depending more or less on the constitution of the wort itself as well as the extent of the fermentation. After a comparatively short space of time the chemical reactions taking place in the wort of a malt mash arrive at a balancing point, after which the relative constitution of the wort appears to be but little altered: consequently we are led not to magnify unduly the chemical effect of any complicated processes of malt treatment utilized, but rather to favor simplicity, the choice of materials being a far more important question to the attainment of a satisfactory result, with its necessary concomitants. We brew with water, malt (plus or minus substitutes), and hops.

Brewing waters vary immensely, from such extremes as a soft Carboniferous Grit water with, perhaps, only 5 grains of solids per gallon, to a strongly salt Norwich water and the permanently hard gypsum water.

Brewers who possess a nearly pure water, provided it contains nothing really deleterious to brewing, can make it, at a certain expense, what they like. In the opinion of some brewers, however, a natural water containing similar bases, acids, and total solids acts somewhat differently from its artificial substitute. We know little of the manner in which the solids exist as salts in the water. In the calcareous waters of Grimsby we find that 12 grains of chloride of calcium per gallon favors brilliancy and checks rapidity of fermentation.

Our next material, the grist, lends itself to variation both in constitution and proportion. This must be left in any individual case to the discretion of the brewer who possesses knowledge and experience. It will depend much upon what he has already found to suit his own particular case best, and also what his yeast is accustomed to, since materials, systems and yeasts vary so much in different localities. There are, however, broad lines from which it is unwise to deviate too far. In very weak "beers," such as the "table waters," original gravity 1016 degrees maximum, the main difficulty is to keep them fresh to the finish of the barrel. They must, therefore, be used quickly, before the remaining fermentable degrees have vanished. Otherwise they will drink below their gravity, not to mention the fact that the limit of alcohol allowed by law will be exceeded. I would point out the great value we have found in a generous admixture of foreign malt in the grist—we use no substitutes. Foreign malt (long varieties) possesses a steadying effect on yeast, simultaneously with offering a strongly anti-wild-yeast character to the wort, besides giving to the beer the most important advantage of a firm, close, permanent head, generally only associated by the public with beers of a far heavier gravity. This latter property is exhibited strongly in the resultant beer, as compared with such in which foreign malt has not been employed.

There exists naturally a minimum quantity of hops which can produce the necessary bitterness to a given volume of

water equal to one brew. This amount must constitute the least possible quantity we can use, and is quite independent of the weak original gravity of the wort. The same applies to the coloring used.

These beers are very sensitive to odors and flavors, and hence the use of a considerable amount of old hops must always be avoided. Again, all worts boiled with a free escape of steam lose their hop aroma during their long boil. We require urgently to retain these, hence the very great advantage which is derived from adding one-quarter of the total amount of hops used in the copper only a quarter of an hour before turning out. The improvement in "fresh hop" aroma and real hop flavor (not merely bitterness) in the finished article is most marked, whilst also masking most effectually the low original gravity of the beers.

In carrying out the fermentation of such worts, too much stress cannot be laid on the value of clean surroundings, especially owing to the long time the wort remains exposed to the attacks of germs before it covers itself with the slightest protective head. It is preferable to employ a system of air filtration. So much has this been found to be true that all fermenting vessels in Grimsby containing such weak worts are covered in completely with cotton twill sheets, freshly washed, steeped in a very weak solution of sulphurous acid, and subsequently wrung out. These sheets are only removed after taking off the first dirty head or during the one skimming. They are then at once replaced. Although apparently still quite clean after each brew, they are really, of course, heavily germ laden.

We must bear in mind that, after fermentation has commenced, the rising carbonic acid gas from the fermenting wort acts as a protection against incoming air.

If the brew could be made to work out so exactly as to leave the back drink vessel dry, it would be so much the better, but this is not possible without a manhole deep enough to hold the head and its "froth-wort."

In such a case the top stone would act itself as a protection from germs, and, by keeping the valve there closed, with the addition of a small cover over the manhole, below the edge of which the yeast would only rise, such an arrangement would fulfil the requirements of the case. If not, as is usual in practice, it is better that the top vessel wort should be fairly deep, thus rendering the top shallow wort layer deeper than usual, in order to minimize the deterioration of this top drink from its having been over-yeasted at top and bottom, since we do not circulate or pump at all, and back drink vessels would hardly cover themselves properly after being skimmed clean. Moreover, the final beer would be unduly flat.

We find that a brew of original gravity 1015—1020 degrees, pitched on Monday evening, will be ready to rack at half gravity on Thursday morning. From this period it steadily and naturally deteriorates in body in the fermenting vessels, until, after a week, it is nearly spoiled, as far as character is concerned. On the Saturday it may be racked at a gravity of 1008 degrees, but only with the most rigorous attention to the brew, and by constantly guarding against any rise in temperature.

Pitched on Monday at 1015—1020 degrees, with 3 to 4 oz. of yeast per barrel, say at 5 p. m., at 59 F., the wort will only have covered itself properly with a head by Tuesday evening, when it will have risen in temperature to 60 F., and have lost only 1 degree of gravity.

(To be continued.)

TARIFF INCREASE IN COLUMBIA. The import duties upon beer and all other articles specified in the customs tariff of Columbia, Central America, has been increased five per cent.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

February 15th to March 15th.

Samples received:

Barleys	4
Malts	206
Malt Adjuncts	41
Colorants	9
Hops	14
Grains	6
Waters	12
Worts	56
Yeasts	221
Beers and Ales	281
Temperance Beverages	22
Coals	18
Miscellaneous	48

938

Barleys.

All four samples received during this month were of California type, but crops from various years. They all showed satisfactory physical conditions and the germinating capacity in all samples was above 98 per cent.

Malts.

One hundred and eighty samples of Western Malt and 25 samples of California Malt were received during the month. The average moisture in these malts is approximately the same as for the last period reported; it was found in the Western Malt to be 4.22 per cent., and in the California Malts 4.30 per cent. The yields of extract also vary only slightly from those lastly reported. In the Western Malts the average extract on air dry basis was 68.7 per cent., and 71.8 per cent. calculated on dry basis. The California Malts showed, as usual, a much higher yield of extract, this being 71.1 per cent. on air dry basis and 74.3 per cent. on dry substance. One sample of Caramel Malt showed 64.3 per cent. extract and had a moisture of 3.40 per cent.; its condition was generally satisfactory.

Malt Adjuncts.

Forty-one samples of various Malt Adjuncts were analyzed. Twenty-nine cereal products were classified as follows:

Corn Grits	15
Corn Meal	8
Refined Grits	6

Of these, five samples of Corn Grits and two of Corn Meal contained excessive amounts of moisture, while the remaining were all entirely satisfactory. The analysis of twelve samples of sugars and syrups showed these to be in a satisfactory condition and of good brewing value.

Colorants.

The various samples under this heading were all found normal and satisfactory for the purposes for which intended.

Hops.

All the samples examined were Pacific Hops of 1916

crop. Ten of these were entirely sound and in a first class condition and were satisfactory materials for all brewing purposes. Four samples showed a rather large percentage of mouldy cones and also carelessness in picking and kilning operations.

Grains.

Four samples of wet brewers' grains were analyzed; their chemical composition was normal and satisfactory, indicating proper conditions during the mashing operations. Of two samples of dried brewers' grains examined, one was perfectly normal and satisfactory, while the other sample contained a rather excessive amount of moisture.

Waters.

All samples were subjected to a biological examination and six samples completely analyzed in order to determine their fitness for mashing operations or for the use as boiler feed.

Worts.

Complete chemical examination was made of 48 samples of lager beer wort and 8 samples of ale wort. They were all found to be properly constituted for the purposes intended. A biological examination was made of 4 samples in order to detect incipient infection during the cooling process.

Yeasts.

One hundred and sixty samples of lager beer yeast were examined, six of which were from the Pure Yeast Department and were found to be entirely free from infection. Twenty-eight samples of the brewery yeasts contained infections above the established safety limit, while the remaining 126 samples were in a satisfactory condition. The examination of 61 samples of ale yeast showed 2 to contain a rather excessive amount of lactic acid ferments, the remaining 56 being in a sound and healthy condition.

Beers and Ales.

One hundred and eighteen samples of ale were subjected to chemical as well as biological examination; 40 of these were completely analyzed in the Chemical Laboratory with the following average result:

Original gravity	13.1 deg. B.
Alcohol by weight	4.28 per cent.
Alcohol by volume	5.36 per cent.

All samples of lager beer were examined in the Chemical as well as Biological Laboratory, and 68 samples were completely analyzed. The average results found were as follows:

Original gravity	12.1 deg. B.
Alcohol by weight	3.48 per cent.
Alcohol by volume	4.36 per cent.

Temperance Beverages.

Ten samples of low alcoholic beers and 4 samples of low alcoholic ales were found by the chemical analysis to have the following average composition:

Original gravity	6.2 deg. B.
Alcohol by weight	0.32 per cent.
Alcohol by volume	0.42 per cent.

The alcohol content of the 8 cider samples varied from 0.1 per cent. to 1.25 per cent. by volume.

Coals.

Of the 18 samples analyzed, 8 were found to be of satisfactory composition, while 10 samples contained excessive amounts of ash and could only be considered fuels of medium quality.

The miscellaneous articles examined comprised mainly samples of filtermass, oils, boiler compound, soaking solutions, cleansers and disinfectants, varnish, etc.

A Study of American Beers and Ales.

By L. M. TOLMAN, Chief Central Inspection District, and
J. GARFIELD RILEY, Assistant Chemist, Food and
Drug Inspection Laboratory, New York.

Bulletin No. 493 of the United States Department of Agriculture, under the above title, contains a contribution from the Bureau of Chemistry in Washington, D. C., whose chief is Carl L. Alsberg.

The investigation, whose results are communicated by the Bulletin, was undertaken for the purpose of securing information in regard to the composition of brewery products made in this country, the main object being to find, if possible, a means of distinguishing beers and ales made entirely from malt from those made from malt together with other cereal products, such as rice, corn and cereals.

To attain this object the literature of the trade was carefully studied; samples of raw brewing materials were collected, as well as data relating to foreign beers; analyses were made of finished beers and ales and their results tabulated, showing clearly that during fermentation marked changes are brought about other than the mere conversion of sugar into alcohol, among them the development of acids, the losses of protein, ash and phosphoric acid.

There is also a table showing the effects on the finished beers or ales of the use of corn, rice, cereal and brewers' sugar as substitutes for malt in the worts, while still in another table the results are given of the examination of a large number of commercial beers of American production, which were represented to be made from malt and hops, it being alleged that this representation proved to be false, although exact information as to the amount or kind of substitute used was not available.

The conclusions arrived at by the investigators are these:

"The all-malt beers made in this country contain higher percentages of protein than the all-malt beers made in Europe, owing to the use in this country of a barley high in protein.

"The use of rice, corn or corn products, and brewer's sugar as substitutes for malt reduces the content of protein, ash and phosphoric acid in the finished beer.

"This difference, as regards the protein, ash and phosphoric acid, is a sufficient basis for distinguishing the all-malt beers made in this country from those containing the commercial mixtures of rice, corn, cereal and brewers' sugar.

"It is necessary to calculate analytical results to the basis of a common wort in order to interpret them properly."

Copies of Bulletin 493 may be procured from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 5 cents per copy.

RAPID PROCESS FOR DETERMINING THE ACIDITY OF CORN. (U. S. Department of Agriculture. Circular 68.) The test to determine the acidity of corn, which previously required 16 to 18 hours, can be made in less than one hour by the use of improved apparatus developed by H. J. Besly and G. H. Baston of the office of Grain Standardization, Bureau of Plant Industry. Under the new method an electric mechanism, similar to those seen on soda fountains, is used to mix finely ground corn and alcohol. Thirty minutes of mixing, it is found, will extract from the corn an amount of acid-reacting substances comparable to the amount extracted through digestion in 86 per cent. alcohol at room temperature for 18 hours. The methods for making acidity determinations of corn with this apparatus are described in detail in the circular.

Generating Carbonic Acid Gas.

By FRED. M. MAYNARD.

(Continued from page 188.)

While if the price of the acid is higher than that given the saving will be correspondingly greater.

Another advantage of the soda process is that so long as the materials are of good quality there is no uncertainty about the resulting product, therefore there is no necessity for testing the residue, as is the case with whitening. The residue, by the way, which is a perfectly clear liquor, free from sediment, may be safely run down the drains without fear of choking them, as the gritty lime mud from the whitening is so liable to do. Should, however, through negligence or breakdown the spent charge of soda be allowed to remain too long in the generator, it may become crystallised, but it can be easily dissolved with warm water, while the hotter the water the more effective it will be. As this residue has, however, a distinct market value, the better plan is to run it into tubs or pans, when it will crystallise in about two hours at ordinary temperatures, into Glauber salts (sulphate of soda), a readily saleable article, and worth about thirty shillings per ton—seventy-five pounds of Glauber salts being obtained as the result of the neutralisation of forty pounds of bicarbonate of soda by twenty-four pounds of sulphuric acid, in place of the valueless sludge deposited from the whitening; although as this latter substance is sulphate of lime, and is produced on virtually the same lines as the "soluble gypsum" sold to brewers for water hardening, it might possibly be used for the same purpose, and thus save buying this article. It would, however, be necessary to determine the actual weight of sulphate of lime in a given quantity and make sure that it was free from arsenic, lead and other deleterious matters.

It may be found, when whitening or other gritty material has previously been employed, that on first using bicarbonate of soda the generator will show defects, particularly about the discharge fittings. This will be due to the cleansing properties of the soda, but such defects should be immediately made good, and it will be found distinctly advantageous to employ a rubber joint ring between the discharge sluice and the generator.

A further desirable feature in connection with the use of bicarbonate of soda instead of whitening is that the generator keeps cooler and produces cooler gas, and since increase of temperature decreases the solubility of carbonic acid gas in water or beer, whilst decrease of temperature increases its solubility (as a matter of fact, just double the quantity of this gas will be absorbed by a liquid at freezing point as it could possibly absorb at 68° F.), and as this is very clearly evidenced when bottling chilled and conditioned beers, the importance of this point will be fully appreciated by every brewer. Generator carbonic acid gas must always be thoroughly purified by washing (although this is not so necessary when bicarbonate of soda is the alkali employed) and the water in the washer frequently changed. Should the gas have an unpleasant odor due to the presence of organic impurities in the earthy carbonates, permanganate of potash is generally used in the washer. For this purpose one ounce of permanganate of potash to the gallon of water will be found sufficient, but when the purple color disappears the solution has no further purifying action and should be replaced by a fresh charge. In the event of the gas containing nitrous compounds, owing to the inferior quality

of the sulphuric acid employed, and the brewer, having a stock of such acid, is obliged to use it, it is possible to purify the gas by passing it through a washer containing a mixture of equal parts of a ten per cent. solution of sulphate of iron (green vitriol) and a ten per cent. solution of carbonate of soda. To make half a gallon of this mixture, dissolve four ounces of iron sulphate in a quart of water, and four ounces of common washing soda in another quart of water; then mix the two solutions together, when a precipitate of ferrous oxide will be formed, which will arrest all nitrous compounds in the washer.

When using generator carbonic acid gas for beer bottling, it is also very essential that no air be allowed to mingle with the gas, since although air is very slightly soluble, it greatly prevents the solution of the gas, and frequently accounts for the contents rushing violently out of the bottle when opened, while the part remaining in the vessel becomes quickly flat and insipid, to say nothing of its other detrimental actions on the beer, causing turbidity and unsoundness.

An incidental gain secured by the substitution of bicarbonate of soda for whitening, but one not to be despised, is that of the saving in railway charges, for whereas to produce a ton of gas on the old system (carbonate of lime) no less than six tons of raw materials (three tons whitening and three tons sulphuric acid) are needed, only three tons four hundredweight of bicarbonate of soda and sulphuric acid (two tons soda and one ton four cwt. acid) are required, representing a clear reduction of two tons, sixteen hundredweight in the total weight carried; while to users abroad, who have to pay such high freights on bulky articles like whitening and on sulphuric acid, even as deck cargo, it will be obvious that the saving is a very considerable one, approximating probably to half the total cost of the material as received at a brewery in the Antipodes, for example. What applies to freight applies also to storage room, which may be a matter of some importance in a small yet busy bottling store, for the bicarbonate of soda is supplied in handy two-hundred-weight bags or ten-hundredweight casks, while, so that it shall not be mistaken for the finest quality used in the manufacture of soda water, etc., for which it cannot be substituted, some manufacturers give it a slight cream tint. As this is one of the few commodities the price of which has not risen owing to the war, those brewers who have not hitherto tried it will be well advised to do so now.—(London "Brewers' Journal.")

SOLIDIFYING DRIVEWAYS. "If a liberal coating of cinders be applied, just after a rain, to the dirt approaches to the driveway, the weight of the passing wagons will press them firmly into the earth while it is still soft. The result will be a surface that will not easily be blown away by the wind."—("Graindealer's Journal.")

TOP FERMENTATION YEASTS. Unsatisfactory results are sometimes obtained with top-fermentation yeast and this is due to the fact that certain classes of these yeasts possess an extremely low power of fermenting maltose. Yeasts rich in maltase are formed in worts containing much maltose, while worts poor in maltose yield yeasts containing little maltase; the quantity of zymase formed is in proportion to that of the maltase. Yeasts rich in maltase, however, in the presence of interfering substances such as large quantities of dextrins, proteins, etc., tend to lose their hydrolytic properties and give bad results.—(F. Schoenfeld, "Ver. deutscher Chem.")

Notes and Queries.

As nearly all the questions we receive refer to matters generally interesting replies.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

R. G. The change in the character of your product, especially with reference to its thin taste and lack of foam keeping qualities, may perhaps be attributed to some change in your brewing materials and it is, therefore, impossible for us to give you any advice or offer any assistance until you have provided us with the fullest possible details, not only of the materials you are employing, but also of your mashing and fermentation methods and temperatures. You also fail to state whether your beers are carbonated or whether you allow them to undergo a secondary fermentation by the addition of kräusen. If the latter is the case, kindly let us know the temperatures of your chip cask cellars and the average pressure maintained on your bunging apparatus.

T. C. The phenomenon you describe is not at all unusual. The production of hydrogen sulphide during the fermentation of certain lager-beer-and-ale worts is not yet sufficiently explained and cannot always be accounted for. Some authorities attribute it to the presence of free sulphur in the brewing materials, but our own experiments lead us to disregard this hypothesis and to attribute it to faulty composition of the wort, which has a degenerating effect upon the culture yeast and a tendency to develop certain wild species. We suggest that you make the following preliminary experiments: (1) Obtain an entire change of yeast from a reliable source; (2) use the new yeast in a wort made from at least 65 per cent. of good quality malt; (3) increase the percentage of hops so that it will be represented by 0.6 pound per barrel of wort, collected in the fermenting vat. Do not make any other changes. Treat your water exactly as you treat it now. Let us hear from you as soon as you have observed any special developments.

F. S. The best method you can adopt under the circumstances is the following: Take a thin, glass cylinder slightly narrowed and with a shoulder at the top, and fit with plugs of cotton wool and with proper caps. Sterilize several of these cylinders and then take them to the place where the air is to be examined. Pour a little sterilized nutrient gelatine into each of the cylinders and leave them with the plugs out for one hour. At the end of this time replace the plugs, rotating the cylinders horizontally until the gelatine solidifies into a thin layer on the walls of the cylinders; finally put the cylinders into the incubator and maintain a temperature of about 80 deg. F. to 85 deg. F. for several days, at the end of which time they will be ready for biological examination.

J. C. It is the result of our own experience that India Pale Ales are at their best after they are stored for a period of from six to nine months from the time they were brewed, and it is a good custom to brew them in October or November so that they may be ready for consumption in the following winter. We are in favor of storing the ales in hogsheads or barrels rather than in vats. The best storage temperature is in the neighborhood of 58 to 60 deg. F. About one-half pound of new choice hops per hogshead is

quite sufficient for dry hopping. The hogsheads should be bunged with porous spiles for about three months after which the package may be tightly bunged and stored for the remaining period.

A. J. M. We suggest that you call the attention of your architect to the desirability of removing all the ammonia coils from the ceiling of your fermenting room. We advised you to do this in the spring of last year, but you appear to have ignored our suggestion. We also called your attention to the desirability of arranging for more perfect insulation and to make some attempt to install a proper ventilating system which, at the present time, is entirely lacking. As to the most appropriate capacity for fermenting vats, there are no fixed rules, but in your particular case we should give preference to a capacity of from 150 to 200 barrels each.

T. W. The development of *sarcina* does not take place with equal rapidity in all breweries, perhaps because there are so many varieties of these objectionable organisms. It is quite possible that the serious trouble which is now in your brewery may have been growing slowly, but steadily for many months. If you had regularly consulted a brewers' chemist, the necessary warning note would have been sounded and you would have been advised to adopt preventive measures at once. Without knowing any of your surrounding conditions we suggest a thorough house-cleaning and an immediate change of yeast. Keep your cellars uniformly cold. Be careful to remove the grains immediately after they leave the mash tub. Use a sufficiency of new hops of good quality and boil the wort at least two and one-half hours after which cool it with the greatest possible rapidity. As to the beers you now have on hand, you had better kräusen them with strongly hopped kräusen and get them under pressure as quickly as possible.

E. R. We were very much interested in the description of your process and have made a careful examination of your beers. We regret to say that we do not consider them in any way satisfactory. They are too sweet in taste and are entirely lacking in stability. Although the original gravity of the wort was only a trifle over 11 deg. B., the gravity of the beer is 5.6 deg. B. It contains entirely too much fermentable extract which after mixing the beer with a small quantity of yeast was readily fermented. It is possible that beers of this type may be adapted for bottling purposes, provided they are properly steamed, but they are in our opinion entirely unsuited for the draught trade.

F. B. We can see no reason for condemning or even for adversely criticising the pitch of which you have sent us a sample. It is normal in color and odor, in fracture and melting point. It is quite insoluble and communicates no odor or taste to a 5 per cent. solution of alcohol, slightly acidified with lactic acid. It has excellent coating qualities and does not crack when dry. We pronounce this a first class material for pitching brewery packages.

C. W. The spent hops left in the hop jack after proper sparging retain approximately two barrels of liquid for every 100 pounds of hops used in the kettle, consequently if you use 350 pounds of hops, the liquid retained by them in the hop jack will represent about seven barrels. The gravity of this liquid, when squeezed out by gentle pressure, should not exceed from 2-3 deg. B. Whether you are properly exhausting your hops and extracting all their valuable and useful ingredients into your beer can only be determined by chemical analysis (1) of the hops before boiling and (2) of the spent hops left in the hop jack.

J. M. Both samples of yeast have a stale and disagreeable odor, but this may be due to the length of time taken

up in sending by mail. The sample marked "No. 2" is very weak, containing an abnormally high percentage of dead cells, and it is grossly contaminated by *sarcina* and *saccharobacillus pastorianus*. We advise its rejection. The sample marked "No. 1" is much more uniform in appearance and its protoplasm is fairly normal, but like sample "No. 2" it is too much contaminated and it is likely to impart to your finished beer a disagreeable flavor. The best thing for you to do under these circumstances is to obtain a new supply of pure culture yeast from a reliable source.

"THE PSYCHOLOGY OF ALCOHOL is complex. The case is not stated in statistics, in saving bank figures, in police records, or in any other compilation of data. One might as well try to reduce life to a mathematical formula as to try to devise rules, based on statistics, for so moody a thing as man."—"National Herald.")

LIFE OF AMMONIA PUMP RODS. By D. L. Fagnan in "Power." As is generally known, the life of the piston rods of ammonia pumps in refrigerating plants is comparatively short, and the rods must be packed quite frequently to prevent leakage of ammonia. The frequent packing wears the rod considerably, and many engineers keep on hand several sizes of packing rings. Keeping on hand several sizes of packing rings and repacking the rod every two or three weeks is a source of loss of ammonia. Inquiries of 230 operators in one year showed that 25 had to renew the rod every three months and to repack it every three weeks. This experience of the operators was corroborated by reports from various ammonia pump manufacturers. Experiments with materials for pump rods showed that the best service is given by a high grade tool steel. This rod was packed with fibrous packing symmetrically arranged about a central metallic insertion. The rod has been in service for more than a year, running 18 hours a day in summer and 6 to 8 hours a day in winter, and the wear is only 0.002 inch. From five to six drops of oil per minute is fed over the rod, and it is only upon starting, during the first few strokes, that the odor of ammonia is perceptible.

PURIFICATION OF WATER BY CHLORINE. The usual substance employed for the purification of water by chlorine is calcium hypochlorite, but J. Race has experimented with ammonium hypochlorite and finds it to have a greater germicidal value as measured by its action on *B. Coli Communis*. Using a solution of ammonium hypochlorite (prepared by the double decomposition of calcium hypochlorite and ammonium oxalate) against one of calcium hypochlorite of similar strength—namely, .3 parts per million of available chlorine, the former was found to be 20 to 30 times as effective. This was traced to the presence of chloramine, apparently formed by the spontaneous decomposition of the ammonium hypochlorite in accordance with the equation $\text{NH}_4\text{OCI} = \text{NH}_2\text{Cl} + \text{H}_2\text{O}$. Chloramine is known to have a much greater germicidal action than an equivalent of chlorine, and to be produced by the action of ammonia on calcium hypochlorite in dilute solution. Practically no absorption of chlorine was found to occur when water was treated with a mixture of hypochlorite and ammonia. For example, in parallel experiments with a river water containing ten parts per million of available chlorine in the form of (a) calcium hypochlorite alone, and (b) calcium hypochlorite previously treated with an equivalent of ammonia, the proportions of available chlorine absorbed at 60° F. were (a) 35 and 60 per cent. in 5 and 60 minutes, and (b) 1.4 and 3.2 per cent. in 1 and 20 hours respectively.—("The Lancet.")

— THE —

National Brewers' Academy

AND

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Nil Desperandum.

Some of our friends appear to consider the present state of affairs regarding Prohibition in the United States as being desperate, even hopeless. They are mistaken.

In several States brewers have closed their plants, sold their equipment and real estate. In others they have converted their breweries for the manufacture of "non-alcoholic" beverages, fruit juice, cereals, ice cream, artificial ice, etc., ill-advised laws having been passed by Legislatures composed of men who were cowed by the threats of local pastors and self-seeking agitators, while in other States rural and misinformed voters have decreed Prohibition by alleged "popular" referendum.

The members of the trade who were thus compelled to turn their capital and industrial activity into channels other than those to which they and their ancestors were apprenticed and accustomed cannot be blamed for having done so. They did what they could do to save themselves and their families from economic annihilation.

But those who are still brewing beer and thereby supply millions with what they demand for their personal needs and enjoyment are determined to continue the fight against the enemies whom, with the assistance of the enlightened masses of the American people, will ultimately defeat.

The situation in this country is not as desperate and hopeless as some may consider it to be. Our enemies, in their blindness and madness, which is sure to finally destroy them, are recklessly pursuing a policy which will result in the masses turning against them. The very fact that a number of States have been made "bone-dry," and that Congress has passed bills by means of which "bone-dryness" may be actually accomplished will, sooner or later, induce those made to suffer to reverse the doings of their legislative misrepresentatives as well as the foolish steps taken by rural and parson-led constituencies.

Those whom the gods wish to destroy they first make mad. And madness it was when an insignificant number of desperate theologians and jobless politicians inaugurated the present reign of industrial terrorism. They did not know that it must needs be followed by a reaction which is bound to again bring about normal conditions.

The breweries now closed, or converted, will be reopened and operated for the production of the beverage which, in all civilized countries is recognized as a factor in the evolution toward progress, moderation, comfort and happiness of the masses. There is no such thing as a permanent standing still in the process of social development, much less than retrogression toward barbarism and universal deprivation of the means of human enjoyment.

Humanity will not return to the dark times when alcohol was not yet known. From the time when man commenced to progress from cannibalism, raw meat, unboiled roots, and nothing but water as a beverage, we have arrived at our days of refinement in habitation, dress, all kinds of tasty and dainty food, delicious and invigorating beverages, arts, accelerated means of communication and all the other blessings of civilization and science, and we shall not permit a small number of persons whose brains are still steeped in the darkness and ignorance of mediævalism to prevent us from progressing to still greater comforts and joys of life.

The present situation is only temporary. The brewing industry will not be extinguished in the United States. It will survive all attacks now being made upon it!

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Prejudice, Intolerance, Fanaticism.

"With great imagination, proper to madmen, he leads his powers to death, and himself leaps into destruction." Thus Shakespeare describes the mental make-up of "Hotspur," and his description fully fits our modern Prohibition "Hot-spurs" who, in their madness, inculcate prejudice, intolerance and fanaticism in the minds of their uninformed neighbors for the purpose of inciting them to destroy necessary and wholesome industries.

The leaders of the Prohibition movement will not only lead their followers to political annihilation, but also ultimately leap into destruction themselves. That will be the natural result of their crusade.

Can it be otherwise? Can men who are trying to turn backward the wheels of progress succeed when they themselves are sinister of wit, weak in wisdom, false in perception, walking in intellectual darkness, blind to the light of science, nurturing lies and rejecting truth, are trying to breed hatred among the citizens of a republic so that they might fight and destroy each other, their property and their families?

They are the conservators of all that reason would do away with in order to advance and improve humanity. They are the fosterers of error and the enemies of knowledge. They feed fear and poison all hope for a better future. They try to revive the brutal laws of generations mouldering in their graves for many centuries. They are Anarchists at heart who would smother all faith in altruism and love of neighbor. They betray all who believe them. They rejoice in the tears and in the misery of those whose right to existence they deny. They are human monsters who pollute thought, serve despair and ravish justice. They offend against fact and never knew what is logic.

It is impossible that bestiality sought to be reestablished on earth by such monsters will ever be enthroned in a civilized community.

The passing by Congress and the signing by the President of the District of Columbia Prohibition bill is an outrage perpetrated upon a large number of defenseless American citizens who, thereby, have been deprived of their right to decide a vital question by their own votes, and who are now compelled to live as men from all parts of the country, a handful of wily, self-seeking and despotic politicians, have decided that they shall live.

Mr. Joseph P. Tumulty, President Wilson's private secretary, seems to be a fresh and rash young man. He has written a letter to some of his political cronies in New Jersey urging them to work for the Local Option Bill in that State. Is it work of that kind for which the people of the United States are paying Mr. Tumulty's salary? He should stick to his writing the President's letters; what Legislatures in the different States should or should not do, is none of Private Secretary Tumulty's business.

Minority Rule.

Whenever the Prohibitionists or the Woman Suffragists have been defeated in a State by the voters at the polls they turn to bulldozing the legislature into doing their bidding. Legislators may be easily "influenced" by local pastors and agitators who threaten them with political annihilation by the alleged "church vote," or labor vote, or any old other vote that only exists in the imagination of the fool politician thus threatened.

Because the Prohibitionists cannot hope to conquer big industrial and, therefore, intelligent commonwealths like New York, Pennsylvania, Wisconsin, Illinois, Ohio and others if the question of destroying a necessary and salutary industry were submitted to a referendum of the enlightened voters, they have gone to Congress, demanding that the United States be made "bone-dry" by amending its constitution.

The procedure to accomplish this consists in making two-thirds of all State legislatures vote for the scheme of destruction. Under this arrangement States like Oklahoma, Nevada, the two Dakotas, Wyoming, Rhode Island, Arizona, New Mexico, each one of which has hardly as many inhabitants as some of the big cities of New York, Pennsylvania, Illinois, Ohio, California, etc., represent as high a political value as States with populations ten times as large as those undeveloped and sparsely inhabited political units of our entire national aggregate. And the consequence would be, if nation-wide Prohibition were to be achieved by constitutional amendment, that the people of the United States would be deprived of their right to determine their own welfare and destiny. An insignificant minority of cowardly and selfish politicians would be empowered to overwhelm more than one hundred million human beings, alleged to be "free and independent!"

The small and unpopulated States would be permitted to dictate to the large and populated ones. We would no longer be a republic of freemen, but a nation ruled by a minority of poorly informed, poorly educated and deliberately misguided reactionaries.

The question whether the American people are to permit an outrage like that is far more important than whether we are to take part in the European war, or the decision of any other pending political question.

There was lieutenant in the United States Navy whom his record as a gunner made him the best in the entire service. One day he drank more than was good for him, and Josephus Daniels, the Prohibitionist and, unfortunately, Secretary of the Navy, dismissed the efficient officer, who had served with distinction for twelve years. If Daniels were to dismiss every gunner and officer caught "drinking," the Navy would soon consist of ships without a crew to navigate and fight them. Daniels is unfit for his post. He is a nuisance and a disgrace. The sooner he is dismissed, the better it will be for this country. A man should be at the head of the Navy, not a Prohibition fool.

"Local Option" to Destroy?

We recently discussed the question of Local Option for the big cities of New York State with the pastor of the local church which the women of our family are in the habit of attending, and we asked him why he favored Local Option. His answer was: "Because I am an American. It is un-American to deny the people in our large cities a right which the inhabitants of our villages are possessing."

And when we told him that no man should be accorded the right to destroy his neighbor's property, deprive him of his employment and reduce his family to pauperism, this alleged "representative of the Divinity" replied: "But when a majority of American citizens decides upon such destruction, they have a perfect right to so declare their determination on election day."

We then asked him this question: "Would you accord to the Jews, Catholics, saloonmen and others in this neighborhood the right to determine whether or not your Protestant church should be torn down, or blown up with dynamite, and you be deprived of your employment and your wife and children exposed to the pangs of hunger and misery?" he replied that times when churches were destroyed by mobs of different creeds had long gone by and no one would nowadays raise such a question.

So, when the business of a theologian is to be destroyed by Local Option, the proposition is out of date, and we suppose it would be un-American to advance or suggest it? While the destruction of any other business is perfectly legitimate, up to date, American and sensible!

Local Option to destroy any value, any existence of American citizens, without compensation, is wrong, is intolerable, is un-American. We might as well introduce Local Option to return to Monarchism, slavery and all other evils which Americans have banished from this soil in order to enjoy life, liberty and the pursuit of happiness!

The tango is doing more harm to the young men of this nation than alcohol, says a learned college president. Is it possible? Let a political Tango Prohibition party be started at once! The parsons should turn out in force to be its organizers—if there is something "in it" for them; but will it divert the dollars and cents from the tango parlors into the "reverend" theologians' ever gaping pocketbooks?

In Boston a cooper has lost his job in a brewery, it is said, because he had "hit the trail" in "Billy" Sunday's circus, and in some other city a brewing company has prohibited its workers from attending that circus. We are opposed to intolerance wherever it shows its head and we are pleased to say that, so far, these are the only two instances of which we ever heard that members of the trade should have been intolerant.

"Chamberlain's Magazine" suggests that the entire liquor problem be referred for its solution to a national commission of scientists and sociologists. There will be no harm in carrying out that plan. It has been done in other countries more or less successfully. Nor would we be sorry if the question were to be taken out of politics altogether, a pious wish which may not come true in this country for a good many years. And yet we believe that the American people, sooner or later, will solve the problem on election day, when the masses shall have become conscious of the fact that the political parsons and their legislative tools have bamboozled them.

Blasphemous Agitator Anderson.

If 5,000 Christian ministers, with the Governor of the State and the Lord of Hosts on their side, allow Elon R. Brown to throw them down it is because a non-conductor has been interposed or communication cut between them and their supposed source of power.

Yours to strike in the name of Him who drove the money-changers out of the Temple.—*William H. Anderson, State Superintendent, New York Anti-Saloon League, in a bulldozing circular to members of the New York Legislature.*

There you have it: The legislature of the Empire State is to do the bidding of a self-constituted outfit of "5,000" Christian ministers who, as a self-constituted agitator blasphemously boasts, are associated with the Governor of the State and the "Lord of Hosts!"

The people of a great commonwealth are to be deprived of their joys of life; a great industry employing tens of thousands of citizens and yielding to state and nation millions of dollars in taxes, is to be destroyed because one single salaried liar says so. There are no "5,000 Christian ministers" to back this poltroon; nor may he be confident of the backing of Governor Whitman, the Governor being a politician who says this thing to-day and some other thing to-morrow, according to how the political wind blows; nor has Anderson the indorsement of the "Lord of Hosts," whom this shameless blasphemer, like some European autocrats now devastating the world by war, drags into the discussion to bolster up his lying assertions of being delegated by the Divinity to accomplish an infamous scheme of destruction and deprivation.

The Anti-Saloon League is not, as Anderson claims, the "Church in Action," nor is it an instrument of the "Lord of Hosts"—it simply is a self-constituted band of swash-bucklers who have no other object in view but their own aggrandizement and the filling of their pockets with loot. And to gain their ends they are using the alleged "influence" upon uninformed and, therefore, credulous rural voters, of a small number of poorly situated country pastors who are deluded with the false hope that, should they succeed in depriving the masses of alcoholic beverages, their churches may again be filled and thus their own economic condition be somewhat improved.

What the Joint Committee of the Legislature, holding hearings upon the "liquor" bills, thinks of Anderson became evident on March 14th, when Anderson was kicked out of the committee-room for having publicly insinuated that members of the Legislature were waiting to be bribed by "the liquor interests," Anderson having barefacedly refused to substantiate his charges.

"It seems little less than a crime to witness the continued indifference, lack of harmony, insane jealousy and disorganization existing among the temperate 'wets,' whose very liberty as well as their millions upon millions of investments are drifting rapidly to confiscation and destruction. Is it possible that cowardice underlies this shameful lack of unity and cooperation? To the 'wets' we urge now, to-day, at once, a complete change in tactics and in leaders. Dismal and abject failure marks the efforts and activities, or lack of them, of the present leaders. Let us have a change. If you would save the day for temperance and for personal liberty, discard the arrogant, selfish, unreasonable, arbitrary and ignorant rum seller, dive and grogshop keeper and let us go into a fight for real temperance with clean hands, clean mind and clean heart."—(Charles E. Gehring, in N. Y. "Hotel Review.")

Intemperance and Poverty — Cause or Effect?

Bolton Hall in his new book "Thrift," published by B. W. Huebsch, New York City, says: "When we come to the claim that liquor is the chief cause of poverty, we find it merely an unfounded assertion. The notion that drink is the cause of poverty is due to the association of two unrelated facts: that most men drink, and that most men are poor. There is nothing in the great majority of cases to show that the poverty is due to the drink, yet the claim has been so often and so widely made that, despite the fact that most rich men drink, it has gained acceptance. People say, 'This poor man drinks. Drink, therefore, made him poor.' They might say instead, 'This drinker is poor. Poverty must have made him drink.' The kind of reasoning that ascribes poverty to liquor is the same that leads men to say: 'Great Britain has a king and Germany has an emperor, therefore, royalty makes them prosperous.' The truth is that so many elements enter into the problem of poverty that it is absurd to blame its existence on any one cause. The idea that because poor men drink, drink makes them poor, is the same as saying: 'Most of the poor men in England are white; their whiteness is the cause of their poverty.' We might as well say: 'Most poor men shave; therefore, shaving makes them poor.' The truth is that there is no proof that liquor to any material extent causes poverty, but, on the contrary, many reasons for believing that poverty causes drinking. Look at the great countries of India and China, which hold nearly one-half of the human race. Mr. Srinivas R. Wagle, the well-known East Indian economist and journalist, lived for years in China; he says that wages in those two countries are the lowest, estimated in purchasing power, of any civilized country in the world. He states also that the great mass of the Indian and Chinese peoples hardly know of the existence of liquor. Clearly then there must be other causes of poverty in those countries. These various causes you may find in the other chapters in this book."

We recommend the book to the organized trade. If hundreds of thousands of copies are distributed throughout the country, the campaign of enlightenment, education and organization will be vigorously stimulated.

Wayne B. Wheeler, of the Anti-Saloon League, and others of his ilk, have announced that as soon as this country takes part in the world-wide war, their "first step would be to ask Congress to enact a law, ostensibly a revenue measure, but which would place such a high tax on every liquor dealer in the United States that would be absolutely prohibitive, and thus bring about at one fell swoop without any consideration for the rights of the citizens involved, prohibition which Congress has not yet gone on record for in its regular procedure." Let them try it! But will Congress be stupid enough to do their bidding?

There can be no worse crime against Americanism than to drag religion into politics, as the Prohibition theologians and agitators are doing when they assert that the Divinity has authorized them to demand of legislators that they pass laws regulating the lives of the people at large. The mysterious power by which the universe proceeds on its course is too big to meddle with the affairs of the insignificant beings living on one single and little planet, and those who claim to be the interpreters and representatives of that gigantic and to the human intellect incomprehensible power, are scoundrelly impostors and liars.

Keep It Up, Mr. Agitator!

And by the way: Tobacco is being attacked almost as vehemently as alcohol in some of our hayseed-legislatures. The agitators must have something to do to keep the rivulets of their wherewithal from running dry. Tobacco is a first-class object of prohibitory strategy. And when "Demon Nicotine" has been conquered, there are plenty of other demoniacal things to be tackled, for instance: The manufacture and sale and use of playing cards and checkers and dominoes, not forgetting fried meats and buckwheat cakes! In a word, why not a nation-wide law compelling men to walk on one side of the street and women on the other? Why not a nation-wide law separating the sexes in the churches, in the theatres? And so forth, and so forth and so forth. Keep the ball rolling, Mr. Agitator, and then there will ever be a stream of pennies trickling toward your saintly palm from those whom you can fool with your oleaginous phrases. There will always be enough ignorant and, therefore, credulous souls to feed, and clothe and house you!

Boomerang for Southern Prohibs.

Over 150,000 negroes have come to New York alone during the last few months from the South, Prohibition having driven them from their homes. Who is to replace them to work on the Southern farms and fields? Certainly not white men from the North, where Prohibition has not yet made them the slaves of hypocritical parsons and jobless politicians. Let Kansas, Maine and the other fool Prohibition States send their "bone-drys" to the South to drudge for the fool planters who drove their black laborers from their homes. The Southern Prohibitionists are getting now what they deserve!

Minnesota and Wisconsin legislators are discussing the question of compensation. If these two States are to become the pioneers of decency and justice toward great and necessary American industries, others will soon emulate their good example.

George B. Richard, New York City, says: "The claim of the Prohibitionists is exactly like the claim that used to be put forth by the advocates of other fads and fancies. They both assume that their kind of legislation makes the sun shine, the rain fall, the crops grow big, and prices high."

Charles Hooper, of Seattle, Wash., proposes to "start a big movement by organizing a party 'to prohibit the Prohibitionists from prohibiting.'" To be successful in that undertaking, Mr. Hooper will have to read THE BREWERS' JOURNAL for correct ideas and convincing arguments.

Anderson, the New York Anti-Saloon faker, wants the legislature of this State to proceed against an Assemblyman who is reported as having said that Anderson came to New York with a single dollar in his pocket and a single shirt upon his back, neither of which he had ever changed. May be that is so, and also it may be not. At any rate now "Billy" has more than one dollar and probably more than one shirt. It is even said that he has grown rich since, absolutely discredited and disgraced, he came from Maryland to the Empire State. If that is so, the question arises, as a contemporary suggests: "Where did he get it?" And from many sides the answer is waved by the winds: "He got it from a lot of fools who believe him to be sincere and honest."

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

WASHINGTON, D. C. By probably the most drastic and revolutionary methods ever known in the United States Congress the District of Columbia was, on Wednesday night, February 28, voted "dry" by the House of Representatives. The vote was 273 to 137. The Senate had previously passed the bill. The bill, which was signed by the President four days later, will go into operation on November 1st, 1917.

No discussion was allowed under the gag rule brought in by the House Rules Committee, and the vote was taken with only one opportunity for amendment, that being in the form of a motion to recommit the bill to the District Committee with instructions to bring it back to the House forthwith amended so as to contain the "bone dry" recommendation and a proposal that the question be submitted to a referendum of the people of the District before it is put into operation. This motion was defeated.

The enactment of the Sheppard-Barkley prohibition bill will affect 264 retail liquor establishments and close ninety-one wholesale stores and four breweries. It will put out of employment, or directly affect, over 3,200 individuals. There are 264 retail licenses now held by Washington saloons and clubs. The saloons will have to close their doors on November 1, and the clubs will lose their revenues which they have heretofore derived from the bars. In addition to the loss to those connected with the liquor industry, the District of Columbia will lose over \$500,000 annually in license fees, and taxes must go up as a necessary consequence.

The District prohibition bill says, in substance, that alcoholic liquors cannot be made, sold or given away in Washington. Nothing in the bill prevents liquors in any quantity being brought into Washington for personal use. An amendment removes the restriction on liquors to be used for scientific or sacramental purposes.

So the interesting question has arisen as to whether the Reed "bone dry" amendment to the post-office bill, which prohibits the importation into dry states or territories of liquors, and the advertising of liquors in dry states and territories where the laws of such states and territories prohibits such importation and advertising, will or will not apply to the District of Columbia. The District of Columbia is not a state, nor yet is it a territory, strictly speaking, and by the terms of the bill is not included. But the difference of opinion on this point is marked. Several of the best lawyers, in Congress and out, hold emphatically that it was the intention of Congress to prohibit the bringing of liquor into dry territory, while other authorities, equally entitled to consideration, are firm in their opinion that the law does not cover the District of Columbia. According to the latter view, it will be permissible for any citizen of Washington to "stock up" liquor, to any extent and from any source, for his own or his guests' use, as long as he does not sell it. Of course, the bill has a provision against "giving away" liquors, but no prohibition of a man placing a glass of any liquor he chooses before a guest and that guest

making whatever disposition of the liquor he wishes. Nor will it be in the slightest degree difficult to secure all the liquor the residents of Washington want, for about fifty feet over the line, in Bladensburg, Md., it can be had in any quantity and in all varieties, while Baltimore is only forty minutes' ride. There is no doubt that the courts will be called upon to settle the question as to whether the Reed amendment is to affect the District.

Discussion here of the organization of the new House has taken an interesting turn. It has become apparent to both Democrats and Republicans that old party lines could easily be lost sight of, and that the question of controlling the House might center around the prohibition question. It will be remembered that during the closing hours of the last session in the House some of the "wet" Democrats, objecting to the steam roller, revolted and defeated the Administration's pet bill to increase the number of Federal judgeships, simply to punish their "dry" Democratic colleagues for forcing the drastic gag rule under which the District prohibition bill was passed. If the "wet" members are so disposed they could form another such group and absolutely hold the balance of power. And it is not too much to say that they *are* so disposed.

It is in the appointment of committees that the prohibition question may figure very largely. Undoubtedly the "wets" are opposed to even the mention of prohibition in the next Congress. There are two committees which virtually pass upon prohibition legislation: The judiciary, to which is referred the Constitutional Amendments, and the Rules Committee, which can provide the machinery for pushing it through the House in spite of regular rules. If the anti-prohibition members could control these two committees they could absolutely insure no prohibition legislation. Under bi-partisan control the "wets" might easily control these committees by carefully selecting both Republicans and Democrats of "wet" proclivities.

For several months the Bureau of Investigation of the United States Department of Justice has been conducting a quiet investigation into the alleged payment by Washington applicants for liquor-selling licenses of large sums of money in order to influence the granting of licenses. The investigation is now completed and the findings have been placed before Attorney General Gregory. It is understood that in a number of cases regular, but not excessive, attorney's fees were paid by about twenty applicants who were represented before the Excise Board by lawyers. The charge made by the Anti-Saloon League that vast sums were spent to influence the Board was entirely disproved.

As was to be expected, "bootleggers" are doing a thriving business along the waterfront of the counties of "dry" Virginia, bordering on the lower Potomac and its tributaries. One boat appeared last week in the lower river with a full and complete supply of liquors of every description, the stock being valued at over \$6,500. It required but little over three hours' business to clean it out from stem to stern. And they do say that some of the prohibitionists-for-political-reasons helped to do the cleaning up.

Inquiries among the local trade as to what brewers expect to do here after November 1st, brought forth the following statements:

Abner-Drury Brewing Co.: "We will keep going until November 1. Many men, however, in the District will be thrown out of work by August 1."

Anheuser-Busch Brewing Association Agency: "We are not going to close our Washington plant, but will turn our attention to other manufactures."

German Brewing Co's (Cumberland, Md.) Agency: "We are going to run right up to November 1."

National Capital Brewing Co.: "We probably will shut down July 1, or thereabouts."

Pabst Brewing Co's Agency: "You wouldn't print it if I told you what I think of that bill. We are going to keep running right up to October 31."

Washington Brewery Co.: "They will have to give us breathing space before we can tell when we can shut down. We won't announce our closing-up date."

The Porto Rican citizenship and civil government bill, carrying with it Prohibition for Porto Rico, was passed by the Senate, February 20th, without a roll call. The House had passed it before, and the President signed it March 2nd.

Organized agencies of the Methodist Episcopal Church, it was announced here on March 24th by the Board of Temperance, will not press the prohibition constitutional amendment during the special session of Congress, on the patriotic ground that the full attention of Congress is required for national defence. "Meanwhile," says the statement, "it is to be hoped that patriotic men in the liquor industries will see the expediency of soliciting governmental cooperation for the conversion of their plants into industrial alcohol factories, packing, preserving and ice plants and for the putting of them to other industrial uses to which they are adapted."

MONTGOMERY, ALA. The ALABAMA Legislature is hesitating to enact a bone-dry law in this state, the persons and agitators who are behind these precious legislators, fearing that if such a law were passed, the state would go "wet" again in less than no time.

LITTLE ROCK, ARK. The Suffrage bill has been signed by the Governor of ARKANSAS. It gives the women in this State the vote at primaries only.

In the Senate a bill was introduced to tax "Bevo," "Pab- lo," "Just Right," "Golden Seal," "Blue Ribbon," "Temp Brew," "Coca-Cola," Egg Cola and drinks made from similar ingredients."

SACRAMENTO, CAL. Among the bills now before the CALIFORNIA Legislature are some to amend the State constitution so as to make State-wide prohibition impossible; a bill for new regulations of saloons; a county-unit measure; to withhold the sale of liquor from persons deemed unqualified to possess it; to prohibit the sale of liquors on trains, except in dining cars, and to establish new closing hours for saloons. A proposed amendment to the constitution would provide for compensation to grape growers, wine makers, breweries, etc., in the event of prohibition being instituted in the State.

The County Unit Option bill was defeated March 13th.

The California State Brewers' Association has taken Senator Rominger to task in regard to his 10 per cent. alcohol bill, because he seems to be carrying water upon both shoulders and no one knows whether he is sincere or not. Rominger is still wavering, although he has declared that: "It cannot be said too frequently that the bill is to prevent the use of whiskey, gin and brandy as drinks, and that it is aimed at the drinks mixed of these liquors. There should

not be any doubt that the measure is aimed at the saloon, but beer and light wines can be had, without impairing the local option rights."

DENVER, COL. The COLORADO Legislature is discussing a "bone dry" Prohibition enforcement bill; it is known as the Schermerhorn bill.

DOVER, DEL. Governor Townsend has signed the Loose anti-shipping bill, which is now in force.

ATLANTA, GA. The Senate of the GEORGIA Legislature, by a vote of 34 to 6, passed a "bone-dry" bill March 23rd.

BOISE, IDAHO. The IDAHO Legislature, before adjourning March 11th, has passed a bill prohibiting liquor advertising in this State.

SPRINGFIELD, ILL. The Anti-Saloon League's ILLINOIS State-wide Prohibition referendum bill was killed in the Lower House by a vote of 80 to 67, March 28th.

By a margin of two votes Senator Latham's bill for more stringent penalties for bootleggers has failed of passage in the Senate.

Compensation for saloon keepers and brewers who suffer losses when cities are voted "dry" is provided in a bill introduced in the House by Representative Trandel, of Chicago. The bill is similar to one backed by the "wets" last session without success. It provides that a city shall compensate for losses when it is voted "dry," and that the State shall compensate if a State-wide prohibition bill becomes effective.

Representative Hicks introduced a bill prohibiting the sale or use of liquor by clubs in "dry" territory.

Relatives of minors or habitual drunkards would be permitted to collect damages up to \$1,000 for sale of liquor to persons for whom a warning against sale had been issued, by provisions of a bill introduced in the house by Clarence A. Jones of Springfield. It proposes that relatives should collect \$50 for each drink sold such persons.

The Juvenile Protective Association of Chicago is fathering a bill prohibiting the sale of liquor in dance halls, and providing a \$200 penalty for violation.

INDIANAPOLIS, IND. Governor James P. Goodrich has signed the bill by which INDIANA is to be a "dry" State after April 2nd, 1918. He also signed the woman suffrage bill, and vetoed the bill which would have legalized the operation of motion picture shows on Sunday in Indiana.

To save millions in property and wages the Senate has adopted a report from the Committee on Manufacturers favoring the passage of a bill permitting brewers and distillers in Indiana to continue the making of intoxicants indefinitely under State supervision for sale in "wet" States. The report was presented by Senator Mercer, Republican, and a dry leader. The only member signing a minority report was Senator Bracken. Senators Simmons and other leaders in the fight for prohibition voted for the majority report. The bill has passed its second reading.

TOPEKA, KAN. The Senate of the KANSAS Legislature has passed the House Anti-Tobacco bill prohibiting smoking in public, but an amendment was tacked onto it which, if accepted by the House, would make the ridiculous measure unconstitutional.

FRANKFORT, KY. The KENTUCKY Legislature, in extraordinary session, is discussing the so-called Spurrier bills. One of them provides for a license tax of 10 cents on every gallon of distilled spirits manufactured in the State; another for a tax of 10 cents on every quarter barrel, 20 cents on every half barrel and 40 cents on every whole barrel of beer brewed in Kentucky.

AUGUSTA, ME. The Senate of the MAINE Legislature has passed the House bill empowering the Governor to depose any Sheriff not energetically enforcing Prohibition. Governor Milliken signed the bill.

BOSTON, MASS. Adverse committee reports on several bills seeking to change the time for voting on the license question have been presented to the MASSACHUSETTS Legislature. The issue is to be decided at municipal elections held on different dates in cities and towns, and the bills sought to have all vote in November.

LANSING, MICH. Senator Damon has introduced a bill in the MICHIGAN Legislature to prohibit all shipments and possessions of liquor in this State. For the first offense the bill provides a penalty of not more than \$200, or imprisonment for not less than 30 days and not more than 60, or both. For the second offense the violator is to be sent up for not less than six months nor more than two years, and in addition the court may impose a fine of not to exceed \$1,000.

If the next Legislature provides the machinery, Prohibition will go into effect May 1st, 1918. But if the "wets" circulate petitions and obtain 50,000 signatures, and file them with the Secretary of State within 90 days after the close of the session, the "dry" legislation cannot be made effective until it is submitted to a vote of the people at the next general election. The bill could not be voted upon until the November election in 1918, and the liquor men would have practically eight months longer in which to do business.

ST. PAUL, MINN. By a vote of 81 to 47 the MINNESOTA House has indefinitely postponed action on the Anderson statutory prohibition law.

The House has also passed a resolution instructing the speaker to appoint a committee to "investigate the conduct of campaigns by the Republican party, Democratic party, Prohibition party, the Brewers' Association and the Anti-Saloon League and any and all other organizations or associations seeking to direct or control the policies of this State and attempting to secure the election or defeat of any candidate for public office in this State."

JEFFERSON CITY, MO. Both houses of the Missouri Legislature have passed a referendum bill on Prohibition, the vote to be taken in November, 1918, and Prohibition to become operative July 1st, 1920.

Soft drinks are to be taxed by a Senate bill and there is a bill to raise saloon license fees to \$400 per year.

The American Secular Union and Freethought Federation, protesting against Prohibition, has sent to the Legislature a memorial saying: "It is regrettable in this enlightened age that a people of any State in the Union or in any nation would attempt by law to curtail the harmless, moral and progressive development of the people by obnoxious measures, which seek to suppress the spirit, liberty and freedom among an intelligent people."

HELENA, MONT. Governor Stewart has told the MONTANA Legislature to enact new revenue laws, as Prohibition will surely result in a deficit in this State's treasury.

LINCOLN, NEB. The Senate of the NEBRASKA Legislature has requested Congress to refuse issuing Federal liquor licenses in "dry" States.

The Lower House has passed a "bone-dry" Prohibition bill by a vote of 84 to 3, but the Senate emasculated it.

CONCORD, N. H. By a vote of 204 to 152 the House of the NEW HAMPSHIRE Legislature has rejected woman suffrage.

On March 21st the House of Representatives passed a bill which would establish State-wide prohibition on May 1st, 1918. The House Committee on Appropriations amended the measure and then it was again passed, March 28th, by a vote of 190 against 185.

TRENTON, N. J. The NEW JERSEY Assembly has killed the Gaunt-Mackay Local Option bill, the vote being 39 to 19, after private secretary of President Wilson, Tumulty, had written a plaintive letter to some of his cronies here to pass the bill. But then the Senate passed the Kates home rule bill giving municipalities power to vote upon the liquor question.

On March 21st the Kates bill was killed in the House by a vote of 33 to 17.

The bill prohibiting the sale of cigarettes to boys under 18 years of age has been signed by Governor Edge.

ALBANY, N. Y. It now appears that the Hill-Wheeler Local Option bill may be amended to death, the amendments proposed on March 20th are to forbid that 1. More than one referendum be taken on the question of closing the saloons in any particular locality within five years. The bill allows such a referendum every two years. 2. Forcing the municipality which votes "dry" to make good to the State Treasury the financial loss suffered through loss of excise taxes. 3. Changing the time for taking the liquor referendum, so that it would not coincide with regular municipal elections.

March 7th was a field day for the trade when arguments against local option were heard by the joint committees of the NEW YORK Legislature, William H. Hirsh, attorney for the New York State Brewers' Association, was the principal speaker against the Hill-Wheeler bill. He made a number of telling points, declaring that local option is not in conformity with the American system of government; that it "renders insecure the investment in any business which handles liquor. It subjects the property and livelihood of thousands engaged in the sale of liquor to the whim of the electorate at any election. An adverse verdict means destruction of their property and spells ruin; that the bill does not provide for any compensation for the loss. Under the system of local option there is a great field for prohibition agitators who keep communities in a constant turmoil over the license question, and force the liquor interests into politics for the purpose of protecting their investment and property; that if people are to be given the right to vote at local option elections, then provision should be made to compensate those who are voted out of business for the loss of their property and the destruction of their business." Many others, among them representatives of the organized hotelmen, spoke in a similar strain, while the ranters of the Anti-Saloon League and W. C. T. U. only repeated their stale and unconvincing fairy tales about the alleged evil effects of alcohol.

On March 17th the unspeakable Anderson, of the Anti-Saloon League, was practically kicked out of the Assembly Chamber, where another hearing was held. Anderson had publicly declared that "the liquor interests" had collected a corruption fund with which to bribe legislators; but when he was requested to submit facts, he refused. They then put him out ignominiously.

The Assembly, March 29th, amended the Hill-Wheeler bill so as to provide for special Local Option elections in the Spring, to be held every five years. In the Senate the bill is still waiting action of the Committee to which it was referred.

Both houses have again voted in favor of woman suffrage to once more be submitted to popular referendum next Fall. The Legislature is to adjourn April 19th.

RALEIGH, N. C. The NORTH CAROLINA Legislature has killed a bill limiting shipments of "liquor" to 2 quarts per year, and then only for medicinal purposes.

BISMARCK, N. D. The NORTH DAKOTA Legislature has passed its "bone-dry" Prohibition bill.

HARRISBURG, PA. Senator Raymond E. Smith, of Crawford County, fathers a constitutional Prohibition amendment for PENNSYLVANIA to become operative on July 1st, in the year succeeding its passage.

COLUMBIA, S. C. Both houses of the South Carolina House of Representatives have passed a bill prohibiting liquor advertisements in newspapers and periodicals. "Bone-dryness" is to go into effect July 1st, 1917.

PIERRE, S. D. The "bone-dry" bill has been signed by Governor Peter Norbeck.

The SOUTH DAKOTA Senate has appointed a committee to ascertain the damages the brewers will sustain when South Dakota becomes "dry."

NASHVILLE, TENN. A tax of \$1,000 a year on wholesale dealers and agencies handling near beers in Tennessee is proposed in the general revenue bill now before the Tennessee Legislature. It is understood that there is no violent objection to this. Of course those who handle near beers would rather that there should be no tax, but if there is to be a tax, they say, it is preferable to tax the wholesaler and let the retailer go. The average retailer does not sell enough near beer to warrant his paying a yearly tax.

AUSTIN, TEX. The House of the Texas Legislature has defeated a resolution calling for submission of the prohibition question to the people of this State.

Dr. J. A. Barton, chairman of a certain Texas Prohibition Commission, is urging "bone-dry" national Prohibition by Congress, should the United States join in the European war.

SALT LAKE CITY, UTAH. The Prohibitionists of UTAH are in a flutter of excitement, as it has been discovered that from the Young house resolution on State-wide prohibition the words "and all malt or brewed drinks" had been erased on its travels between the Senate and the House and that in this form it had been signed by the governor.

G. L. Becker, president of the Becker Brewing & Malt-ing Co., Ogden, has said in regard to the Prohibition bill: "The action of the Legislature, if allowed to stand, will permit the manufacture and sale of all beverages containing not to exceed one-half of one per cent. of alcohol, excepting malt or brewed beverages, which under this bill cannot be manufactured at all, even if such beverages contain no alcohol. To my mind it is inconceivable that this action could be anything but an error, as the discrimination is so manifestly against our home industry and in favor of those manufacturers of malt beverages outside of the State who could undoubtedly ship their product, which is not intoxicating, into the State despite the recent decision of the Supreme Court on the Webb-Kenyon act. The Webb-Kenyon act prohibits the interstate shipment only of intoxicating liquors."

Frank A. Fisher, manager of the A. Fisher Brewing Co., Salt Lake City, was one of the most determined opponents of Prohibition, and he spent much of his time and money speaking, writing and agitating against it.

The lower house has passed the anti-cigarette bill, which prohibits the sale of cigarettes or the "makin's" in the State of Utah.

CHARLESTON, W. VA. Seeking the resubmission of the

prohibition amendment, Senator B. L. Rosenbloom, of Wheeling, has offered a resolution in the WEST VIRGINIA Senate proposing an amendment to the State Constitution eliminating the amendment of 1912, by which the manufacture and sale of intoxicants in West Virginia were prohibited.

MADISON, WIS. Change in the law for submitting liquor questions to a vote of the people, including a proposal to allow saloons to operate for a certain number of hours on Sunday, are contained in a bill offered in the WISCONSIN House by Assemblyman Charles F. Hart, of Oshkosh.

On March 22nd the Assembly, by a vote of 52 to 22, passed the Evjue "liquor" referendum bill, the election to be held in the Spring of 1918, and the law, if confirmed by the people, to take effect July 1st, 1920.

Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc.. Action by Civic Bodies and Others For or Against Prohibition.

ALASKA. The Prohibition measure imposed upon Alaska is so vague and unintelligible that it will probably have to be replaced, the trade having entered upon a contest in the courts.

CONNECTICUT. The Supreme Court of Connecticut is considering a case of saloon license transfer in which the Yale Brewing Co., Inc., New Haven, and St. Joseph's Roman Catholic Church of Winsted are interested, the priests of the church wanting the license canceled. The case involves many intricate technical details and the decision of the court is anxiously awaited.

FLORIDA. Deputy Sheriffs recently confiscated several hundred barrels of whiskey found hidden in "dry" Quincy. The whiskey was emptied into the city's gutters.

GEORGIA. The Supreme Court of Georgia has ruled this States' Prohibition law to be constitutional, also ruling that "liquor" in excess of the prescribed amount may be seized and destroyed by State authorities, even though it was in possession of a citizen before the new law became effective.

IDAHO. Judge Carl A. Davis of the Boise District Court has decided that "the law applying to prohibition districts in Idaho which does prohibit possession shall apply to the entire State after the enactment of the State-wide law, even though the act making the entire State 'dry' does not expressly prohibit the possession of intoxicating liquors."

ILLINOIS. In about 40 cities and villages of Illinois local option elections will be held this month, among them: Cities and villages—Amboy, Algonquin, Carlinville, Carterville, Elmwood Park, Galena, Havana, Henry, Johnston City, Lacon, Morris, Maple Park, Nauvoo, New Douglas, Pana, Springfield, Tamms, Wamac. Towns—Atkinson, Alto, Addison, Clear Lake, Divernon, Danforth, Gold, Hopkins, Harmon, Highland, Jarvis, Lake, Moccasin, Montmorency, Northfield, Sigel, South Park, Timber, Union, Valley, Vernon, Wauconda, York.

Saloonmen in East St. Louis have been advised by their brewers to strictly observe the Sunday closing and all other laws regulating the trade.

INDIANA. La Crosse has been made "dry" by the remonstrance of 214 citizens.

KANSAS. The municipal council of Kansas City has repassed the former ordinance prohibiting beer deliveries, but leaving out the clause objected to by the Supreme Court, when the former ordinance was held invalid.

In the coal fields of Southeastern Kansas the miners are aroused over the "bone-dry" law. Many of them declare, "No beer, no work." All of the men at one big mine struck as a protest against the law.

KENTUCKY. The Kentucky Court of Appeals has ruled that violations of the law against the sale of liquors on Sunday cannot be prevented by injunction unless the Legislature enacts a statute declaring the operation of a saloon on Sunday a public nuisance.

LOUISIANA. Since the saloonmen of New Orleans have been compelled to close on Sundays, a few of them organized a movement, led by one A. Chiavaro, 612 Elmira street, with the avowed object to "get square" with the brewers, whom they charge with being responsible for the authorities insisting upon enforcement of the law. The agitators are now demanding Prohibition for Louisiana, in other words, they are acting like the man who wanted to cut off his nose to spite his face.

MASSACHUSETTS. In 22 town elections in Western Massachusetts one town turned from "dry" to "wet," Montague, and three from "wet" to "dry," Athol, Sheffield and Williamsburg, while Royalston remained dry on a tie vote. The "wet" towns are: Adams, Agawam, Barre, Brookfield, Deerfield, Greenfield, Montague, Wendell; "dry": Ashfield, Athol, Gill, Leyden, Orange, Rowe, Royalston, Sheffield, South Hadley, Chesterfield, Worthington and Williamsburg.

MICHIGAN. The so-called Prohibitionists of Lenawee county recently passed resolutions saying: "We recognize the fact that a large part of the dry vote at the recent election was cast by men who were not in favor of liquor legislation more drastic than the law now in force in local option counties, but who were nevertheless opposed to the saloons." In other words, "a large part" of those who voted for prohibition in Michigan did so in the belief that they would continue to get all the liquor they wanted.

NEBRASKA. Although Nebraska is to become "dry" next month, most of the breweries in this State are still operating and brewing as much beer as ever before.

NEW JERSEY. Excise Boards at New Brunswick and Elizabeth are considering a plan to raise saloon license fees in those two cities.

Mayor Hetrick of Asbury Park has expressed the pious wish that, in order to keep the place "dry" in fact and not only in letter, the citizens of that lively resort stop drinking "liquor" at home. The effects of the Mayor's appeal are not yet apparent.

A writ of mandamus to compel the Beverly City Commission to call an election for an excise commission has been refused by the New Jersey Supreme Court, which held that the Walsh Commission government act, under which Beverly is governed, vests the powers of an excise board in the Commission.

Classing the man who voted in favor of the sale of liquor as "bad" as one who indulged in dancing, card playing or other pleasures, Rev. Charles F. Barrett, an evangelist conducting meetings at the First M. E. Church in Phillipsburg, has declared that such men were "out of place at the communion table."

The Associate Mercantile Educational Moving Picture Campaign showing the truth as to the disastrous effect of so-called "dry" laws is in progress, and has already proved a revelation to many thousands of unthinking people who imagined that sumptuary prohibition meant a total ending of the consumption of intoxicants. So successful has this educational campaign proved that the allied association of the State Federation conducting it has sent a moving picture operator into some of the supposedly "dry" spots of New Jersey, including Asbury Park, Bridgeton and Millville, and obtained additional pictures that cannot but satisfy the most optimistic prohibitionist that his propaganda

is not only a failure but has degenerated into a farce in New Jersey communities that have tried it for years.

The Manufacturers and Merchants Association of New Jersey has again issued a number of convincing tracts in its fight against Prohibition, among them these, entitled: "Moonshine, That's All"; "Is Union of Church and State Coming?"; "Local Option Not Enough."

NEW YORK. William R. Talbot, a saloonkeeper at Beacon, N. Y., has been mulcted in \$20,000 damages by a jury in the Bronx County Supreme Court for having sold "liquor" to a man whose wife told Talbot not to do so.

Recently the Anti-Saloon League caused the arrest of President Brown of the New York Central Railroad because "liquor" was sold on a train as it passed through "dry" territory up-State.

Our valiant friend C. A. Windle, of Chicago, was in New York City March 21st, delivering one of his forceful and conclusive speeches against Prohibition, at a debate before the Civic Forum Educational Alliance, assembled in the hall of the Young People's Branch, Stuyvesant and 9th Streets. His feeble and unconvincing opponent was Dr. D. Leigh Colvin.

OHIO. Under a ruling of the Supreme Court of Ohio, construing the Greenlund liquor license law, brewers from outside the State must not sell from wagons without license.

By another decision of the Supreme Court Henry county loses out in its suit against the Christ. Diehl Brewing Co., Defiance, for back Dow-Aiken taxes. The case had been bitterly fought in the courts for more than ten years. The county had sought a judgment of \$16,000 for taxes due on the company's former distributing houses in Holgate and Deshler.

Girard, Trumbul County, has voted "wet," 536 to 500, keeping eight saloons. Rittman, Wayne County, and Salem, Warren County, voted "dry."

Matt Glaser, chief lieutenant for Rudolph A. Mack, former campaign manager and attorney of the Cincinnati Anti-Saloon League, has been convicted of subordination of perjury in connection with Mack's race for Governor of Ohio on the "Law Enforcement" ticket. Evidence in the case showed that Mack's petitions had been fraudulently prepared.

Wayne B. Wheeler, general counsel of the Ohio Anti-Saloon League, has announced in Columbus that: "If war is declared the resolutions for national prohibition will be urged as a part of the preparedness programme. It is becoming clearer each day that a nation cannot be a prepared nation unless it is a sober nation. It will not be a sober nation unless it is a saloonless nation."

PENNSYLVANIA. The injunctions against the Victor Brewing Co., of Jeannette; Clairton Brewing Co., of Clairton; Independent Brewing Co., of Pittsburgh; Pittsburgh Brewing Co.; Steuben Brewing Co., of Steubenville, Ohio, and others, alleged agents of these companies, obtained by District Attorney Isaac W. Baum, at Washington, Pa., have not yet been disposed of by the court, although counsel for the companies offered exhaustive proof that the charges against the companies are utterly unfounded.

To all breweries in Luzerne County licenses were granted, to wit: Bartels Brewing Co., Edwardsville; Freeland Brewing Co.; Pennsylvania Central, Stegmaiers and Lion, Wilkes-Barre; Franklin, Hanover Township; Pennsylvania Central and Pilsner, Hazleton; Susquehanna, Nanticoke; Glennon, Howell & King, Pittston.

"Jurisdiction of the court is only obtained when the requirements of the statute are complied with," has declared

Judge Henderson, of the Superior Court at Scranton, in an opinion reversing the court of Clearfield county in the liquor licenses cases of the E. D. Schwem Company, the DuBois Brewing Co. and Frank Flynn.

All licenses were granted in Cambria and Armstrong counties.

In Coatesville all hotel licenses have been revoked by Judges Butler and House. Coatesville was "dry" in 1913, but drunkenness increased to such an alarming extent under the "dry" condition that the court licensed the places which have now been summarily closed.

The Eaglesmere Land Co. has purchased the Mountain House, known by many as the Stackhouse Hotel, in order to close the only licensed hotel at Eaglesmere.

TEXAS. The Court of Criminal Appeals in Texas has decided that a person acting as an agent for the purchase of alcoholic liquor is not guilty of violating the local option law of this State.

VERMONT. In this State sixteen towns and cities have given majorities for license as compared with 22 last year. Montpelier was the only city which voted to remain in the "dry" column.

VIRGINIA. "Tanhauser," one of the non-alcoholic beverages ruled out of Virginia because of their alleged resemblance to beer, may be sold in VIRGINIA without violating the prohibition act, according to a verdict rendered by a jury in the Hustings Court. W. C. Herbert, a Richmond distributor of the drink, who was indicted for selling it, was acquitted by the jury.

The State police boat Commodore Maury recently fought and took the schooner Elizabeth Clark, of Baltimore, in the Rappahannock River, where the schooner had been running the whiskey blockade. Captain Ike Bozeman, with his mate, both wounded in the fight, and his crew, were lodged in Lancaster County jail. Twenty cases of whiskey were seized on the schooner and the patrol reported 200 cases had been sold at landings along the river.

So great has become the demand in Danville, Va., for a certain patent medicine which contains 25 per cent. alcohol that the city police department laid the condition before the prohibition commissioner. An investigation led to the discovery that during two days more than 700 bottles were sold in Danville and Schoolfield. The police had to deal with more drunkards one week last month than during the entire preceding month, and each man admitted that he became intoxicated on the "medicine."

WEST VIRGINIA. Although the West Virginia legislature has passed a bill permitting each adult male to bring into this State one quart of liquor a month, United States District Attorney Barnhardt announces that the "bone-dry" bill passed by Congress renders the West Virginia law invalid, and that he will arrest all violators of the federal law. As the West Virginia law becomes effective May 1st, importations may be made from that date until July 1st, when the federal act becomes effective.

Injunctions secured by the Prohibition Commissioner of West Virginia prohibiting railways operating in this State from permitting passengers to carry labeled packages of intoxicating liquors, have been dissolved by the Supreme Court of Appeals.

WISCONSIN. Local option elections will be held in many Wisconsin cities, towns and villages this month, among them Winneconne, Neenah, Rice Lake, Oconomowoc, Chippewa, Eau Claire, Park Falls, Sanborn, White River, Odanah.

Judge James O'Neill of Neillsville has issued an injunction restraining the Casanova Brewing Co., Hudson, from

selling beer in "dry" territory. Several attempts were made to convict the manager, Chris Casanova, on charges of violating the excise law, but on each occasion the jury disagreed.

Sebastian Niedermair's brewery, Neosho, was raided several weeks ago and Sheriff Mortenson not only seized 250 cases of beer, but also arrested Mr. Niedermair, who was confined to his home with a broken foot. He has been doing a wholesale outside business only, but is charged with not having taken out a local license.

MEXICO. In the constitutional assembly of Mexico a proposal to put in the constitution prohibition of the manufacture and sale of alcoholic beverages has been defeated by a large majority.

ARGENTINE REPUBLIC. The Government of this country has issued a decree prohibiting sales of liquor between 12 midnight, Saturday, and 12 noon on Sundays.

PERU. A law passed by the National Congress of Peru and approved by the President of the Republic on February 10th, 1917, provides for a prize of £100 (nearly \$500) to be awarded for the best text from which to teach temperance in the public schools of Peru. Intemperance, especially in the mining regions, is said to be a "serious problem" in Peru and Bolivia.

SOUTH AFRICA. The municipal elections recently held in Transvaal have resulted in favor of license and total Prohibition was defeated by a vote of three to one.

AUSTRALIA. The Legislative Assembly of Victoria has rejected a bill providing that after December 31st, 1919, liquor licenses should not be granted to grocers.

NET RESULTS OF PROHIBITION, AND CHRIST. "In the United States, the net result of Prohibition is an increase of 500 per cent. in moonshine distilling, while bootlegging and smuggling grows apace. The result of this is simply great disrespect and contempt for the law of the land. The most terrible forms of hypocrisy and vice are most highly developed. Falsehood and misrepresentation about the liquor business is the order of the day. Thousands of pulpits give precedence to the Prohibition propaganda in the name of Jesus Christ, when in not a word that He ever spoke did He ever lend His aid to the Gospel of Prohibition, for in His teachings He spoke favorably of and used the wines of His country and those wines were very rich and heavy, and when used to excess, very intoxicating. He was a Jew and used Jewish words, and any classical Jewish scholar of to-day will so translate every word referring to wine that He ever used."—(M. E. Squibb.)

PHYSICIANS OPPOSED TO PROHIBITION. During the recent Local Option campaign in Maryland doctors Wm. H. Welch, W. S. Halstead, Hugh H. Young and Julius Friedenwald, issued a declaration, saying:

"In moderation, wine, beer and spirits may be taken throughout a long life without impairing the general health. We further believe that prohibition is not the solution of the evils which arise out of the excess and abuse of alcoholic beverages, and the experience of States and communities where prohibition has been tried proves that these evils are not eradicated by the character of that legislation. We believe that the funds for public health activities, the insane and the tuberculosis, may (by the proposed prohibition) be greatly impaired without any corresponding good. "We, therefore, oppose the passage of a law, which high legal authority now says will prevent (unless future legislation is passed to allow it) the use of alcohol in any form of medicines containing alcohol in our laboratories, hospitals and medical practice."

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building,
Randolph and 5th Avenue.

CHICAGO, March 29th, 1917.

The output of the Chicago breweries last month amounted to 68,238 barrels, a good deal more than it was in February, 1916, and it is not to be doubted that this production will continue increasing with the rapid growth of this progressive and intelligent metropolis of the Middle West. The indications are now that within the present generation Chicago will almost rival New York, it being estimated now that the population of Chicago is fast approaching the 5,000,000 mark. The Chicago Traction and Subway Commission has made an elaborate study of the characteristics, growth and development of the city in so far as they have a direct bearing on its transportation problems. The main report of this study shows that the analysis of Chicago's population brings out the fact that the low average density of twenty persons per acre for the whole city area is largely due to the wide distribution of its principal residential districts, lack of uniform building in these districts and the large areas still undeveloped. This separation of the residential population into many districts and the relatively low average density of the areas tributary to practicable transit routes promise a volume of traffic sufficient to support certain high-speed elevated lines at the present time, but insufficient to support corresponding subways, with their much greater cost, until development has proceeded further. In the financial plan of the commission's report, the number of revenue rides per capita was assumed to increase at the rate of two rides per annum; that is, from 334 in 1917 to 400 in 1950. The latter figure, coupled with the estimated population of 5,000,000 for the same date, warrants the estimate of a passenger revenue of \$100,000,000 and gross receipts of \$104,500,000.

That he has evidence that some aldermen have "shaken down" saloonkeepers has been admitted by State's Attorney Hoyne in explaining why he had instructed an assistant to dismiss cases against 150 dramshop-keepers charged with violating the closing law. The prosecutor declined to divulge names, but said members of the city council who have been accused have not been publicly named so far in graft investigations. He intimated he would place his evidence before the grand jury. "Charges against many of these saloonkeepers have been instigated by city administration leaders in various wards," asserted Mr. Hoyne. "They have abused the law to try and club saloonkeepers with other political affiliations into line. The city administration cannot use this office to further its political ambitions."

From the law department the council has received an opinion, prepared by Chester E. Cleveland, holding that the council may pass an ordinance prohibiting the shipment of intoxicants bought in "wet" territory within the city limits into prohibition districts also within the city. But the opinion questioned the right of the city to prevent dealers shipping into "dry" zones liquors purchased at points outside the city. That means, that if an ordinance were passed

prohibiting Chicago dealers from delivering in "dry" territory, the resident of the "dry" territory merely would have his supplies shipped to him from one of the "wet" suburbs. According to views expressed about the City Hall, if the council passes the law suggested by the corporation counsel it will be illegal for people to deliver beer and whiskey even if proper society matrons do hide behind their telephones and ask for a few hundred drinks. The only "dry" folk who would be able to buy liquor in the loop stores or favorite breweries would then be those who lived in the suburbs.

Efforts to secure additional funds with which to carry on the work of the Citizens' League were begun following an appeal made at the 40th annual meeting of the organization. According to the report submitted by Henry King Grose, superintendent, damages of \$20,000 were recovered from saloonkeepers during 1916. The league now has about 180 suits against 700 saloonkeepers in the courts of Cook County.

The Cook County Liquor Dealers' Association has collected a large amount of evidence against bootleggers in Chicago, and it has requested the City Council to proceed against them.

To-day hundreds of delegates from organizations of the trade are in Springfield to protest against passing the "dry" bills now before the Illinois Legislature.

In many saloons of Chicago the free lunch has been discontinued on account of the high cost of all food, the saloonmen stating that these lunches have cost them from \$5 to \$50 per day, the latter figure being given by hotel proprietors.

There was a \$200,000 fire several weeks ago in a seven-story building at 18th and Canal streets, just across the plant of the Peter Schoenhofen Brewing Co., but it was under control before it could do damage to this splendid brewery.

Col. Theodore Roosevelt has joined the Anti-Saloon League forces in the fight to get a State-wide referendum in Illinois. In reply to an invitation sent him by H. J. Davis, Chicago superintendent of the league, Col. Roosevelt writes as follows: "Indeed, if I could come I would. You are most welcome to quote me in saying that I wish you all possible success in your effort to have the question submitted to a referendum."

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NOTHING BUT SICKLY SENTIMENTALITY. "The majority of Prohibitionists are Prohibitionists because they have never heard but one side of the liquor question discussed, and that was the Prohibition side. The only way that this class of citizens can be won over to the anti-prohibition side is to present solid arguments to them and show them that prohibition is not only wrong in principle, but that it is ineffective in practice. When this style of campaigning is pursued the Prohibitionists lose ground. Every prohibition argument can be answered. In fact, there is nothing but sickly sentimentality to any prohibition argument. Stripped of its sickly sentimentality there is nothing to any prohibition argument."—"Facts."

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, March 19th, 1917.

The most important measure to come up before the second session of the California Legislature, which convened February 26th, was the County Unit Local Option Bill. Voting four to three, the Senate Public Morals Committee on March 1st gave favorable recommendation to the County Unit Bill. The action followed the public debate of two hours in the joint hearing of the committees of the Upper and Lower Houses in the Senate Chamber. Every available chair, seat and resting place held its interested spectator, and while it was the first public hearing and joint meeting of an Assembly and Senate committee this session, it was one of the largest gatherings in recent years at such a hearing.

The speakers were "Rev." D. M. Gandier of the Anti-Saloon League and the prohibition organizations of the State, and Arthur Arlett, representing the proponents of the bill; and Frank T. Swett, president of the California Grape Protective Association, Arthur Seymour representing the United California Industries, and Harry Ryan, representing the Trades Union Liberty League, appearing for the opponents.

On March 13th the prohibitionists' first test of strength in the present Legislature proved unsuccessful when the above named bill went down to defeat in the Senate by a vote of 23 to 15.

Nearly three hours of debate attended consideration of the measure, during which time almost every member of the Senate voiced his opinion. Prohibition in all its phases before the Legislature was injected into the discussion, and the result is taken as an indication of the attitude of the present Legislature upon prohibition matters.

The Rominger bill, which is fathered by the Hearst publications, is the next important measure to come before the solons at Sacramento. A public hearing before the Public Morals Committees of the Assembly and Senate, in joint session, was held on March 16th. It is predicted that the Senate Committee on Public Morals will recommend the bill favorably to the Senate.

The bill would abolish the sale of all liquors excepting beer and wine with some bona fide meals in hotels, restaurants, clubs and on trains and steamships. The fermented liquors sold would not exceed 14 per cent. of alcohol.

So as to permit citizens generally to buy for use in their own homes, towns and cities and counties are permitted, if desired, to license a small number of wholesale or bottle houses. The smallest sale allowed is a commercial quart or two commercial pints. Fermented liquors such as wine and beer, containing up to twenty-one per cent., are the only liquors that can be sold by these wholesalers. No drinking is allowed on these premises. There are other provisions safeguarding the sale. The number of such licenses is limited to one for every 2,500 population of a city, town or city and county. If the population is less than 2,500, then only one permit may be issued.

Brewers and wine makers are allowed to sell beer or wine in quantities of not less than two gallons.

Wine manufacturers are not molested in carrying on the manufacture of wine and brandy. Their sales must conform strictly to the provisions of the law. For instance a brandy manufacturer cannot sell to a hotel, but there is nothing to prevent selling to a druggist, whose sales in turn are restricted. Wine manufacturers and shippers are allowed to buy and sell among themselves for blending and the manufacturer of sweet wine is allowed to buy brandy

for fortification. The remainder of the measure is devoted to the absolute preservation of the local option principle, and to surrounding the traffic with restrictions which it is believed will effectually bar out spirituous liquors in any form and of every kind.

The Rominger bill seems to be the one measure before the present Legislature that has the people of the State of California thinking. It has caused disruption among the wine men or the California Grape Protective Association. There are a few winemen in the State that favor the bill, and then there are others that can see the trap the prohibitionists have laid for them. It is the old trick of the Anti-Saloon League, and that is to weaken the forces of the license cause, and then after that is accomplished come forward with another prohibition constitutional amendment and make the entire State bone-dry. The outlook of this measure is that it will go down to defeat as the County Unit bill did.

There will be license and no-license elections held in San Bernardino and Needles on April 9th; and at Elsinore on April 3rd.

Blythe, Riverside County, voted no-license on February 27th by a majority of 93.

The Fourth Supervisorial District of Madera County voted license by a majority of 66. The towns in this district are Crane Valley, Coarsegold, Enterprise, Grubgulch, Knowles, Oakhurst, Raymond, Sugar Pine, Wallace and Zebra.

The Fourth District of Mariposa County, comprising the towns of Colorado, Mariposa, Mt. King and Sherlocks voted no-license by a majority of 69 on March 5th, 1917.

Henry J. Widenmann, of the Solano Brewing Co., Vallejo, Cal., was recently appointed State Highway Commissioner by Governor Hiram Johnson.

HUMAN SLAVERY was abolished in the United States more than fifty years ago. To-day a nation-wide movement is on foot to recreate a species of slavery of the entire people by a system of sumptuary laws aimed at restriction of their personal liberty. Whether this be in the name of efficiency or under the false emblem of morality, the result is the same.—(Counsellor Levi Cooke, Washington, D. C.)

PERNICIOUS NOTION. The prohibition of alcoholic drink is based on a pernicious notion that the American citizen, after running his country and his own business, has not enough sense and will-power left to drink within moderation, and on an equally pernicious impression that it is more highly moral to abstain from small indulgences than to curb the appetite for them to a moderate use. Prohibition is therefore a parasitic fallacy preying on true morality, and is inadmissible in principle.—(N. Y. "Evening Sun.")

REVENGEFUL POLITICIANS ENDANGERING LIBERTY OF THE PRESS. "Those in whose hands is the current Prohibition propaganda are as clever as the children of darkness. They have put in the Post Office Bill a paragraph which makes it a crime to send a newspaper into a Prohibition state, if it contains a liquor advertisement, although it is no crime to print it in the state where it is published. The purpose in view is to get even with the press more than to promote temperance. The loss of the liquor advertising is not important—many papers do not print them now. But the principle is bad and puts the liberty of the press into the hands of revengeful politicians to a degree that threatens a very important public protection."—(Waterbury [Conn.] "American.")

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., March 12th, 1917.

Another cut in the beer production of the United Kingdom has been announced by the Prime Minister, Mr. Lloyd George. This time it is to be down to 27 1-2 per cent. of the production as it was before the war, and that means that by the end of the current year the output of the breweries of this country is to be reduced to a little over 10,000,000 barrels. Such is the brewers' life in war-time! He could not help it if he would, because the government has also prohibited the manufacture of malt, asserting that the stores on hand would be sufficient to produce the quantity of beer the government still permits to be brewed. The restrictions thus placed upon the trade will be felt by the masses of the people much harder than by the brewers themselves—but knowing that the end of our suffering is near, we dignifiedly and patriotically submit. The rejoicing afterward will be so much more enthusiastic when all is over.

During the quarter ended December 31st, 1916, the output of beer in the United Kingdom was 6,370,329 barrels, as against 8,858,414 barrels during the corresponding quarter of the fiscal year 1914-1915.

The "Money Market Review" states that although many breweries have so far been prosperous since the war broke out, brewery shares have been among the most neglected these terrible thirty months since August, 1914.

The teetotalers have experienced quite a good setback while they were exploiting present conditions for their pet scheme of introducing nation-wide Prohibition in this country. With their customary vehemence, exaggeration and falsification of facts and figures they insisted that the amount of grain required to produce beer would yield more nourishment to the nation if it were used in fattening pigs and cattle. This ridiculous statement has now been demonstrated to be utterly unfounded, as members of the Royal Society and the chemists of the Board of Agriculture, as well as a number of other scientific authorities, among them Dr. A. D. Waller, Professor of Physiology at the University of London, have reported that the food value of beer is more than half the brewing materials used, whereas the food value of pork is less than one-fifth of that of the same material, and the new president of the Board of Agriculture, Mr. Potter, summing up the opinions of his experts, has declared: "If we had not got the brewers' 'grains,' we could not send the milk in the quantities we now did to our big towns" (meaning the "dry grains" left over from mashing). Furthermore, Earl Dunraven has said, in discussing the food question before the House of Lords: "We are told that brewing is a cause of waste, that great quantities of grain necessary for food are used for making unnecessary liquor. We are told that sugar is a luxury. As a matter of fact, I believe that the drinkers of beer use up only about 5 per cent. of the grain; 95 per cent. of the grain goes as feeding-stuff to animals, and other food."

State purchase appears still to be far off, judging from the silence maintained upon the subject in government circles, where, as may be seen from remarks made by Sir Francis Lowe, M. P., for the Edgbarton division of Birmingham, no desire prevails to add to the perplexities from which the country is suffering already. Sir Lowe, replying to a petition submitted to him by the Temperance Legislation League, declared: "I cannot see that the proposal now being put forward with so much persistence would be likely to promote the cause of temperance and sobriety in the very least. It would, on the other hand, plunge the whole coun-

try into a most heated and acrimonious controversy at a time when all should be united, and, in the unlikely event of its receiving legislative sanction, it would materially add to the burdens and responsibilities of the Government, who already have upon their shoulders almost more than they can properly carry."

Brewmasters are becoming scarce in this country, as many of them joined the army, and brewery chemists went into the munition business.

Bass, Ratcliff & Gretton, Ltd., recently subscribed another 500,000 pounds of the British War Loan.

By cable.—London: "Thirty thousand saloons in Great Britain probably will be closed in the next few months, according to the *Mail*. The measure is proposed as a solution of the difficulty arising from the compulsory restriction of the beer output and the brewers are stated to be in practical agreement with the government in regard to the remedy. The closing of the saloons is said to have been suggested by some of the brewers themselves. They contended that there were too many distributing agencies and that a third of them could be suppressed without inconveniencing the public, while such a step would enable the liquor trade to be conducted more economically. The brewers have been conferring recently with the Home Office."

Officials of the ministry and munitions have discovered that a good deal of the "drunkenness" attributed to women is due to the chewing of cordite, the smokeless explosive used in the shell of cannon and the ammunition of small arms. Its effect on their health is very injurious and remedial measures are being taken.

It has been rumored in Dublin that the Government is about to take over the brewery of Messrs. Arthur Guinness, Son & Co., Ltd. The secretary of the company stated that, as far as they know, the Government will take over all the breweries in the United Kingdom, but they have received no details of what is to be done.

It is reported on reliable authority that a committee appointed a few weeks ago to investigate the question of State purchase of the liquor traffic has decided in favor of the project, and the Government will soon take over the entire trade. There is no indication that the Government intends to enforce unfair terms or take any mandatory action. It will simply put the matter on a basis of war necessity for the greatest good of the brewing and distilling interests as well as the Government. Tremendous pressure is being brought to bear on the Government to abolish the old system of public houses which are used only for drinking, and remodel them into ideal social centres after the French plan, where sociability and refreshment would have greater importance than satisfying the craving for stimulants.

THESE PAID AGITATORS seem to think that the American people are a nation of drunkards and unable to take care of themselves, and are appointing themselves guardians to instruct them as to their manner of living. It makes no difference to them whether a person takes a glass of beer with meals or drinks a quart of whiskey a day. They are all in the same class with them. Anything to keep up the agitation and the contributions. If you don't think it pays to be in the ranks of the Anti-Saloon League, look over the list of names of their speakers, and you will find a lot of ex-politicians who have done nothing but travel over the country and live on the fat of the land, or go to Westerville and look at the residences of the officials. Barnum was right when he said that the American people want to be humbugged.—(George Carpenter, Columbus, Ohio.)

Brewing News from the European Continent.

Cable dispatches from Germany assert that "the suspension of all beer brewing in Northern Germany is imminent. This action is due to the desire to save maize for bread and malt to take the place of coffee." It is hardly probable that this statement is founded in fact, as the German army needs beer as well as bread and meat, and the breweries of Bavaria, Baden and Wurttemberg alone could not produce enough beer to satisfy the several million men in the field and the population of Germany besides. But that the output of all breweries in Germany has been restricted still more last month, is not to be doubted, since the American Ambassador, Mr. Gerard, and many other American diplomats, recently returned to the United States, have reported that grain has become exceedingly scarce in Germany, particularly barley and maize, while the *Munchener Post* has printed a story asserting that large quantities of malt intended for use in Bavaria had been diverted to Prussia by dishonest middlemen, and that the Bavarian authorities had tried to hush up the scandal by letting the middlemen off with a warning and the payment of "conscience money," which had been applied to the uses of the organization for providing public meals. The main facts seem to be now admitted. It is stated that the amount of "conscience money" amounts to about \$125,000, but the Bavarian press points out that the profit made by the middlemen must have far exceeded any such amount, as the price of malt is in Prussia three times the price in Bavaria. Arrests by the Prussian police are reported from Cologne and from Krefeld.

In Munich itself, the consumption of beer is limited so radically that many of the famous beer halls are closed for the greater part of the day, and the system of beer-cards has been in vogue for some time.

All beer is barred from the popular-priced restaurant recently opened by the University of Berlin, and the few men students left in the university are said to be drinking substitute coffee and tea instead of the amber beverage that used to flow so freely in the "kneipen" in the vicinity of the university.

Austria has taken still more drastic steps to limit the consumption of beer, according to reports reaching Germany. It is announced that the Government has forbidden the preparation of malt for brewing purposes and has issued regulations, covering all the saloons of Austria, providing that only a pint per day may be sold to each guest and only one quart be sent to each outside customer. Beer may be sold only from 7 to 10 P. M. on week-days and from 4 to 10 P. M. on Sundays.

The new Minister of Public Subsistence in Austria, Major General Anton Hoefer, having discovered that grain and other food had been cornered, or hidden, many banks being engaged in the cruel business, has announced that severe punishment awaits all speculators and usurers selling food at higher than maximum prices fixed by the government.

The production and consumption of beer is steadily increasing in France, as wine and cider are hardly obtainable, the army needing all the wine that the government is able to requisition. Brewing materials are slow to arrive at the breweries as there is a car famine and the railroads cannot deliver on schedule time. Copper has also become scarce and brewers fear that their brew kettles and other apparatus may be commandeered for the manufacture of ammunition, as has been done in Germany. The price of copper, which was 137 francs per 100 kilos in 1914, has increased

to over 670 francs and it is still soaring. The imports of beer from England to France, which were 74,000 quintals in 1915, have increased to 590,000 quintals in 1916, the large increase being explained by the fact that most of these imports were destined for the British army in France.

Notices have been posted in the streets of Paris warning people against drunkenness and disorderly conduct, and appended are "jag" lists, showing the names of persons who had been fined and imprisoned at "forced labor for being intoxicated."

Monsieur J. Lemaitre, discussing the temperance question, has said that there is no Prohibition in France, nor will there be, adding: "The fine health of the French troops in Gallipoli and in France is considered to have been largely due to their consumption of red wine—our light Burgundies and Bordeaux."

To the pages of the Golden Book of the French brewing industry these names have been added: Guibourg Lucien, Sergeant in the 128th Infantry; Albert Lucien Duvet, Sergeant in the 6th Territorial Infantry; and Andre Griette, brewer at Picquigny, Somme, Corporal in the 350th Infantry; all decorated for bravery in action before the enemy.

To those of our readers who know some "Low Dutch," and even others who don't, the following taken from our Hollandish exchange, will be interesting:

Geen kleinigheid.—Een groote Parijsche koffiehuisshouder, die tegen het wettelijk verbod voortging met het schenken aan zijn klanten van absinth, die bekende groene likeur, is veroordeeld tot een boete van tweemaal honderdduizend franken.

By cable from London.—The sale of all spirits and other alcoholic liquors has been prohibited in Denmark, according to a Reuter dispatch from Copenhagen.

The order is temporary and calls for returns to be made on all stocks of spirits in the country.

SYMPTOM OF NEUROSIS. "In a majority of cases alcoholism is not a disease so much as it is a symptom of a neuropathic constitution. In fact, the test of a neuropathic constitution is the inability to use alcohol at all or to use it wisely or moderately. Alcoholism is in reality only a symptom, the expression of an unstable constitution. It is really this unstable constitution which blossoms out in alcoholism, and which is perhaps led through this into an insanity. . . . The flowing bowl would do little harm if it were not for the shallow pate."—(Dr. Charles L. Dana, noted neurologist.)

"No one can quarrel with the conclusion that to-day bread should claim greater respect than beer. Bread is a food and beer is a beverage, and these are quite different categories. Few people drink beer because it happens to contain a certain proportion of nutritives in the form of malt, sugar, dextrin, and some proteins; it is appreciated as a pleasant, and, in the majority of cases, wholesome drink, and these qualities have made it the national beverage. But although beer does not contain a large amount of nutrient material, there is good reason for saying that in the healthy individual it favors the assimilation of food in a manner akin to such condimental substances as pepper, salt, and vinegar. Beer certainly contains, amongst other things, the vitamins in a remarkable amount, as might be expected having regard to the chemistry and physiology of its raw materials and the method of its production. There is, therefore, little question that beer increases assimilative power, thus adding to the nutrient value of the foods partaken with it."—("The Lancet," London, England.)

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Akron Brewing Co., Akron, Ohio, are building a new 460-barrel brew house and making additions to their cellars to increase their capacity from 60,000 to 150,000 barrels. The new equipment consists of one steel kettle, 16 ft. by 8 ft. 6 in., with copper cover and copper heating coil, propeller, worm gear drive and motor; mash tank of steel, 16 ft. by 8 ft. high, with 30 in. dished bottom; Lauter tank, 18 ft. diameter by 7 ft. high, with draining device consisting of wort ring and single cock, grant and bronze-slotted false bottom; rice tank, 13 ft. by 7 ft. 6 in.; beer tank, 13 ft. by 18 ft. by 8 ft. 6 in., with hop strainer on top 13 ft. by 8 ft. by 4 ft. 6 in., and slotted strained plates; one hot water tank, 18 ft. by 14 ft. and 8 in., copper coil; one pressure water tank, 6 ft. 6 in. by 12 ft. high; one steel grains tank, 14 ft. diameter by 15 ft. high, all furnished by the Goetz Co., Chicago.

—Atlas Brewing Co., Chicago, are making an addition to their Government Pipe Line, with equipment made by the Goetz Company.

—Badger State Brewing Co., Janesville, Wis., are about to enlarge their plant to a capacity of 10,000 barrels per year.

—Becker Brewing & Malting Co., Ogden City, Utah, are figuring on removing their plant to Elko, Nevada. If they decide to do so, the brewery will be enlarged and equipped with the very latest in machinery, while the malt house is to remain where it is now.

—Birk Bros. Brewing Co., Chicago, are making an addition to Government Pipe Line, the Goetz Company making the installation.

—Peter Breidt City Brewery, Elizabeth, N. J. Work is rapidly progressing on the large new bottling shop for the Peter Breidt City Brewery. When completed the building will be one of the most modern bottleries in the East. The work is being executed under the supervision of Peuckert & Wunder, brewery engineers and architects, Philadelphia.

—M. Burkhardt Brewing Co., Akron, Ohio, install a new Government Pipe Line, furnished by the Goetz Co., Chicago.

—F. W. Cook Brewing Co., Evansville, Ind., are considering plans for the manufacture of non-alcoholic beverages.

—Cumberland Brewing Co., Cumberland, Md., recently installed one new Lauter tank, 13 ft. diameter by 6 ft. 6 in., with copper grant and wort pipes, all bought from the Goetz Co., Chicago.

—C. Diehl Brewing Co., Defiance, Ohio, recently bought from the Goetz Company one section for Baudelot cooler.

—Evansville Brewing Association, Evansville, Ind., are discussing plans for the installation of equipment for producing non-alcoholic beverages.

—Fort Pitt Brewing Co., Sharpsburg, Pa., install a new Government Pipe Line, with equipment from the Goetz Company.

—Franklin Brewery, Wilkes-Barre, Pa., is enlarging its cooling system and installing new machinery.

—Wm. Gebhard Brewery Co., Morris, Ill., installed

one Loew New Era pasteurizer, furnished by the Goetz Co., Chicago.

—John Gund Brewing Co., La Crosse, Wis., have installed one new mash tank, 14 ft. dia. by 10 ft. high, with dished bottom and propeller, worm gear drive and 20 H.P. motor; one meal conveyor with motor drive; one Aufhack and Austreber machine for 17 ft. mash tank with worm gear drive and 15 H.P. and 5 H.P. motors, all furnished by the Goetz Company.

—Home Brewing Co., Indianapolis, Ind., contemplate going into making "near beer" in case Prohibition becomes operative in Indiana.

—Huntington Brewing Co., Huntington, Ind., are considering plans for manufacturing non-alcoholic drinks should Indiana become a Prohibition State.

—Independent Brewing Co., Pittsburgh, have remodeled their plant at Butler, Pa., and are about to again operate it.

—International Brewing Co., Buffalo, N. Y., are having their 25-ton freezing tank equipped with a Frick drop pipe system.

—Leisy Brewing Co., Peoria, Ill., erect a new garage which is to cost about \$15,000.

—Fred C. Lukas, proprietor of the Castanea Brewery, Lock Haven, Pa., has added to its equipment a 10-ton raw water ice making system fitted with air agitating devices.

—Pabst Brewing Co., Milwaukee, erect a \$12,000 storage building adjoining their shipping depot at Third and Prairie streets, Milwaukee.

—Pilsen Brewing Co., Chicago, have installed one new rice tank, furnished by the Goetz Company.

—E. Porter Brewing Co., Joliet, Ill., have installed a Government Pipe Line with fittings for four Government beer storage tanks, furnished by the Goetz Company.

—Premier Brewing Co., Philadelphia, are constructing a government pipe line from their storage cellars to their bottling works.

—Rieger & Gretz Brewing Co., Philadelphia, are making alterations and additions in their plant to the amount of about \$35,000. The work includes a new chip cellar and other improvements. The plans for the work were prepared by Peuckert & Wunder, brewery engineers and architects.

—Rising Sun Brewing Co., Elizabeth, N. J., are building an addition to their plant at an estimated cost of \$18,000. The new structure will be erected in an L-shape. A part of it will be about 33x100 feet and another portion will be 40x60 feet. It will be two stories in height and will be semi-fireproof. The construction will be of brick, and the floor will be of concrete. The front will be built of yellow brick and the remainder of the building will be of North River brick. The exterior will be attractive and will have blue stone trimming, while the cornices will be of copper. The interior walls will be covered with white cement and will be marked to represent tile.

—Ruff Brewing Co., Quincy, Ill., have enlarged their bottling works and added to its equipment new machinery costing about \$15,000.

—Jos. Schlitz Brewing Co., Milwaukee, have installed a 6-barrel copper kettle with mash tank and machine and copper work; rice cooker with machine; hot water tank

with heating coil, and Baudelot cooler, furnished by the Goetz Co., Chicago.

—Fred Sehring Brewing Co., Joliet, Ill., construct addition to government pipe line, the Goetz Company, Chicago, having furnished the equipment.

—Standard Brewing Co., New Orleans, La., installed one hop jack, 11 ft. by 5 ft., with slotted false bottom; hot water tank, 12 ft. by 10 ft. by 7 ft. high, with exhaust steam heating coil and live steam heating coil and float and gauge board, purchased from the Goetz Company.

—Standard Brewing Co., Scranton, Pa., are installing additional storage tanks and a government pipe line to their bottling department.

—Stark-Tuscarawas Breweries Co., Canton Brewery Branch, Canton, Ohio, install one new mash tank, 14 ft. by 7 ft., with false bottom and copper work and grains conveyors; one grains tank, 9 ft. diameter by 7 ft. high, all made by the Goetz Company, Chicago.

—Tennessee Brewing Co., Memphis, Tenn., are about to reopen their plant for the manufacture of "soft drinks."

—Texas Brewing Co., Fort Worth, Texas, are installing one 250-ton vertical single-action refrigerating machine, direct connected to a cross compound poppet-Corliss valve engine, and one 8-ton vertical single-acting belt driven enclosed type refrigerating machine, together with condensing side, including 18 "Shipley" Flooded atmospheric ammonia condensers, all furnished by the York Mfg. Co., York, Pa.

—Thieme & Wagner Brewing Co., La Fayette, Ind., are converting part of their plant into a factory for producing fruit juices.

—Union Brewing Co., Anaheim, Cal., are installing additional equipment for producing "near beer."

—Worcester Brewing Corporation, Worcester, Mass., install a government pipe line from their brewery to their bottling house.

—D. G. Yuengling & Son, Inc., have installed government tanks and a pipe line connecting their brewing and bottling plants.

—The Jetter Brewing Co., South Omaha, Neb., have decided to cease operating their brewery, as Nebraska is going to be "dry" next month.

—Railroad and shipping congestion are responsible for a lack of brewing materials, fuel and motor oil, in many breweries throughout the country.

—W. H. Paulhemus, manager of canneries in Puyallup and Sumner, Washington, proposes to convert all breweries in Washington State into canneries.

—The affairs of the Forest Park Brewing Co., St. Louis, have been taken out of bankruptcy and their plant is now being operated by its present management.

—To the Golden West Brewing Co., Inc., Oakland, Cal., the Grand Prize for bottle beer has been awarded by the jury of the San Diego International Exposition.

—The stockholders of the Kalamazoo Brewing Co., Kalamazoo, Mich., the plant of which was closed two years ago, have decided to sell their real estate to a cold storage concern.

—Konrad Bros. & Werners' malt house and elevator at Hartford, Wis., were sold on foreclosure by the Sheriff, February 17, to Albert Schroeder and John A. Grimm, for the sum of \$8,200.

—The Rubsam & Horrmann Brewing Co., Staten Island, N. Y., have handsomely contributed toward providing equipment for the rooms of the Staten Island Chapter of the Red Cross Society.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

FIRM CHANGES.

MASSACHUSETTS—BostonBunker Hill Breweries, Inc., succeeds Alonzo G. Van Nostrand.

TEXAS—HoustonAmerican Brewing Association (unincorporated) succeeds American Brewing Association (Board of Trustees).

" —San Antonio.....The Trustees of Lone Star Brewing Co. succeeds Lone Star Brewing Company.

BREWERIES CLOSED.

INDIANA—FerdinandFerdinand Brewing Company.

PENNSYLVANIA—FranklinChristian Brecht Brewing Company.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1917 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, also in all other American countries where breweries exist, alphabetically arranged, with postal addresses, corrected to January 15, 1917.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries, firm changes and breweries closed recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

—The plant of the Walter-Raupfer Brewing Co., Columbia City, Ind., has been closed since February 20th.

—The plant of the Pells Brewing & Ice Co., Trinidad, Colo., has been taken over by the newly organized Trinidad Cold Storage & Packing Co.

—Suit has been brought by the Hand Brewing Co., Pawtucket, R. I., against the Brauning Bottling Co., alleging that the defendants have stolen 865 bottles and 34 cases, the property of plaintiffs.

—There is a bottle shortage throughout the country, owing to railroads having placed an embargo on bottles, and one of the results is that bottling works are placed on short time, while more keg beer is being sold by breweries.

—The National Brewing Co., Stevens Point, Wis., having made a voluntary assignment, a committee of three stockholders, J. J. Bukolt, S. H. Worzalia and Bernhard Polebitski, has been appointed to take charge of its property.

—Phillip J. Rack, agent for the Best Brewing Co., Chicago, was overpowered by three highwaymen, and robbed of more than \$3,000 near the saloon on Kildare and Wabansie avenues, Chicago, February 24th, the crooks escaping in an automobile.

—The Japanese company that has purchased the brewery at Tsing-tau, which was established by Anglo-German capital, is shortly to start operations. Brewing materials will be supplied from Japan. The initial output will be 30,000 cases a year, but the maximum capacity of the plant is 50,000 cases.

"THE WHOLE PROHIBITION PROPAGANDA depends largely for its success upon an appeal to emotions and passions. The professional agitators have capitalized the drunkard and the evils of intemperance, and they are doing a flourishing business and are collecting immense sums of money for themselves. They have muddled the real temperance problem for the time being, and in many States the majority of people have become "daffy" on the so-called liquor questions. They actually believe that about all the ills flesh is heir to come from drink. Hence they are eager and willing to swallow any quack remedy which is labelled "prohibition."—(Arthur B. Johnson, Yonkers, N. Y.)

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW INCORPORATIONS. Southern Illinois Beer & Liquor Co., Herrins, Ill.: Capital, \$16,000. Incorporators, Paul Colombo, John, George and James Marlow.

Smith Bros., Inc., New Bedford, Mass.: Capital, \$300,000. President, Joseph T. Smith; treasurer and clerk, James F. Smith.

Bunker Hill Breweries, Inc., operating the plant and doing the business formerly carried on by A. G. Van Nostrand, Boston: President and treasurer, A. G. Van Nostrand; business manager, Leonhard Baer; assistant treasurer, M. J. Messer; sales manager, A. I. Davis; bottling department manager, W. T. Van Nostrand.

Officers have been elected by brewery companies as follows:

Akron Brewing Co., Akron, Ohio: Additional directors, William H. Evans, Jr., E. J. Alderfer and J. A. Rohner. The brewmaster is Walter Gruner.

American Brewing Co., Indianapolis, Ind.: President and treasurer, Joseph C. Schaf; secretary, superintendent and brewmaster, Anthony J. Krass.

Atlas Brewing Co., Chicago: President and treasurer, Otto Kubin; secretary, superintendent and general manager, Anton Laadt; brewmaster, Arthur W. Ernst.

Auto City Brewing Co., Hamtramck, Mich.: President, Stanislaus Chronowski; vice-president and treasurer, Joseph Chronowski; secretary, Charles Huhn; brewmaster, William Stempel.

Badger State Brewing Co., Janesville, Wis. (reorganized and operating again): President, Peter Meer; additional directors, Otto Hackbarth, G. U. Fisher, Edgar Kuemmel, Max Engemann and Oscar Heiber.

Bavarian Brewing Co., Wilmington, Del.: President, C. H. Eisenmenger; first vice-president and general manager, John F. Hehl; second vice-president, M. Eisenmenger; secretary and treasurer, William Butz; brewmaster, Jacob Steiger.

Bellaire Brewing Co., Bellaire, Ohio: President, William Feller; vice-president, Conrad Rumbach; secretary and treasurer, C. W. Rodewig.

Belmont Brewing Co., Martins Ferry, Ohio: President and general manager, Henry Bieberson; vice-president, August Kraatz; secretary and treasurer, H. C. Hackman; additional directors, A. W. Eick and J. C. Wagner.

Bolton's Sons, Inc., Lansingburgh, N. Y.: President and treasurer, William Bolton; vice-president, George Bolton; secretary, Joseph Bolton, Jr.

Bowler Brothers, Ltd., Worcester, Mass.: President, John Bowler; vice-president, Herbert K. Sparrell; treasurer, Alexander Bowler; secretary, Edward F. McCabe; office manager, William F. Donoghue; brewmaster and superintendent, A. K. Stace; additional directors, John McGuire and J. Frank Doyle.

British Columbia Breweries, Ltd., Vancouver, B. C., Canada: Receiver and manager, S. L. Prenter; superintendent, Henry Reisel; brewmaster, Henry Traeger.

Buffalo Brewing Co., Sacramento, Cal.: President, Frank J. Ruhstaller; vice-president, J. H. Arnold; treasurer, H. W. H. Grau; secretary, William E. Gerber; general manager, F. C. Weil; brewmaster, Walter Daubenspeck.

John B. Busch Brewing Co., Washington, Mo.: Brewmaster, Ulrich W. Busch, succeeding Valentine Huber.

Cairo Brewing Co., Cairo, Ill.: President and treasurer, Chris Beck; vice-president, L. Lazarus; secretary, Charles Feuchter; general manager, D. H. Montgomery; brewmaster, William Kunz.

California Brewing Association, San Francisco, comprising National, Union and Acme Brewing Companies: President and general manager, J. P. Rettenmayer; vice-presidents, Henning Thode, C. O. Swanberg and A. E. Buttner; secretary-treasurer, C. J. Josue; additional directors, W. F. Adams, Fred Hansen, P. S. Schuster and H. Wreden.

Cleveland & Sandusky Brewing Co., Cleveland, Ohio: President, Theodore Fishel; first vice-president, John E. Stang; second vice-president, Fred E. Leick; secretary and treasurer, John Campbell; additional director, Emil Joseph.

Columbus Brewing Co., Columbus, Neb.: President, William J. Walter; vice-president, secretary-treasurer and general manager, Georg Rambour; brewmaster, Thomas Nessler.

Connecticut Breweries Co., Bridgeport, Conn.: President, treasurer and general manager, Peter W. Wren; vice-president, John A. Hurley; secretary, Wilhelm A. Wintter; additional directors, William Hickey and Jacob B. Klein; brewmaster, Christian Haug.

Crown Brewery, Alexandria, Egypt: Technical director, A. Zollinger, formerly with the Panama Brewing & Ice Co., Panama, C. Z.

Dixie Brewing Co., New Orleans, La.: President, Valentine Merz; vice-president, Victor Le Beau; secretary and treasurer, Robert L. Lambert; brewmaster, Karl A. Gerst.

E. L. Drewry, Ltd., Winnipeg, Man., Canada: President, Edward L. Drewry; vice-president, F. W. Drewry; secretary-treasurer, Charles E. Drewry; general manager, W. S. Drewry. The brewmaster is H. Waas.

Eulberg Bros., Inc., Portage, Wis.: President, general manager and brewmaster, J. J. Eulberg; vice-president, M. J. Eulberg; secretary, Julius A. Eulberg; treasurer, Joseph N. Eulberg.

Evansville Brewing Association, Evansville, Ind.: President and general manager, Charles F. Hartmetz; vice-president, Gustav C. Meyer; treasurer, Charles W. Ullmer; secretary, Otto C. Hartmetz; brewmaster, Gus. J. Werner.

Foss-Schneider Brewing Co., Cincinnati, Ohio: President, John G. Broxtermann; vice-president, A. Foss; secretary and treasurer, E. A. Foss; brewmaster, Fred J. Broxtermann.

Franklin Brewing Co., Columbus, Ohio: President and general manager, John Unverzagt; vice-president, Henry Seibert; treasurer, Charles A. Deibel; secretary, Leonard Mohr; brewmaster, Charles A. Wilhelm; additional directors, Frank Christ, George J. Igel, Henry Kropp, J. A. Pfeifer, John W. Swain and F. M. Thompson.

Frontenac Breweries, Ltd., Montreal, Canada: President, Joseph Beaubien; vice-president, Hon. J. M. Wilson; secretary and treasurer, L. J. Mouton; general manager, Eugene Koehler.

Fuhrmann & Schmidt Brewing Co., Inc., Shamokin, Pa.: President, P. H. Fuhrmann; vice-president, Max Schmidt;

secretary-treasurer, A. J. Walter; brewmasters, W. J. Linder and Gustav Ziehm.

Gambrinus Brewing Co., Columbus, Ohio: President, general manager and brewmaster, August Wagner; vice-president, E. L. Taylor, Jr.; secretary and treasurer, F. Wagner.

Grand Island Brewing Co., Grand Island, Neb.: President, Albert von der Heyde; vice-president, William Schefel; treasurer, William Veit; secretary, Richard Goehring; brewmaster, Lorenz Herzinger.

Home Brewing Co., Newark, N. J.: President and treasurer, Peter Hauck, Jr.; vice-president, Hugh C. Barrett; secretary, William C. Krueger; superintendent and general manager, Henry A. Guenther; brewmaster, William J. Guenther; additional director, William F. Hoffmann.

Home City Brewing Co., Springfield, Ohio: President, James J. Wood; vice-president, M. M. Berry; secretary-treasurer and acting superintendent, August A. Jung; brewmaster, Julius Bossert, elected a director to fill the vacancy caused by the death of the late secretary-treasurer and manager, Thomas L. White, deceased in December, 1916.

Honolulu Brewing & Malting Co., Ltd., Honolulu, Hawaii: President, F. E. Hime; vice-president, James Steiner; treasurer, Oswald Mayall; secretary and general manager, St. S. Sayres; additional directors, F. C. Hobron, A. Holmes, W. L. Frazee, E. E. Conant and Frank R. Greenwell; brewmaster, Hartwig Harders.

Hortonville Brewing Co., Hortonville, Wis.: President, P. Olk; treasurer, F. Jungmann; secretary, S. Yogerst.

Horlacher Brewing Co., Allentown, Pa.: President and general manager, Fred H. Horlacher; treasurer, George N. Horlacher; secretary, Frederick D. Horlacher; brewmaster, Christ. Auch.

Hudepohl Brewing Co., Cincinnati, Ohio: President, Mary E. Hudepohl; vice-president, C. J. Hesselbrock; treasurer, F. J. Willenbrinck; secretary and general manager, William A. Pohl; brewmaster, John Markt.

Huron County Brewing Co., Sebawaing, Mich.: President, Gustave Reinhold; vice-president, Frederick Kroll; secretary and treasurer, J. C. Martin; superintendent and brewmaster, P. Pfaff.

Jamestown Brewing Co., Inc., Jamestown, N. Y.: President and treasurer, P. F. Simon; vice-president, H. H. Cooper; secretary, Francis Dunn.

Jung Brewing Co., Cincinnati, Ohio: President, William C. Geis; treasurer, J. F. Tieberman; secretary, Oscar Stoehr; brewmaster, Walter Weingarten.

John Kauffman Brewing Co., Cincinnati, Ohio: President, manager and brewmaster, John R. Kauffman; vice-president, M. S. Rickert; treasurer, Frank G. Reif; secretary, Philip Renner; additional director, Charles J. Kauffman.

Koppitz-Melchers Brewing Co., Detroit, Mich.: President, superintendent and brewmaster, Konrad E. Koppitz; vice-president, W. Bruce Howard; secretary-treasurer and general manager, F. P. Goettman; brewmaster, George Walker.

La Brasserie Champlain Limitée, Quebec, Canada: President, Raoul R. Bergevin; vice-president, Honoré Doré; secretary-treasurer and general manager, A. P. Robetaille; superintendent and brewmaster, P. Philéas Roy; additional director, Etienne Genest, J. G. Blondeau and George Couillard.

Herman Lackman Brewing Co., Cincinnati, Ohio: President and treasurer, Albert Lackman; vice-president, Henry F. Lackman; secretary and general manager, Herman W. Lackman; brewmaster, Edouard Bronner.

Lima Brewing Co., Inc., Lima, Ohio: President, Frank Seiber; vice-president, Henry Frueh; secretary and treasurer, E. W. Charles; brewmaster, John Richter.

Lone Star Brewing Association, Unincorporated (a correction): President, Henning Bruhn; vice-president, F. W. Cook; secretary-treasurer, Chas. Grossmann; trustees, Henning Bruhn, F. W. Cook, Chas. Grossmann, Louis Fink and Otto Meerscheidt.

Medicine Hat Brewing Co., Ltd., Medicine Hat, Alberta, Canada: Brewmaster, Frank Vrehl, formerly with the Garden City Brewery, Chicago.

Moerlbach Brewing Co., Rochester, N. Y.: President and treasurer, Henry E. Kondolf; vice-president, Fred Odenbach; secretary and general manager, Charles H. Gehrke; brewmaster, Albert Gantert.

National Brewing Co., New Orleans, La.: President, C. A. Wagner; vice-president, Albert Werner; treasurer, H. C. Osborne; secretary, A. C. Daubert; superintendent and brewmaster, Fritz Baldenhofer; additional directors, Beck Henrikson, Gaspere Greco, John Gentilich and Theo. J. Lala.

National Brewing Co., San Francisco: President and general manager, Justus Hansen; secretary and treasurer, C. G. J. Josue; brewmaster, Charles F. Hansen; additional directors, H. W. Hansen, A. F. Josue and C. R. D. Hansen.

New Ulm Brewing & Malting Co., New Ulm, Minn.: President, John Schneider; vice-president, Hermann Vogel; treasurer, Otto Meyer; secretary and general manager, Joseph T. Groebner; brewmaster, John P. Heinrich.

Olean Brewing Co., Olean, N. Y.: President, S. W. Binney; vice-president, J. T. Howard; secretary and general manager, James M. Homer; treasurer, Joseph Kaye; additional directors, F. P. Byrne, J. Miller, A. F. Voght, J. Matuch, J. A. Sheldon and A. J. Wright.

Old Colony Breweries Co., Fall River, Mass: Additional directors, Edward Delehanty, F. A. Flynn, Adolph Haffenreffer, George Hindle, L. L. Holden, Charles Letendre and H. Sears.

Ortlieb Brewing Co., Mauch Chunk, Pa.: President, C. Curtis Doak, successor to Hugo Ortlieb, resigned.

Phoenix Brewing Co., Inc., Rice Lake, Wis.: President and brewmaster, Joseph J. Hanzlik; vice-president, Adam Baier; secretary, Mary L. Hanzlik; treasurer, Henry Wilz.

Pilsener Brewing Co., Hazleton, Pa.: President, William Kelly; vice-president, George Arnold; secretary-treasurer and manager, Harry W. Jacobs; brewmaster, Joseph Gabler; additional directors, P. J. Casey, A. J. Casey, Nicholas Yascanitz, Mike Lapchak.

Quandt Brewing Co., Troy, N. Y.: President, George Bolton; vice-president, Joseph Bolton, Jr.; treasurer, William Bolton; secretary and general manager, Thomas McCochrane; brewmaster, William Hammer.

Rahr Brewing Co., Green Bay, Wis.: President and treasurer, Fred A. Rahr; vice-president and brewmaster, George Groessl; secretary, Joseph P. Nugent; additional directors, Miss Angeline Rahr and Mrs. Flora Gotfredson.

Renner Brewing Co., Youngstown, Ohio: President and general manager, Emil A. Renner; vice-president, George J. Renner, Jr.; secretary and treasurer, Gustave A. Weaver; brewmaster, Harry E. Weaver.

J. G. Schemm Brewing Co., Saginaw, Mich.: President and general manager, C. W. Riedel; first vice-president, William Seyfardt; second vice-president, Frank Marxer; treasurer, William J. Mertz; secretary, John L. Raquet; brewmaster, M. Stegmeyer.

Schreihart Brewing Co., Inc., Manitowoc, Wis.: Presi-

dent, Henry J. Schreihart; treasurer and general manager, Charles Kulnick; secretary, Otto H. Senglaub.

Stark-Tuscarawas Breweries Co., Canton, Ohio: President, John G. Rommel; first vice-president, Michael Seibold; second vice-president, Wm. A. Schuster; secretary and treasurer, John F. Weiss; additional directors, Wm. Rommel, A. F. Hieronimus, John L. McDonald, Henry Seibold, Frederick Bernhard, Sr., and Geo. J. Edel; brewmasters, Canton Brewery, Max Birzer; Stark Brewery, A. F. Hieronimus; Schuster Brewery, John A. Seibold; New Philadelphia, J. A. Miner. Managers: Canton Brewery, J. L. McDonald; Stark Brewery, A. F. Hieronimus; Schuster Brewery, W. A. Schuster; New Philadelphia, Henry Seibold.

Rudolph Stecher Brewing Co., Murphysboro, Ill.: President and treasurer, Rudolph Stecher; secretary, Herman Zuber; superintendent and brewmaster, Erwin Stecher.

Susquehanna Brewing Co., Nanticoke, Pa.: President and general manager, C. E. Stegmaier; vice-president, Charles E. Stegmaier; secretary-treasurer, John F. McCarthy; additional directors, J. C. Wiegand and George J. Stegmaier.

Tivoli Brewing Co., Butte, Mont.: President, John F. Charles; vice-president, manager and brewmaster, Ernest Huber; secretary and treasurer, Jerry Mullins; additional directors, Edg. Schmitt and Ernst Schmid.

United States Brewing Co., Newark, N. J.: Vice-president, William C. Krueger, succeeding the late Peter Hauck, Sr.

Weibel Brewing Co., New Haven, Conn.: President and general manager, Charles R. Nicklas; treasurer, Mrs. T. F. H. Weibel; secretary, Joseph A. Weibel; brewmaster, Leonhardt Hartmann.

West Point Brewing Association, West Point, Neb.: President and general manager, Ferdinand Koch; vice-president, Chris. Schinstock; secretary and treasurer, J. F. Zajicek; brewmaster, Carl Hilz.

Western Brewery & Ice Co., Albuquerque, N. M.: President and treasurer, Jacob Korber; vice-president, O. N. Marron; secretary, Jesse Haggard; general manager, T. S. Walker; brewmaster, Carl Spietschka.

Windisch-Muehlhauser Brewing Co., Cincinnati, Ohio: Additional director, G. Clifford Muehlhauser.

Joseph Wolf Company, Stillwater, Minn.: President, Joseph Wolf; vice-president and general manager, Joseph P. Berkly; secretary and treasurer, Anthony Wolf; brewmaster, George Volkert.

BRITISH-AMERICAN BREWERIES. The Milwaukee & Chicago Breweries, Ltd., announce a final dividend of 4 per cent. on the capital stock, making 7 per cent. for the year to September 30th last, as against 5½ per cent. for the previous year.

"SOMETHING WRONG. There is something wrong in prohibition Iowa when drinking men can obtain booze with regularity. Somebody is to blame for dispensing it and peddling it, and while most people know its source but few can prove it."—Charles City [Ia.] "Press.")

FAILURE IN LEGITIMATE BUSINESS. "Ninety-nine persons out of every one hundred think as we do in regard to Professional Paid Reformers—that is, they are not capable of assuming the control of our great Government. They were failures in all their legitimate business undertakings—now they want to appoint themselves our keepers for a substantial consideration."—(The Chicago "Booster.")

Personal Mention.

W. H. Austin, attorney for the Wisconsin Brewers' Association, is of the opinion that it is the drinking men who are putting the country "dry." He is quoted as saying: "It is not the Prohibitionist; it is the man who drinks with you. It is the 'wet' who is voting the cities 'dry.' In every city carried for no-license it has been the 'wets' who did it. They are doing this because they have some objection to the saloon through which our wares are sold."

William Ebling, president of the Ebling Brewing Co., New York, celebrated his birthday on Sunday, March 18th.

John F. Becker, treasurer of the Wm. Ulmer Brewery, Inc., Brooklyn, N. Y., who spent the winter in Florida, has returned to his home greatly improved in health, and he is now again busy at work in his office.

George Ehret, Jr., and Rudolph J. Schaefer, president of the F. & M. Schaefer Brewing Co., both of New York, were members of Mayor Mitchel's committee to honor Ambassador Gerard upon his return from Germany, the committee giving him a public reception at the New York City Hall.

Thomas F. Fitzgerald, president of the Fitzgerald Bros. Brewing Co., Troy, N. Y., recently said: "Beer as a home beverage is finding greater favor all the time. Our trade in bottled beer is steadily growing, and we can only attribute this to the fact that people who need a mild stimulant find in beer the required properties. Drank in moderation, beer possesses exceptional food properties. Its ingredients are products of the soil; there can be no adulteration of these products as they come to us, and the process of brewing beer is such as to bring out the best food value of these products, which are malted barley and hops. Scientists and chemists will tell you of the food value of these two ingredients and when brewed into beer under the rigid sanitary conditions maintained in all breweries, a mild, stimulating, nourishing beverage is produced."

Carl M. Gottfried, vice president of the Gottfried Brewing Co., Chicago, recently sold his residence, 40 East Cedar Street, one of the most attractive homes in the Lake Shore drive district, to Benjamin Allen for \$75,000, taking in part payment property belonging to Mr. Allen, at 2971-73 Michigan Avenue, valued at \$20,000.

Edward F. Krumdick, of the Winona Malting Co., Winona, Minn., has been elected a member of the Winona Chamber of Commerce.

Ferdinand Lehmann, superintendent of the Lake View Brewing Co., Buffalo, N. Y., who was taken ill several weeks ago so that he had to go to a hospital for treatment, has fully recovered, owing to his rugged constitution and the skill of his physicians and nurses.

Richard Lieber, of the Indianapolis Brewing Co., Indianapolis, has been appointed secretary of the Indiana Board of Forestry, having accepted the position without pay, stipulating that the \$1,800 salary be used for the employment of an expert forester. This act is in keeping with Mr. Lieber's well-defined views of citizenship and service. Wholeheartedly and without hope of preferment or personal advantage he has entered into numerous public enterprises and has achieved things for Indianapolis and Indiana. He brings to the forestry board a knowledge and experience of his subject that should make the board a powerful instrumentality for saving, multiplying and beautifying the woodlands of Indiana.

August J. Lindemann, secretary of the Milwaukee-Waukesha Brewing Co., Milwaukee, has retired from active work for that company with which he was connected

for many years. Mr. Lindemann has a host of friends in Waukesha and vicinity who regret to note his withdrawal from that territory, as in the many years of his business connections there he had won the confidence and respect of the community.

Fred C. Loeb, president and general manager of the American Brewing Co., Rochester, N. Y., recently gave a beefsteak dinner to the officers and employees of the company. There was music, speeches and dancing and a general glorious good time for all.

Paul A. Meyer, for a number of years superintendent of the plant of the Mercer County Brewing Co., Farrell, Pa., has accepted a similar position for the Butler (Pa.) plant of the Independent Brewing Co., Pittsburgh.

William Peter, Sr., president of the Wm. Peter Brewing Co., Union Hill, N. J., celebrated his eighty-fifth birthday on March 15th. He is as youthful and energetic as ever and we hope that he shall stay with us for many more years to come. Mr. Peter was born in Achern, Baden, March 16th, 1832, his father being a successful merchant, and at one time, Mayor of that city, who, during the revolution of 1848-1849, fought with Franz Sigel for the liberation of Germany from the oppression of Feudalism and, consequently was persecuted by the Prussian oppressors, from whose clutches he escaped to emigrate to the United States, his family following him in 1850. Young William Peter, who had been apprenticed to the trade of brewer and cooper, soon found employment at the "small beer" brewery of Erhard Richter, on Forsyth Street, New York. Subsequently he worked in several other breweries until 1859, when he established a beer garden in West New York, N. J. In 1865 he erected his own brewery at Union Hill which, during the course of a generation, he developed to its present magnitude and efficiency. He still supervises and directs its operation with a masterly hand, as in the fulness of youthful vigor and professional enthusiasm.

William E. Sembach, secretary of Thomas Ryan's Consumers Brewing Co., Syracuse, N. Y., is reported as having recently said: "One 'bone-dry' bill, making shipments of intoxicants into Prohibition territory absolutely impossible, is the best anti-prohibition measure that could be passed. All brewers are in favor of it, for we know that its passage will have the opposite effect from that for which it was intended. When prohibition territories are situated so that they are absolutely deprived from securing liquor of any sort there will be a reversal of feeling. The hypocritical prohibitionists who shout loudly against the sale of beer and wines when they have a fine supply for their own use in their cellars, will not be so loud in their condemnation of the liquor traffic. When they are deprived of it themselves they will not be so anxious to urge dry measures in the future."

Charles J. Vopicka, one of the founders of the Atlas Brewing Co., Chicago, for years its president and then United States Minister to the Balkan States, returned to this country March 20th, arriving in New York on board the Norwegian steamship Nanenfjord. He cannot return to Bucharest, until the war is over at least, for the Germans decided that they wanted no foreign diplomats there after their capture of the Rumanian capital December 6th. He is on a vacation and his future plans rest with Washington, whither he went March 22nd, to lay important information before the President and the State Department, the nature of which he could not publicly reveal, but, among other things, he declared: "The food situation in Bucharest could not be worse. The Rumanians need as much help as the Belgians. The Germans cannot give it, for they need all

they can get for military purposes. There was a week when I could get bread for the legation only by getting the commandant's permission to have a baker open his shop and bake for me. The wives of high Rumanian officers were among the 4,000 women who came to the legation begging for food. We did what we could, but in the end we had to close the gates. The people of Rumania believe the United States is the only friend to whom they can turn. They hope that American business men will send educators and capital to rehabilitate their land. I believe that American capital invested in Rumania will prove just as good as money invested in Russia—probably better."

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

23414.—A firm in England desires to secure an agency for the sale of brewers' cake, made of dried grain and oil cake. Shipments are desired in quantities of 100 to 500 tons. Cash will be paid on presentation of documents. Quotations should be made c. i. f. destination, per ton of 2,240 pounds, including war risk. Reference.

23890.—A firm in Norway wishes to secure an agency for the sale of oats, grits, malt and malting barley. Quotations should be made c. i. f. destination. Payment will be made by cash against shipping documents in Norway. Correspondence may be made in English. References.

23895.—A commission agent in Brazil desires to enter into business relations with an American export firm which deals in articles used in the manufacture of beer. References.

23908.—A firm in Canada desires to be placed in communication with American manufacturers and exporters of bottles.

23,982.—A representative of American firms in France, with an office in the United States, desires to be placed in communication with American manufacturers and exporters of brewery supplies and machinery. References.

24015. A firm in Tasmania wishes to receive prices and catalogues from American manufacturers and exporters of hop-picking machines.

SAFE AND SANE SOLUTION. "The drink problem is by no means a problem of the first order, and it is perfectly open to a solution that is rational and consistent with a type of civilization appropriate to this country. It can be solved by a process analogous to the 'Safety First' movement directed against the far more important problem of industrial accidents, or like the movement for a 'safe and sane' Fourth of July. These reforms were effected in perfectly cool temper, without any rampant orgy of law-making, and without involving any reflection on either our national dignity or intelligence. Contrast them, for instance, with our ill-considered and ineffectual handling of the problem of the white slave traffic, resulting in the stupidities of the Mann Act—the most efficient agent of blackmail, probably, that any government ever devised. There is no reason why the United States might not become a sufficiently temperate nation without the sacrifices required by prohibition."—(Albert Jay Nock.)

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. The subjoined official notice has been published by the secretary of the Master Brewers' Association of the United States:

"Important Notice.—Owing to the fact that a strenuous Prohibition Campaign will be waged in Ohio in October, District Cincinnati has requested President Carthaus to use his good offices in New Orleans to have the Annual Convention postponed until after the Fall elections. Inasmuch as it is entirely likely that other states also will take an active part in the Fall Campaign President Carthaus approves of the suggestion of the Cincinnati District and hopes that this will also be agreeable to the other Districts. We have been requested to publish this notice, and to urge all Districts to promptly communicate with District New Orleans to inform them whether these plans meet with their approval. As a probable opening date for the New Orleans Convention, the 18th of November has been suggested."

District Meetings.

ALBANY. The Albany District has passed resolutions of condolence regarding the demise of its treasurer the late Harry F. Bowler, of Amsterdam, N. Y.

BALTIMORE. The members of the Baltimore District had to cancel the date of their special meeting which was to be addressed by National President Wm. F. Carthaus who was detained by professional work in St. Louis. The question of making arrangements for the annual banquet is held in abeyance.

BUFFALO. The Buffalo District has elected the following officers: President, Ray Schwartz; vice-president, Ernst Silber; recording secretary, Joseph Ettl; financial secretary, George Sitterle; treasurer, Theodore Braun; trustees, Fr. Silber, Gus Braun, Fred, Lehmann; delegate to the National Board, Ray Schwartz. Colleagues Carl R. Hirtzel and Frank P. de Westelaken were admitted to active membership, while colleague C. W. Lappe was elected to passive membership. Ch. Lehmann is the newly appointed chairman of the Technical Committee. George J. Meyer, president of the Geo. J. Meyer Malting Co., Buffalo, has been made an honorary member.

CHICAGO. At a special meeting held by the Chicago District, National Secretary C. A. Nowak delivered an interesting address, whereupon the members discussed questions relating to the technical training of the craft; also the Anti-Prohibition campaign, financial matters and other important subjects. Newly elected members are Geo. P. Suess, of the National Brewing Co., Chicago, and Frank Cloer, of the Fort Wayne Brewing Co., Fort Wayne, Ind.

CINCINNATI. The Cincinnati District is agitating for postponing the national convention until November next, when the Prohibition campaign will be over and the members have more leisure to attend. Colleagues Charles Proebstle and Charles Klink have been elected delegates to the Ohio Liberal League.

CLEVELAND. The members of the Cleveland District are enthusiastic over the grand success of their annual ball and banquet, which were attended, among many other prominent men, by Mayor Harry L. Davis, Senator H. Telling, Chairman of the Board of Elections Gustav Herstins, the Mayor's Secretary N. Cook and Secretary Kemel of the City Science Board, all of whom made interesting and impressive speeches.

LA CROSSE. The members of the La Crosse District are vigorously agitating against Prohibition and, owing to the

serious political situation, they have resolved to omit displaying the German colors in their hall and the singing of German national airs. Arrangements have been made for a series of interesting lectures upon professional subjects.

MILWAUKEE. The Milwaukee District has recently discussed the question of "near beer." The officers have been re-elected as follows: Fritz Bock, president; Oscar Mueller, vice-president; C. F. W. Wrede, secretary; Chas. Ehlich, Julius Kerber and Jul. Stemmler, trustees; auditing committee: Oscar Mueller, Carl Kieferle, and J. F. Theurer; delegate to the National Board of Trustees, Fritz Bock.

NEW ORLEANS. At a meeting held in the New Orleans Brewers' Exchange and attended by many of the presidents and other officers of the brewery companies in New Orleans, National President Wm. F. Carthaus delivered an interesting address in which he declared his idea of technical advancement and the enlistment of the research efforts of all of the scientific departments conducted by our Government at Washington and elsewhere, as well as submitting our "problems" to the representative Universities in the land, is not merely utopian, but that, if properly begun and carried out, would yield better, quicker and permanent practically mutual results than many ideas or methods heretofore advanced and tried out. To the National Alliance State League of Louisiana the New Orleans District has contributed \$25 to assist the German School Fund aside from the regular individual dues for the same cause.

NEW YORK. With President Robert Weigel in the chair, the New York District held its regular monthly meeting on Saturday, March 10th.

The proper advice from the National Secretary having been received, Colleague Fred. Glatz was enrolled as member of the District. The Banquet and Ball Committee reported that function, held February 10th, to have been a grand success.

John Koenig, Secretary.

PHILADELPHIA. Colleagues Charles Baar, George Gress, John Siebert, George Wagner and Christian Walther have been appointed members of the Philadelphia Districts' Technical Committee. The New Orleans Touring Club has been joined by 34 members. Arrangements are being made for the annual ball and banquet.

SAN FRANCISCO. At the suggestion of National President Wm. F. Carthaus the San Francisco District is making an effort to induce the Berkeley University to organize a permanent course of lectures upon brewing technology. The election of officers resulted as follows: Fred. C. Hansen, president; Julius Hieronimus, vice-president; J. B. Oppel, recording secretary; Wilhelm Schick, financial secretary; John Buchner, treasurer; Ph. Zimmermann, Henry Windeler, and John V. Oppel, trustees. Colleague J. P. Rettenmayer, for many years financial secretary, had declined reelection, owing to being overcrowded with professional business. Colleague George Klufinger has been granted a withdrawal card.

ST. LOUIS. National Secretary Carl A. Nowak having returned from his visit to a number of Districts, reported to the St. Louis District his impressions, the discussion upon which resulted in suggesting that a course of lectures be arranged for the Associations' national conventions. The members have also indorsed the suggestion that the "communications" be published in the English language only. Colleagues Hans Kalb and Carl Kreidler have resigned from the District.

ST. PAUL. At the annual general meeting of the St. Paul-Minneapolis District, National Secretary C. A. Nowak delivered the message of President Wm. F. Carthaus which

was carefully considered while action was reserved for future meetings. The newly elected officers are: President, Fritz Just; vice-president, John Beerhalter; secretary, Jos. Dinzl; treasurer, Wm. Figge; directors, John Dietz, Xaver Bauer, and Arvid von Luehmann; delegate to the National Board of Trustees, Joseph Dinzl.

Obituary.

W. H. Blee, president and general manager of the Springfield Breweries, Ltd., Springfield, Ohio, died suddenly in that city March 5th, the cause of death being heart disease. Mr. Blee, who was seventy-two years old, was one of the founders of the brewery of Vorce & Blee, which firm operated more than forty years, until it was consolidated with the Springfield Breweries, Ltd., of which the deceased was then elected to the position which he held until death summoned him from the field of his successful labors.

Harry F. Bowler, Amsterdam, N. Y., one of the most prominent men in that city, and owner of the brewery bearing his name, died at the Robert Treat Hotel, Newark, N. J., February 10th, having gone to that city to consult a specialist on heart troubles. He was born in Ipswich, England, and came to this country with his parents at the age of 4 years. The family located in Troy. In early manhood he went to Richmond, Va., where he acquired a knowledge of brewing. From Richmond he went to New Haven, Conn., where he married Julia Imogene Millard, of Palmyra, who died May 14, 1913. In 1880 Mr. Bowler returned to Troy and there became associated with the Potter & Sands brewery. After a year he went with the Evans Brewing Company, at Hudson, N. Y., and after eight years became identified with Quinn & Nolan Brewing Co. at Albany where he stayed until 1889 when he came to Amsterdam. It was the year that he located in Amsterdam that Mr. Bowler erected a large brewery on West Main Street which was destroyed by fire in September, 1895, and was replaced by the present modern brick plant which is one of the best equipped concerns of its kind in New York state. By close application to business he soon established a patronage which extended to many points in the state. Mr. Bowler was married a second time in 1915 to Mrs. Anna K. Wood, of Amsterdam, who survives him, together with two sons and one daughter, two brothers and one sister.

William Foster, who organized the Foster Pump Works in South Brooklyn, N. Y., died at his residence, No. 132 Columbia Heights, Brooklyn, March 9th, at the ripe old age of 92 years. He was president and treasurer of the company which, for many years, has constructed pumps for various industries, notably very effective pumps used for conveying mash and wort in breweries. His survivors are two daughters. Mr. Foster was born in Holme, Lancaster, England, and settled in Brooklyn nearly sixty years ago. He was the oldest member of Plymouth Church, which he joined in 1849, and for many years was a deacon in the church.

Frederick Hinckel, oldest son of the founder of the Hinckel Brewing Co., Albany, N. Y., died February 25th at his home in Normanskill. He was born in Albany fifty-eight years ago, and was educated in the public schools of Albany, and at an institute for brewers in New York. He finished his course in brewing in Germany in 1879. Mr. Hinckel first acted as secretary and then as brewmaster of the Hinckel Brewing Co. In 1906, when there was a change in the management of the company, he retired to his country home at Normanskill, where for a time he engaged in the nursery business. In 1909 he purchased a hotel at Normanskill, which he had since conducted.

Ernest F. Hirschoff, secretary of the United States and Gottfried Krueger Brewing Companies, Newark, N. J., died at his home in that city, No. 556 High street, after a short illness of pneumonia, March 26th. He leaves his widow and three sons.

Pauline Horrmann, widow of the late August Horrmann, one of the founders of the Rubsam & Horrmann Brewing Co., Stapleton, Staten Island, N. Y., died at her home, 122 Beach street, Stapleton, March 26th, aged seventy-nine years. She had come to this country with her parents when still a child and lived on Staten Island for more than fifty years. Her survivors are two daughters, three sons, four grandchildren and one great-grandchild.

John Joyce, vice president of the Harvard Brewing Co., Lowell, Mass., died January 26th, while sojourning at Beverly Hills, Cal. He was born in Limerick County, Ireland, sixty-eight years ago and emigrated to the United States in 1862, settling in Lawrence, Mass., where he established a bottling business in 1877 and in 1898 he organized the Harvard Brewing Co., whose president he was until 1908, when James R. Nicholson succeeded him. He is survived by his widow and two daughters, Mrs. Genevieve J. Johnson, and Mrs. H. S. Shonnard.

Charles D. Stanford, better known in the trade than whom are few men in this country, died suddenly of heart failure March 10th, in Boston, his native city. He was one of the most popular and successful salesmen in the brewing industry. He was born October 28th, 1850, and entered the brewing field in 1889, while making practical experiments at the Haffenreffer Brewery, Boston. Subsequently he was sales-manager for the Universal Carbonating Co., and after that he became general sales-manager for the Pfaudler Co., Rochester, N. Y. Thousands of friends and business associates mourn his loss.

Adolph Schwind, manager of the Schwind Branch of the Dayton Breweries Co., Dayton, Ohio, died at his residence on Holt Street, Dayton, February 12th, aged 61 years. His father was the founder of the Schwind Brewery and under him the deceased grew up in the trade and thoroughly learned the business in which he succeeded his parent. His widow and two daughters are his survivors.

John F. Seitz, manager of the Bartholomae & Roesing plant of the Milwaukee & Chicago Breweries, Ltd., Chicago, died March 3rd at his home in Oak Park, Ill., at the age of forty-six years, having been connected with the brewery since he was fourteen years old. His widow and one daughter survive him.

Theodore Weidman, aged 55, died at his home, Blue Rock Farm, Montgomery township, Pa., after an illness following a paralytic stroke which he sustained on July 16th. He was well known as a salesman of supplies among the trade and a particular friend of the officers and directors of the Philipsburg Brewing Co., Philipsburg, Pa.

F. J. Wetterer, president and general manager of the Wetterer Brewing Co., Cincinnati, Ohio, and his family are bereaved by the death of Mr. Wetterer's uncle, Jacob Wetterer, who died February 20th, from the infirmities of age at his home, 3226 Fredonia Avenue, Cincinnati. He was 81 years old and had served in the United States army during the Civil War. November 15th, 1914, the deceased and Mrs. Wetterer had celebrated their golden wedding. Surviving him are the widow, three daughters, Mrs. George Drageser and Misses Alice and Kate Wetterer; three sons, John, Louis and William Wetterer; two sisters, Mrs. Fred Mack and Mrs. Mary Grainger, and seventeen grandchildren.

Deaths in Foreign Countries.

Joseph Keeley, managing director of Isherwood, Foster & Stacey, Ltd., Lower Brewery, Maidstone, England, aged 75.

J. McMaught, former director in D. Watney & Sons, Ltd., Richmond Brewery, and in Brandon's Putney Brewery, Ltd., Putney, England.

Leslie H. Worssam, son of Henry J. Worssam, Wenlock Road, London, England; killed in action.

Arthur Wussin, president of the Hop Growers' Association of Saaz, Bohemia, aged 61.

Yeast Knocks Out Prohibition.

Congress seems to have decided to make prohibition States "bone dry," which will test the genuineness of those who have been voting to keep others from drinking. Nation-wide prohibition by constitutional amendment, if necessary, is also finding support in Washington.

As soon as the big men in the liquor trade lose interest in the suppression of the illicit manufacture and sale of alcoholic liquors the "moonshiner" will find his trade much safer and more profitable. Making cider, wine and home made beer, and distilling spirit in pot stills are very simple processes. By using costly and complicated apparatus the big manufacturers effect some economies in production and secure more uniform products, but almost anybody can make potable liquors at home.

Nine times out of ten the excise officers receive the "tips" on which they raid illicit stills from the distillers and wholesalers. When a distiller has to pay an inland revenue tax of \$1.10 a proof gallon on whisky that costs less than thirty cents a gallon to make, he has a very strong personal interest in suppressing the "moonshiner" who pays no tax. As soon as the distiller and the wholesaler are driven out of business by national prohibition these "tips" will not be supplied and "moonshining" will be safe and profitable. With its revenue cut off, the Federal Government cannot afford to employ an army of detectives to suppress the private manufacture of liquors. If the Government still derives a large revenue from taxes on the manufacture and sale of liquors, prohibition will be a farce.

Prohibition refuses to face this side of the case, yet it is a self-evident fact that real prohibition will stimulate illicit manufacture and remove the selfish incentive of the liquor trade to suppress it. A barrel of sweet cider or grape juice with a little sugar added to it will become a potent beverage in a few weeks and prohibition will not become effective until the yeast germs which produce alcoholic fermentation in liquors containing sugar or starch are exterminated.—(New York "Commercial.")

DRUNKARDS' CHILDREN. "There is no reason why the children of drunkards should be more likely to be mentally defective than the children of sober people. As a matter of fact, they are not so. I find that in 56 the parents of the children concerned were definitely sober; in 13 they were definitely one or both of them drunken; in 29 there was no definite history either way. Moreover, it is quite easy to keep the weak in mind from drinking; they have not the craving for drink which makes a man sacrifice everything to obtain it. They drink only as they do every bad and foolish thing which comes in their way, because it is easier to do it than to leave it undone."—(Dr. Gill, Medical Director, Langho Inebriates Reformatory.)

The Futility of Prohibition.

Insufficient sleep is held accountable by many of our leading clinicians for much physical and mental deterioration and disease. It probably ranks not far below alcoholism as a pathogenic factor.

Suppose now that a number of earnest souls were to start a movement against this dreadful evil, and suppose that in time this movement, under the leadership of such unselfish, not to say angelic, souls as Richard P. Hobson and the late candidate for President on the Prohibition ticket, were to become able to secure sufficient sleep legislation in about half the states of the country, and then suppose that a national amendment to the Constitution were to be agitated, as a Federal amendment is being agitated by the prohibitionists now, how, reader, would you stand on the question?

Remember that this sleep amendment would make it obligatory upon you to secure not less than a certain number of hours of sleep out of each twenty-four. There would be severe penalties for violation of the law.

Do we not know from past experience that where prohibition is enforced the people will make their own spirits? Prohibition could never be enforced, for it would be impossible for any government to police all homes. The making of spirits is a simple matter, requiring no more intelligence than bread baking. And this sort of home-made liquor is about the most injurious of any. In those departments of France where such liquor is made the mental and physical demoralization of peasantry is said to be extreme.

A rational system of governmental control of the industry, as is now the case in England, seems to be the best solution of the question of alcoholism. Unless we are frantically enamored of Kultur applied to the human spirit we do not want prohibition.

It is easy to see the futility of such an idea as legislation seeking to enforce sufficiency of sleep. Prohibition is not a whit more sane.

We know how the experts differ as regards the effects of alcohol following the ingestion of certain quantities. Imagine how they would stand on the question of how much sleep is necessary and how little is harmful.

With a sleep propaganda on foot one can imagine how experiments on alcohol comparable to those at Cornell would be undertaken. It will be remembered that in the Cornell work guinea pigs were exposed to the fumes of alcohol continuously for many months, when, of course, they exhibited symptoms of great injury. In our human life continuous saturation in this wise never takes place, and saturation with any substance, ordinarily innocuous, would work injury; sugar or salt, would conceivably inflict harm if so used. A sleep experiment on a par with these Cornell experiments would consist in keeping guinea pigs continuously awake for weeks, when, of course, evidences of marked injury would be noted.

Do we want to be standardized in respect to such matters by impatient simpletons and ambitious reformers?—"Medical Times.")

LIBERTY'S ENEMY THE REFORMER. "The one great illusion of modern democracy and the one great danger to our fundamental liberties is the idea that everything must be reformed, and that if only you can get a reform written into a statute and can put a policeman's club behind it, then the millennium will be that much nearer. Liberty faces no more insidious enemy than this illusion. There is not a single phase of human conduct to-day that is not threatened or actually affected by some form of statutory regulation."—(O. F. Hershey.)

What Doctors Do Not Know About Alcohol.

By T. D. CROTHERS, M.D., in "The Medical Times"

Medical writers and clinical students have always been more or less puzzled and confused with the variable symptoms which appear in alcohol and inebriety. Personal opinions and conclusions from individual cases, when submitted to careful test have been unverifiable and the phenomena of drink are still more obscure. Yet, there is distinct evidence to believe that it is a positive neurosis with cause and effect and controlled by absolute laws. The almost abnormal interest shown during the last few years to find a medical cure for this evil has been without results compared with the tremendous efforts and energies displayed. Evidently these have been concentrated on effects and the cause of alcohol has been assumed as being the specific and only one, yet observation shows this not to be true. For several years past, many observers have been noting causes back of alcohol indicating that the use of alcohol was but a symptom and not the first cause. During the past year a Research Foundation has been organized at Hartford to explore this new territory of causes back of the first use of alcohol. This is founded on the conviction that there are other factors unknown at present noted in the strange unexplainable causes of alcoholism and inebriety. The question of, "Why men drink?" is answered in a voluminous literature of opinions and theories which cannot be verified and are without exact and reliable data.

Why men drink at intervals to great excess and then abstain? Why men drink suddenly to great excess and continue until death after a life of total abstinence and why men drink for the first time following diseases, accidents, losses and social revolutions and so on through a long list of most unexpected breaking out of the drink craze, are all unknown problems that require the most careful, exhaustive investigation.

It is clearly evident that the alcoholic problem is a medical one, although pressed into great prominence by laymen, its solution, the causes and measures for relief must come from medical study. At present there are no reliable data or accurate evidence beyond the teachings of the laboratory.

One fact is sustained by a great variety of evidence, viz.: that the alcoholic and inebriate of the future is born and bred now. They are cultivated and grown in conditions of society from the highest to the lowest. There is no element of chance or accident in this. This should rouse the greatest possible interest to discover these causes and conditions and apply means of prevention and cure here rather than being absorbed in the therapeutic measures to cure the effects.

FIRES. The Youngstown, Ohio, depot of the Pabst Brewing Co., was damaged by fire on February 24th.

There was an ammonia explosion in the refrigeration plant of the brewery of Peter Hauck & Co., Harrison, N. J., February 28th, destroying part of the building and killing John Flynn, the engineer.

In the plant of Saltzmann Bros., Oil City, Pa., fire broke out February 9th, doing about \$2,000 worth of damage.

Part of the plant of the Meyersdale Brewing Co., Meyersdale, Pa., was destroyed by fire in the early morning of March 7th.

The Butte, Mont., storage depot of the Pabst Brewing Co., Milwaukee, was destroyed by fire March 14th; loss about \$50,000.

There was a fire in the brewery of Howell & King Co., Pittston, Pa., March 19th, causing about \$5,000 damage.

Unintelligent Competition.

By S. B. FOSTER, President,

The Bartholomay Brewery Co., Rochester, N. Y.

Oscar Wilde, that great philosopher and thinker, came close to analyzing the real cause of unintelligent competition when he said, "Too many people know price of everything and the value of nothing."

There is no doubt that all too often the price of a commodity is simply the reflection of erroneous impression, whereas it should be determined only on a basis of knowledge of fact.

In determining the selling value of beer, what does knowledge of fact mean?

It means the knowledge of actual cost of producing and selling every barrel or case of beer brewed, month by month, year in and year out.

It means the establishment of a system of cost that includes every item that can be legitimately charged in the manufacture and sale of the brewer's product.

Materials, water, heat power, labor, rent, light, management, equipment upkeep, depreciation, interest on capital invested, drayage, taxes, advertising, selling, entertaining expense and bad debts, and every other item directly or indirectly entering into the cost of producing and selling your product that must come back to you before you can figure a profit.

With a carefully kept record of such facts, one absolutely knows what it costs him to produce and sell his beer—a record that is always on guard to warn him against even trying to compete with a brewer who is digging his grave by selling at "below-cost" figures.

But undetermined costs is not the only evil that makes for unintelligent competition. Another great cause is over competition.

The consuming possibilities of any one territory can only be just so much—very often one or two saloons are ample to meet the requirements—these saloons may be doing a good business, but the injection of a third often spells failure for all, and when not a case of absolute failure, profits are reduced to the point where proprietors are tempted to sell a lower priced beer to offset their losses, or, what is still worse, it stimulates selling after hours and to undesirable persons, casting an odium upon the entire brewing industry, and upon the good saloon as well as the bad.

Another and very serious cause contributory to unintelligent competition in the lack of cooperation in the matter of keeping those men out of business who by their records have proven that their calibre is below the standard required to conduct reputable places. Surely it is not good business for one brewer to continue selling to such individuals when another has refused to sell him on the basis that he is neither responsible or law abiding.

Intelligent competition never hurt any industry. As a matter of fact, competition of the right sort stimulates business, but competition that is based upon lack of knowledge, lack of analysis and lack of common sense, is ruinous to everybody involved and helpful to none.—(The "Crown of Baltimore.")

WERE THEY SADLY DECEIVED? "If the prohibition against taking liberty or property without due process of law is not a restraint against taking liberty or property by ballot, then the representatives of 'the people' who framed and adopted the 5th and the 14th Amendments were sadly deceived, and they did not know what they were doing."—(Lee J. Vance, of the New York Bar.)

Billy Sunday Who Makes Religion Pay.

By GUIDO BRUNO, in Pearson's Magazine, April 1917.

The Gospel of Billy Sunday is hypnotic dope.

Is it not plain why John D., Junior, was most willing to be Billy Sunday's sponsor in New York? Do you understand why business men and factory owners are his staunch supporters? Billy makes their wage-slaves spiritually submissive and this is their dearest wish, especially in our present stressful days, when the real Jesus, the rebel against riches, the fighter for Humanity, is brought nearer than ever to the workers' hearts by noble men and women who do not hesitate to give their lives for the real welfare of their fellows by endeavoring to bring about the "Kingdom of Man upon Earth."

Four sermons of Billy Sunday I heard and in each of them he thundered against "the spirit of rebellion" imported into this country by foreign emigrants. In each and every discourse he mentioned as an example of the most damnable conspiracy of Labor against Capital the anarchist Haymarket "riots" in Chicago.

"The wages of Sin is Death."

Therefore these anarchists had to find a shameful end on the gallows. He never mentions the fact that the five who were executed were all innocent.

The most damnable places on earth in Billy Sunday's mind and in his sermons are saloons. Whenever he has a chance to put in a slander against the saloonkeeper, against the bartender, against the man who drinks his glass of beer or of whiskey, he foams at the mouth with poisonous froth, and spits the venom stored up in his soul for twenty long years into the faces of the sellers and users of alcohol.

It is quite obvious that he would like to cast out the evil spirit, which makes men assemble sociably to talk over politics and social problems. Isn't the saloon the only meeting place in the United States for persons who are independent in thought, who don't bow to restrictions imposed by religious belief or by nationality or race? Isn't the saloon the gathering place of men who cannot afford club fees and who wish to meet their fellows and talk with them as free men? Wasn't the saloon in the United States the starting point of all movements of political and social reform? Wasn't the old-fashioned tavern the assembly room of the fathers of our republic; of the men who drafted the Declaration of Independence?

Sunday could be a crackerjack salesman, a convincing political talker, a master of platitudes and claptrap; but never a leader of men to higher thought or nobler emotion. He has no vision, no education, no originality!

The results of his campaigns covering 27 cities in ten years have been that he "made" \$523,665.91. His success thus speaks loudly in figures.

What, now, is the impression this man has made upon me?

His message is so ignorant, so vulgar, that I cannot stomach it. He has made no impression whatever on my mind. He has failed to evoke a sentiment of any kind in me.

I know that the man is sincere, but the black slayers of the Grand Inquisition were also sincere, true to their dogma and the dead letter of the wornout word!

Slave-drivers in the guise of employers are the direct beneficiaries of his histrionic performances. Our Rockefellerers have understood the value of Billy Sunday for their purpose from the very beginning.

Sunday's business is religion. He is the Wanamaker of

religion in America. Educated, thinking people cannot be impressed by Billy Sunday.

Rabbi Stephen S. Wise, describing Billy Sunday as the greatest theological strikebreaker in history, at the Free Synagogue in Carnegie Hall, New York, last Sunday, said there were more than 100 Christian clergymen in this city who would so offend their congregations as to lose their places if they dared to say in their pulpits what they actually thought of Billy Sunday. Dr. Wise devoted some time in his sermon on "Billy Sundayism: Disease or Cure," to showing what had made Billy Sundayism possible, and asserted that next Sunday he would speak on "How to Make Billy Sundayism Unnecessary."

"Some men will say," the Rabbi declared, "that I am a Jew and that Sunday is a Christian, but only half of that statement is true. I do not believe what Billy Sunday teaches, and I am not certain that he believes it himself. Billy Sundayism is deeper than the man is, knows, or apprehends. It is grave and imperilling, and reveals a social disorder, a moral failure, and religious bankruptcy in our time. It is only an incident which means that the church may be in danger of failure or doomed to extinction. When religion comes to life again, as it is to be hoped that it will, Sundayism will go. Billy Sundayism is possible because of theological standpatism and intellectual moribundness."

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,216,574. Filling apparatus. Karl Kiefer, Cincinnati, Ohio.
- 1,216,666. Brush. Otto H. Dorsch, Brooklyn, N. Y.
- 1,216,705. Capping apparatus. Constant J. Kryzanowsky, Baltimore, Md., assignor to The Crown Cork and Seal Company of Baltimore City.
- 1,217,470. Pasteurizing apparatus. Emanuel M. Lundgren, Staphenhill, Burton-On-Trent, England.
- 1,218,005. Conduit-cleaning device. George Schlemmer, New York.
- 1,218,154. Method of testing filter bodies. Edward Zahm, Buffalo, N. Y., assignor to Zahm Mfg. Co., Buffalo.
- 1,218,190. Carbonated beverage and method of making same. Charles G. Kummerlander, Washington, D. C.
- 1,218,550. Bottle-capping device. John A. Gwinner, Philadelphia.
- 1,218,724. Beer-cooler. William F. Vosseler, Cincinnati, O.
- 1,218,738. Filter. Edward Zahm, Buffalo, N. Y., assignor to Zahm Mfg. Co., Buffalo.
- 1,219,047. Bottle-cap remover. Joseph R. Schultz, St. Louis, Mo.
- 1,219,533. Refrigerating machine. George P. Carroll, Bridgeport, Conn.
- 1,219,690. Tank-filling valve. Robert B. Barber, Hazelton, Pa.
- 1,219,816. Grain drier. Alfred W. French, Piqua, Ohio.
- 1,219,900. Loading mechanism for package-conveyors. John A. Alvey, St. Louis, assignor to Alvey Mfg. Co., St. Louis.

Reissued.

- 14,267. Package-sealing machine. Lawrence D. Morton, Sandusky, Ohio, assignor to The Hinde & Dauch Paper Co., Sandusky.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for the BREWER'S JOURNAL, by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C. London, England, and 10 Gray's Inn Place, W. C. London, England.

Specifications Published

- 1914.
- 8,899. Reichardt. Mash filters.
- 1916.
- 102,984. F. K. Plympton. Machines for making bottle-closure disks or caps and other like articles.
- 103,000. W. E. Heath. Receptacle closures.
- 103,053. R. H. Strickland. Bottles, boxes containers, and the like.
- 103,076. F. Evans. Bottle-stoppers.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 100,798. East St. Louis-New Athens Brewing Co., New Athens, Ill. Filed Jan. 22, 1917.
Particular description of goods.—A Cereal Beverage.
Claims use since Dec. 11, 1916.



Ser. No. 100,979. Val. Blatz Brewing Co., Milwaukee, Wis. Filed Jan. 26, 1917.
Particular description of goods.—A Non-Intoxicating Brewed Soft Drink.
Claims use since Dec. 21, 1916.



Ser. No. 100,846. The Christian Moerlein Brewing Co., Cincinnati, Ohio. Filed Jan. 23, 1917.
Particular description of goods.—A Non-Alcoholic Beverage Sold as a Soft Drink.
Claims use since about Sept. 25, 1916.



Ser. No. 101,104. Jos. Schlitz Brewing Co., Milwaukee, Wis. Filed Feb. 1, 1917.
Particular description of goods.—A Non-Alcoholic Beverage Sold as a Soft Drink.
Claims use since Dec. 22, 1916.

The following Trade Marks have been definitely Registered:

115,639. Non-alcoholic beverage (a soft drink). Lexington Brewing Company, Lexington, Ky. Filed October 21, 1916. Serial No. 98,811. Published December 26, 1916. Registration granted, February 27th, 1917.

115,702. Non-intoxicating malt beverages. Alonzo G. Van Nostrand, Boston, Mass., assignor to Bunker Hill Breweries, Incorporated, Boston, Mass., a corporation of Massachusetts. Filed November 27, 1916. Serial No. 99,595. Published December 26, 1916. Registration granted, February 27th, 1917.

115,792. Non-alcoholic beverages prepared from selected barley-malt, rice, and hops. Obermeyer & Liebmann, Brooklyn, N. Y. Filed November 2, 1916. Serial No. 99,044. Published January 2, 1917. Registration granted, March 6th, 1917.

115,798. Beer. Piel Bros., Brooklyn, N. Y. Filed November 17, 1916. Serial No. 99,357. Published January 2, 1917. Registration granted, March 6th, 1917.

115,900. Malt beverage. Ruff Brewing Co., Quincy, Ill. Filed November 13, 1916. Serial No. 99,283. Published January 16, 1917. Registration granted, March 20th, 1917.

AMERICAN LABOR EVER FOR LIBERTY. "Promise what it will, Prohibition can never drive into its ranks the great and decisive army of Labor. The American workingman will always stand as an insurmountable parapet that shields Liberty from the onslaughts of Prohibition."—(J. Elmer Pfriem.)

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, March 30th, 1917.

Barley. The Crop Reporting Board of the Bureau of Crop Estimates, Dept. of U. S. Department of Agriculture, from reports of correspondents and agents, estimates that the amount of Barley on Farms March 1st, 1917, was about 32,841,000 bushels or 18.2 per cent. of the 1916 crop, against 58,301,000 bushels or 25.5 per cent. of the 1915 crop on farms March 1st, 1916, and 42,889,000 bushels or 22.0 per cent. of the 1914 crop on farms March 1st, 1915. About 43.4 per cent. of the crop will be shipped out of the counties where grown, against 43.2 per cent. of the 1915 crop and 45.1 per cent. of the 1914 crop so shipped.

The local Barley market continues steady, prices being nominally unchanged. We quote: Malting Barley \$1.35@1.40, nominal, f. o. b. New York.

BUFFALO, March 28th: "Barley suitable for Standard Malt is held here at \$1.35; Choice to Fancy Grades, \$1.40@1.43."

CHICAGO, March 28th: "A comparatively small amount of Barley has been traded during the past month because only a very moderate amount has been offered for sale. Apparently the car situation in the country has not bettered to any extent. There has been a steady malting demand for desirable barley with prices materially advanced since a month ago. We quote: Low-Grade Malting, \$1.16@1.20; fair-to-good, \$1.21@1.25; good-to-choice, \$1.26@1.30; choice to fancy, \$1.30@1.34."

Malt. There is a very heavy demand for Malt, and some brewers are turning to Coast Malt, which is \$1.45. The market is very strong and prices are: Standard Malt, \$1.49 cash, \$1.50 sixty days; Bottle Beer Malt, \$1.57 cash, \$1.58 sixty days.

CHICAGO, March 28th: "Standard Malt is quoted here to-day at \$1.42@1.45; Coast Malt, \$1.36@1.39; Bottle Beer Malt, \$1.50; Extra Bottle Beer Malt, \$1.53."

Corn Goods. Quotations: Grits, \$3.00; Meal, \$2.99; Corn Syrup, \$3.64; Corn Sugar in bags, \$3.73; 80 deg. Corn Sugar, \$4.08; Flakes, \$3.45.

CHICAGO, March 28th: "Grits are quoted here to-day at \$2.84; Meal, \$2.83."

Rice. Rice of all grades, imported and domestic, advanced heavily during the past few weeks, principally for the reason that England has commandeered all rice supplies in the United Kingdom and prohibited the exportation of cargoes from India to any other but English ports, which has resulted in tremendous buying of American Rices by all the South and Central American countries and West Indies. Difficulties of ocean transportation have added to the demand and from present outlook the higher levels will be maintained. An actual declaration of a state of war by this country would, no doubt, result in immediate further advances. Prices: Imported, \$2.85 per 100 lbs. at the Pacific Coast; \$3.35 per 100 lbs. Chicago, and \$3.60 per 100 lbs. New York, while domestic is \$2.75 to \$2.87½ per 100 lbs. at the mills, \$3.10 Chicago and \$3.20 New York.

Hops. Referring to our last report, further large purchases were made on the Pacific coast, principally in California, at somewhat lower prices. Stocks are getting into a small compass, and some brewers on account of the tempting offers which are now being made, are laying in a supply for their summer requirements. Business is not what we would call brisk by any means. Our reports from England are, that on account of the enforced reduction of beer consumption, the hop market is also somewhat lower, and the demand very light, but prices there rule comparatively high. No reports were received from Germany or Austria of late. There is considerable agitation on the Pacific coast about growers plowing up hop yards, in consequence of unprofitable prices prevailing, and their being able to raise other products more advantageously. It is still uncertain how much this plowing up of acreage will amount to, but it may reach 30,000 to 40,000 bales. This ought to have some influence in bringing about a better result, as far as growers are concerned. We quote: 1916 Pacific coast hops, 10-@12½c.; 1916 N. Y. State hops, nominal, 40@45c.; 1915 Pacifics and States, 8@10c.; 1914 Pacifics and States, 6@7c.

LOW-VOLTAGE STATESMEN. "We are troubled with low-voltage statesmen, the tiny dry cells of whose brains are just powerful enough to make unceasing racket, while great dynamic minds that might flood the world with legislative light and wisdom are disconnected from the machinery of government."—(W. F. Wiley, editor Cincinnati "Enquirer.")

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Sales Made by Cleveland Brewers Supply Co.

Wm. Diehl, Proprietor, Cleveland Brewers Supply Co., dealers in hops, malt and other supplies, reports having recently made the following sales of Werle Patent Bunging Apparatus Regulator to the Jenner Brewing Co., Boswell, Pa.; Butler Brewing Co., Butler, Pa.; Galion Brewing Co., Galion, Ohio; Compañía Industrial Ceibena, Ceibe, Spanish Honduras, S. A.; Cerveceria de Barranquilla, Barranquilla, Colombia, C. A. Champion Keg Washer to the Erie Brewing Co., Erie, Pa., and Greensburg Brewing Co., Greensburg, Pa.

Pfaudler Glass Enameled Steel Apparatus.

In its Chemical Trades Bulletin C-4, just from the press, the Pfaudler Co., Rochester, N. Y., describing Pfaudler Glass Enameled Steel Apparatus, says:

"Strictly Business.—Protected against chemical action by carefully developed, exceptionally pure and resistive Silicate Enamels, which we fuse into substantial steel shells at great heat, Pfaudler Glass Enameled Steel Apparatus meets the demand for something that is lighter and less bulky, and of greater heat conductivity, than cast metals or earthenware.

"More than thirty years ago we developed the Glass Enameled Steel Tank to meet the demand for an absolutely sanitary container for sensitive and edible liquids. These tanks were shipped to almost every civilized country, and most of them are still in use—the enamel still intact, still sanitary.

"Gradually we improved our enamels, rendering them more resistive to severe corrosive action and more tenacious under rapidly changing temperatures and similar trying service. So, when the great demand for American Apparatus for the American Chemical Industry arose, we were prepared to meet it with an article of proven excellence.

"Typical of the work which is constantly being turned out of our furnaces are the pieces of Glass Enameled Steel Apparatus, for Chemical and Pharmaceutical purposes, illustrated and described in the following pages.

"Quotations upon any apparatus which this Bulletin may suggest to you will be made gladly, promptly and without thought of obligation. We would enjoy an opportunity to discuss with you the adaptation of our line to your work."

York Manufacturing Company.

The York Mfg. Co., York, Pa., report the details of 130 installations recently made by them in plants of various descriptions, among them the Farmers Co-operative Packing Co., Madison, Wis., one 40-ton and one 12-ton horizontal double-acting refrigerating machines, each direct connected to Corliss valve engine, and one 40-ton horizontal double-acting belt driven refrigerating machine, together with condensing side complete; also 4 double pipe counter-current brine coolers, each 18 ft. 2 in. long, 12 pipes high, made of 2-in. and 3-in. pipe, and 22,200 feet of 2-in. direct expansion piping for miscellaneous storage rooms; Wegner Machine Company, Buffalo, N. Y., one 35-ton vertical single-acting high speed belt driven enclosed type refrigerating machine. This machine was installed for the Binghamton Ice Cream Co., of Binghamton, N. Y.; Yarbrough & Bellinger Co., Charlotte, N. C., 5 "Shipley" Flooded atmospheric ammonia condensers, each 20 ft. long, 12 pipes high, made of 2-in. pipe; a 125-ton shell and tube steam condenser, vertical, and miscellaneous material for overhauling their ice plant; Tulsa Ice Company, Tulsa, Okla., one 65-ton vertical single-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side complete, together with a 35-ton flooded freezing system complete; Swift & Company, Alstead and Division street, Chicago, one 20-ton horizontal double-acting belt driven refrigerating machine and condensing side complete; also 7,800 feet of 2-in. direct expansion piping for storage room; W. H. Daugherty Refining Co., Petrolia, Pa., one 34-ton vertical single-acting high

speed belt driven enclosed type machine and condensing side, including a "Shipley" Flooded atmospheric ammonia condenser; also 1,925 feet of 2-in. full weight wrought iron direct expansion piping; The Mono Service Cream Co., Knoxville, Tenn., have doubled the capacity of their refrigerating plant by the installation of another 25-ton horizontal double-acting belt driven York Refrigerating machine and condensing side complete, including two "Shipley" Flooded double pipe ammonia condensers; also a 15-ton brine storage tank and miscellaneous material. Their first 25-ton York machine of the same type was installed about three years ago; Border City Ice & Coal Co., Van Buren, Ark., a 35-ton flooded freezing system complete; also a double pipe distilled water cooler, 17 ft. 6 in. long, 8 pipes high, made of 1½-in. and 2-in. pipe, and 6 "Shipley" Flooded atmospheric ammonia condensers, each 20 ft. long, 12 pipes high, made of 2-in. pipe; Saxon Realty Co., Detroit, Mich., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. This installation was made for the Michigan-Parfay Co., of Detroit, Mich., and will be used for cooling water and soft drinks; Salida Creamery Co., Salida, Col., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; San Pedro Creamery Co., San Pedro, Cal., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Great Falls Meat Co., Great Falls, Mont., two 12-ton vertical single-acting belt driven enclosed type refrigerating machines and high pressure side complete; Buhr-Plaff Candy Co., Cincinnati, one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. This plant was installed by the C. M. Robinson Co., of Cincinnati; City Creamery Co., Kansas City, Mo., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; August Coldway (Creamery), Norwood, Ohio, one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. This installation was made by the C. M. Robinson Co., of Cincinnati, Ohio; Chas. L. Earle, 608 Elm street, Arlington, N. J., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Keystone Creamery Co., York, Neb., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Cooper Mercantile Co. (General Store), Pleasant Green, Utah, one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; St. Johns General Hospital, Pittsburgh, Pa., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Woodward-Bennet Co. (Wholesale Meats), Los Angeles, Cal., one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Scholtz Drug Company, Denver, Colo., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Border City Ice & Cold Storage Co., Heavener, Okla., one 20-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and condensing side, including two "Shipley" Flooded atmospheric ammonia condensers; also the necessary apparatus and equipment to change their freezing system to the York Flooded system, and 360 feet of 1½ in. full weight direct expansion piping; Key City Light & Power Co., Port Townsend, Wash., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Installations made in breweries are reported elsewhere in these columns.

Frick Company's Western Sales Offices.

The Frick Company, Waynesboro, Pa., writes us:

"We have placed in charge of our Chicago sales district Mr. Charles M. Gilbert. Mr. Gilbert has up to this time been working in the Chicago district with headquarters in St. Louis, but his headquarters in the future will be in the Monadnock Block, No. 53 West Jackson Boulevard, Chicago, Ill., and he will handle all our

ice making and refrigerating machinery business throughout the Chicago district from that office.

"In the same manner, some of your readers will no doubt be interested in knowing that we have established Mr. L. N. Udell in charge of the Kansas City, Mo., district with headquarters at 19th and Campbell Sts., Kansas City, Mo.

"Mr. Udell was formerly with us working out of the St. Louis office throughout the Northern section of that territory, but during the last year was with the Continental Machine & Foundry Company of Chicago. He has resigned his position with them and has taken charge of our Kansas City, Mo., sales district. He will handle all our ice making and refrigerating machinery business in the Kansas City district with headquarters mentioned above."

Hetzel's Pipe Joint Compound and Rub-On Paint.

The Estate of J. G. Hetzel, 67 Maine Street, Newark, N. J., manufacture that well-known Pipe Joint Compound which is adapted for use on gas, steam, air, water or ammonia pipe joints; also Hetzel's Rub-On Paint, recommended for repairing tin roofs or any kind of metal work to paint. There is no waste in using these articles; they give satisfaction, the paint containing no acid, tar or asphalt and requiring only one coat to do any job. Write for details to the manufacturers.

De La Vergne Machine Company.

Two interesting bulletins were issued last month by the De La Vergne Machine Co., New York, the one, No. 167, describing and illustrating the "De La Vergne" Ammonia Purifier, a valuable refinement to every plant, and the other, No. 168, giving details regarding the High Speed Horizontal Ammonia Compressors made by these renowned constructors of refrigerating machinery for direct connection to oil, gas or high speed steam engines, electric motors, or for belted service to any prime mover. The bulletins may be had by writing to the De La Vergne Machine Co., Foot of East 138th Street, New York.

Ice Handling Machinery and Tools.

Summer Bulletin No. 26, just issued by the Gifford Wood Co., Hudson, N. Y., is devoted to Ice Handling Machinery and Tools, briefly describing and illustrating the various types of Machinery and Tools used for handling ice during the summer period. The illustrations shown convey to prospective customers the economy and efficiency to be derived from the use of this equipment. Additional information may be obtained from the company's complete catalog or by correspondence. Estimates on Machinery will be furnished promptly. Owing to continued high prices on raw materials which enter into the manufacture of Ice Tools, the company cannot guarantee the prices published in this bulletin; all prices being subject to change without notice. Quotations submitted are for immediate acceptance. Catalogs mailed upon request.

Goodrich Operating Plan Simplifies Gigantic Tasks.

We have received the following from the B. F. Goodrich Company, Akron, Ohio: "How the largest rubber factory in the world, with more than 16,000 employees, has solved the problem of more efficient management and delivered the responsibility largely from one man, upon an Operating Committee of ten of its executives, is an interesting story disclosed in an interview with Mr. B. G. Work, President of the B. F. Goodrich Company.

"During the past two years," said Mr. Work, "we have many times been impressed with the necessity for evolving some plan by which our huge Akron factory, with its army of workmen, might be readjusted to meet a plan of management which would relieve myself and the Board of Directors from a constantly growing mass of detail work. With more than fifty departments, each making a number of different rubber products, it was imperative that our plan must embrace the major portion of these if it were to be a success. During the past year, when our business was increasing at a faster rate than ever before, we were obliged to face the problem seriously and finally. While we regarded the Operating Committee plan as an unusual departure, the more we considered it the more practical of all solutions it seemed. Certainly an entire group of factory executives could more intelligently handle the many details pertaining to their respective departments if they each had the advice or counsel of the other men equally responsible. And surely these men had qualified by reason of the successful direction of their own units, to apply their well trained ability and their knowledge, along well defined lines already established. Our new plan has been working slightly more than two months now and the results that have accrued leave no doubt in my mind that we have solved an important problem for ourselves.

"Our Operating Committee was chosen as follows: Mr. H. E. Joy, Director of Costs of Goods and Factory Costs; Mr. W. O. Rutherford, Director of Sales; Mr. H. K. Raymond, Director of Production; Mr. A. B. Jones, Director of Plant Administration; Dr. W. C. Geer, Director of Development of Goods and Processes; Mr. Geo. Oenslager, Director of Chemical Laboratories; Mr. W. A. Means, Treasurer; Mr. A. P. Lohman, Engineer; Mr. H. C. Miller, Manager of Tire Sales, and Mr. W. H. Yule, Manager of Sales of General Mechanical Rubber Goods.

"This gave representation to every important unit of our factories and at frequent meetings of this committee where vital questions present themselves, they are discussed freely by all members, so that the final decision is the logical one. In this manner, not only the safe conduct of our business is well guarded, but the effects of the plan are felt all through the factories in added efficiency to each department. What makes our plan appear all the more practical is the fact that no business institution can ever outgrow it."

"This statement by Mr. Work illustrates most forcibly the trend of big business and he has shown very clearly how Goodrich Plant takes care of increased responsibilities and not having them wholly dependent upon any one particular executive. It is a decidedly comprehensive solution of the problem that is facing many large business institutions to-day."

"INTELLIGENT SELF-CONTROL is doing much to draw men away from strong drink. Science is doing much to abridge the area of diseases. But the regeneration of men must proceed from within, and is of slow growth. We cannot hope to eliminate death, nor is prohibition likely to end drunkenness."—(Col. Henry Watterson.)

ENERGETIC NATION'S DRINK. "The existence of a broad relation between superior vigor and an inclination for alcoholic drinks, was founded years ago by the writer; drinking people are noticeably more energetic than non-drinking ones. The absolute condemnation of drink has never been indorsed by public opinion or by the medical profession, because it is contradicted by the general experience."—(Dr. Arthur Shadwell, London, England.)

MAJORITY RULE NOT WANTED. "The fanatic has never believed in majority rule. His theory has ever been that the religious element, so-called, should make laws for the regulation of the rest of the community. He takes the ground that liquor, not being necessary to him, should not be necessary to anybody. And if he ever succeeds in stopping the manufacture of liquor by denying everybody the right to drink it he is going to regulate every other question of morals by legislative means, until one day we shall awake to the fact that we have returned to a condition of political servitude, with the fanatic in the pilot-house and the parson and his flock in the seats of the mighty."—(Philadelphia "Sunday Dispatch.")

"NEW WAY OF EVADING 'DRY' LAW. In buying whiskey in 'dry' territory the buyer may be perfectly satisfied that the seller has devised a way to get the liquor safely to his customers, but an old colored man near Bridgeville, Del., has invented the latest and best method of marketing the commodity. A stranger wanted a quart of whiskey and stopped the colored man to ask him how to get it. The old fellow said he had none, but he might be able to get some for a dollar. With the money handed over the stranger wanted protection from the loss of the dollar, so the colored man handed him a box of supposed shoes which he had been carrying under his arm to keep until he came back. Time passed and no colored man with whiskey came. Impatiently the stranger opened the box of shoes to see if they were worth the dollar from which he had parted, when, behold, his quest was over. A quart of whiskey reposed in the box."—"Bulletin," Pennsylvania State Brewers' Association.)

THE BREWERS' JOURNAL

AND

BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

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Patriotic Brewers.

The Board of Trustees of the United States Brewers' Association, at a meeting held in their office, 50 Union Square, New York, April 5th, adopted the following resolutions:

"At this critical juncture the United States Brewers' Association places itself unreservedly at the service of the President of the United States, and pledges him its unqualified support in any measure he may take in behalf of our beloved country.

"We further pledge ourselves, individually and collectively, to any service that may be deemed necessary in order that the honor of our flag, the integrity of our nation and the spirit of our institutions may be preserved.

"Resolved, That the Board of Trustees of this association be hereby appointed a committee of cooperation, with full powers, for the purpose of assisting the government in every way possible, and that this resolution be communicated to the President of the United States and to the Senate and the House of Representatives."

The resolutions were signed by President Gustave Pabst and Secretary Hugh F. Fox.

Similar resolutions were adopted at a meeting of the New York State Brewers' Association, also held in New York, April 5th, the following officers attaching their signatures to the document: President, Jacob Ruppert; 1st vice-president, John Bradley; 2nd vice-president, P. F. Simon; 3rd vice-president, John Reisenweber; treasurer, John C. Heintz; secretary, Sam. S. Brewer; trustees, Jacob G. Lang, William Hoffmann, Louis B. Schram, B. T. Kearns, W. F. Welch, E. M. Jackson, Herman F. Scharmann, Edward Oswald, F. C. Loeb, Thomas F. Fitzgerald, Julius Liebmann; counsel, F. E. Grant and W. H. Hirsh.

FOR A SQUARE DEAL. "All our industrial problems can be solved satisfactorily when we all accept as fundamental the law of square dealing. This law must not only be taught, but accepted by employer and employed. It provides that all our acts and all their acts should redound to the advantage of all concerned, and teaches us that after all the future permanency of our industrial life does not depend so much upon the wealth we create as it does upon the service we render each other."—(A. G. Burry in "American Industries.")

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Brewing Waters and their Treatment.

By ARTHUR R. LING.

Even before the application of science to brewing, it had been surmised by old writers that the character of the beers brewed in a given district was largely determined by the water supply of the district. Nor was it unrecognized in comparatively early times that if waters of different origin had any influence on the character of the beer produced from them, the probable reason had to be sought in the varying nature of the saline matters which the respective waters contained. Among the older brewing authorities there were some who attached little or no importance to the saline matters of brewing waters, and among these I may mention Shannon, Donovan, Black, Combrune, and Hayman. On the other hand, whilst Richardson, Wigney, and Roberts were advocates for the employment of soft waters, Levesque, Ham, and, in more recent years, Tizard, gave preference to hard waters, the last-named, however, under reservation. But most of the observations made even as late as 60 years ago led to conflicting and, in some cases, to inaccurate conclusions.

It would serve no useful purpose in the present short article were I to enter in its relation to brewing. It will not, however, I believe, be out of place to mention briefly one episode in connection with the subject which had the effect of establishing the chief reason of the suitability of the waters of Burton-on-Trent for brewing ales. In the early part of the nineteenth century, one David Booth, employed by the Society for the Diffusion of Useful Knowledge, brought out a treatise on the "Art of Brewing," in which some reflections were cast on the practices of Burton brewers, which induced them, as a body, to commence legal proceedings against the publishers, Messrs. Baldwin and Cradock. The case was heard before the Court of King's Bench on May 10th, 1830, Mr. Brougham appearing for the plaintiffs. Counsel stated that eminent chemists had visited Burton, and analysed the waters there used and the worts produced, and that the Committee of the Society above mentioned were satisfied with the honesty of the brewers, who had thrown open their doors to the chemists. He added: "The learned person, the author of the treatise in question, who was a practical man, being a brewer of 20 years' standing, had been misled upon the subject, by circumstances which might have misled anybody. He had said that he could make Burton ale, similar to that of these brewers, if he were allowed to add certain saline impregnations, chiefly gypsum. Now it so happened, though the fact was not known to the author at the time the treatise was written, that the springs at Burton ran over a rock of that substance (gypsum) which gave them a natural impregnation."

Under these circumstances the Counsel for the Committee admitted that nothing deleterious was used in Burton breweries; and the rule for a criminal information was discharged upon the condition claimed by Mr. Campbell, that the contradiction should be as extensively circulated as the libel had been.

Since this time it has been known to all brewers that the

principal saline constituent of the waters of Burton-on-Trent is calcium sulphate, and it has been the general custom all over the country, in case of need, to treat waters intended for brewing pale ales with one of the forms of $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$.

Our present knowledge of the effect of different salts in a water on the production of different types of beers is now considerable, but there are still some obscure points to be cleared up.

It is generally agreed that a water intended for pale ales and stock ales should contain some 60 grains per gallon of calcium sulphate, that a water for stout should contain carbonates—the London deep-well waters contain sodium carbonate to the extent of 10 grains per gallon—whilst waters intended for mild ales should contain a certain quantity of sodium chloride.

In addition to these saline requirements for special brews, magnesium and potassium salts should be present, as they tend to stimulate the yeast. I am quite aware that both magnesium and potassium salts are present normally in malt worts, but in spite of this, when they are absent from brewing waters, I regard it as advisable to add magnesium chloride up to 5—7 grains per gallon, and potassium chloride up to 3 grains per gallon.

The hardening of water with gypsum can be carried out in two ways, namely, by passing the water through a cylinder or other arrangement containing large pieces of gypsum, or by adding the gypsum in the form of a crystalline powder to the hot liquor back. The first method is uncertain, as it depends on the rate of flow of the water over the gypsum and the size of the lumps of that mineral. True, the quantity of gypsum passing into solution can be checked by taking the specific gravity of the treated water, but this involves extra work.

By far the best method of adding gypsum is the second one, but here some precautions are necessary. If the gypsum be added as a dry powder to the hot liquor back while the liquor is in a quiescent state, it will, to a large extent, sink to the bottom of the vessel, and remain undissolved. To avoid this, the gypsum should be mixed with water into a cream, and added to the hot liquor while the water contained therein is in a state of vigorous ebullition.

Some brewers find a difficulty in raising water to boiling in the hot liquor back, and merely raise it to the required striking heat. But actual ebullition presents several advantages besides that referred to, *e.g.*, it leads to the partial removal of calcium and magnesium carbonates when this is desired.

To remove carbonates more completely—and this is practically the only way of removing carbonates of the alkalis, *e.g.*, sodium carbonate—the addition should be made of an equivalent quantity of calcium chloride. Now this salt is an extremely hygroscopic substance, on which account it is very difficult to handle in the solid state. It is usually employed, therefore, in the form of a strong solution. In this connection I would point out that some confusion has arisen in brewing literature as regards the specific gravity of a strong solution of calcium chloride and the quantity of salt

present. Thus Sykes and the writer state that a solution of specific gravity 1380 contains 63 per cent. of the salt, and that the addition of one fluid ounce to the barrel introduces 10 grains per gallon of anhydrous calcium chloride. This statement appeared in the original edition of "Principles and Practice of Brewing," for which the late Dr. Sykes is alone responsible. He seems to have taken it from Kremer's results, who states that a solution of calcium chloride, having a specific gravity of 1380 at 19.5° C. (67° F.), contains 63 parts of calcium chloride and 100 parts of water. It is easy to calculate from this that one fluid ounce would contain 232 grains, and, consequently, one fluid ounce, when added to a barrel of water, would introduce about 6.4 grains per gallon of calcium chloride. But, according to Schiff, a solution of calcium chloride of specific gravity 1403 at 15 deg. C. contains 40 per cent. of the salt or 56 grams per 100 c.c., so that the addition of one fluid ounce of such a solution would introduce 6.8 grains per gallon of calcium chloride.

Magnesium chloride, like the corresponding calcium salt, is hygroscopic, and is, therefore, conveniently added to a water in the form of a strong solution. Here again the late Dr. Sykes went astray in his directions. He states that a saturated solution of magnesium chloride has a specific gravity of 1160, and contains 45 per cent. of the salt. Further, that the addition of one fluid ounce to the barrel introduces 7.5 grains of magnesium chloride per gallon. According to Gerlach, the strongest solution he investigated of magnesium chloride had a specific gravity, at 15 deg. C., of 1334, and contained 35 per cent. of the salt, so that one fluid ounce would contain 205 grains, and this quantity, when added to a barrel water, would introduce 5.6 grains per gallon of magnesium chloride.

Some brewers prefer to add magnesium salts to their liquor in the form of magnesium sulphate (Epsom salts), which has the advantage over the chloride of being non-hygroscopic. I prefer, however, the use of the chloride, which I believe to be advantageous in regard to flavor and fulness of the beers.

Cold Water Extract of Malt.

The determination of this value in malt analysis was suggested in the first place as a means of detecting whether or not a malt had been forced on the floors, it being assumed on a priori grounds that, when the matters soluble in water exceeded a certain limit, the excess of such matters points to too rapid germination on the floors. Subsequent research has, however, revealed the fact that even when, in carrying out his estimation, all precautions are taken, such as the use of an alkaline solution to arrest enzyme action, and the extraction of the ground malt with such a solution, at a definite temperature, the values obtained in many cases bear no relation to forcing on the floors or on the kiln. The question arises, What is meant by forcing? If the germination of malt be pushed on rapidly during the initial stages of flooring by excessive sprinkling, then by the sixth or seventh day the acrospire may have grown to the full length of the corn, and even beyond, with concomitant production of soluble matters. But it must not be forgotten that, in such circumstances, the correspondingly rapid respiration which occurs tends to reduce the quantity of these soluble matters.

The second instance of forcing embraces those cases in which late sprinkling has been practised, and the malster, following the rule which he adopts under normal conditions, heaps up the piece at the final stage of flooring before it has commenced to wither, and allows it to sweat. In these

circumstances there will be a heavy production of matters soluble in water, whereas respiration, except in the case of the top layer of the piece, will be restricted.

We see, therefore, that the percentage of matters soluble in cold water is at the best a very uncertain factor in determining forcing. The writer has for many years had this matter under strict observation. He would point out that when, in a given sample of malt, the acrospire has grown to the full length of the corn, or even overshot in a large percentage of the corns, this may certainly be taken as an indication of forcing, and it can be confirmed by an examination of transverse sections. A forced malt invariably shows a large interval between the acrospire and the adjacent endosperm. It is usually found in such cases also that the growth of the acrospire and of the rootlet have been at the expense of the contiguous endosperm contents, and that the digestive action has not permeated throughout the entire endosperm, as it should when the best possible modification is produced.

The writer could give an unlimited number of instances of malts showing 30 per cent. and upwards of fully grown and overshot corns, giving the indications above referred to of forcing, and yet containing only from 16 to 17 per cent. of matters soluble in cold water. But there is another point which must be taken into consideration in regard to the significance of the percentage of soluble matters in the malt, thus, as the malt is stored, these matters may increase by several per cent. according to the conditions of storage, so that a malt examined just after stripping may in the summer be found to contain considerable matters soluble in cold water. This, however, is only what might be expected, since malt is not to be regarded as in a statical, but in a dynamical, state, always changing according to its environment. The object of this note is to point out that, whilst many forced malts do not contain abnormally high percentages of matters soluble, under the conditions of the test, in cold water, there are others which have not yet been forced which do contain quantities of these soluble matters decidedly above the normal. It is time that the test was discontinued, as an infallible indication of forcing.

Mashing Machines.—Broadly speaking, there are in use at the present time two kinds of mashing machines, the external and the internal. Of external mashing machines, that devised by the Scottish brewer, Steele, in 1853, is probably the most popular, and we find it installed in most breweries. It is usually run at a speed of 120—180 revolutions per minute, the slower speed being for machines of the maximum diameter, whilst the more rapid speed is suitable for small machines. It is a mistake to run the machines at too high a rate.

Before the introduction of external mashing machines it was the practice to run the amount of water for mashing into the tun at the requisite striking heat, and then to deliver the malt grist to the water by means of shoots. In this case some form of internal mashing machinery, such as rakes, becomes desirable in order to prevent balling and to ensure a uniform mixture heat. But in former days there were brewers without either external or internal mashing machines, and this is still the case in some of the smaller breweries, the mixture being then made by means of oars worked by hand.

Now we know that the initial heat of the mash is a most important factor in determining the character of the wort, and there is no better way of ensuring an intimate mixture of the grist with the water, and consequently fixing the initial heat of the entire mash, than by means of an external masher of the Steele type. On the other hand, when there

is no external machinery, and the grist is simply delivered by means of a shoot into the hot water, then, inasmuch as admixture of the grist and water is not instantaneous, there is danger of some portions of the goods being heated to a higher temperature than others.

As regards internal mashing machinery such as rakes, there are brewers who prefer to work without these, contending that they need nothing further than the external machine, and some of those who hold this opinion have justified it by actual experience. It is well known, in fact, that the use of rakes may be abused, and if the goods are knocked about too much by them there is a tendency for a set mash, leading to flooding. On the other hand, in the majority of cases, if rakes are dispensed with altogether, there is a danger, when sparging is commenced, for the sparge water to drain through channels in certain portions of the tun without washing the extract from the goods. Nor can this be avoided by the most judicious application of the underlet. When this channelling occurs it will be shown by the fact that certain of the taps are running off at a lower gravity than the others.—("Journal Inst. of Brewing.")

Light and Bacteria.

BY FRED. M. MAYNARD.

Before refrigerators were invented and the process of brewing generally was carried out in a much more leisurely and haphazard manner than is the case at the present day, the cooling of the worts was effected by having them on the very shallow coolers all night, while if records are to be believed, the beers turned out perfectly satisfactory. Yet in the light of modern investigations and discoveries, it may well be asked how much of the success enjoyed in the times gone by was due to chance and how much to what really and unquestionably constituted a truly scientific procedure, totally unsuspected though it must have been by those who practised it. Now the obvious and primary, if not only, motive our forefathers had in cooling their worts by night was that the air itself being cooler should materially facilitate the operations; but scientists of to-day will say something more than mere lowness of temperature was responsible for the satisfactory quality of the beers produced under what would appear at first sight such risky conditions, for it is now generally recognized that air-borne organisms are much less in evidence during the stillness of the night than in the heat and bustle of the day, while there is little doubt that the higher the elevation at which the cooler room was situated above the ground level a corresponding diminution of infection was bound to be experienced.

A further and still more striking explanation of the value of the hours of darkness for this portion of the brewing operations is that put forward by Armstrong when dealing with his experience in India, he stoutly averring that the absence of sunlight has a marked inhibitory effect on inimical aerial organisms; if this is so, then those of the craft who have gone before us had clearly more factors for good at work on their behalf during the night than they ever imagined. This being the case, it may well be urged that under existing conditions, when brewings have to be collected within twelve hours of mashing, the hour of mashing be so put forward that the cooling of the worts shall take place after dark, or preferably that both coolers (or receivers) and refrigerators be made light-tight as well as proof against aerial infection.

But this question of light is not done with when the wort leaves the refrigerators, for Lohmann tells us that even

diffused light has a distinctly detrimental effect upon the yeast organism, seriously checking cell multiplication, and this suggests the further query as to whether the light-tight covering of a stone square has not some materially beneficial influence upon the barm and may not account for its well-known strength, purity and generous outcrops, and, therefore, whether the question of closed fermenting tuns may not be worthy of more consideration than has yet been accorded it.

Purvis and Warwick again go still further and definitely show that the actinic rays of light (blue and violet) cause great weakness and disintegration of *Saccharomyces Cerevisiæ*, whereas on the other hand in a red (*i.e.*, non-actinic) light its sporulation is perfectly normal. May this therefore not be taken also as an explanation of how it is that the small "rule-of-thumb" home brewer, who although most casual in many of his methods, but who usually carries out his fermentations in a cellar, is generally so successful? For according to the various authors named, while darkness is favorable to the development of the true yeast, it is unfavorable to that of bacteria. Wherefore, however desirable a light and airy fermenting room may at first blush appear, it is difficult, in the light of the experiences recorded, to put away the thought that cellars, as are always found in lager breweries, would not perhaps yield superior results in practice; for do not mushrooms thrive in the dark? And if so, why not their microscopical cousins, the *Saccharomyces Cerevisiæ*? In a cellar, however, aerial infection will be still further minimized by the mechanical effect of the air, while slightly damp walls, ceilings and floors will naturally tend to attract, retain and thus render innocuous many objectionable organisms which might enter. But what applies to the yeast in the fermenting vessels, where it is suspended in a non-actinic colored fluid, applies with even still greater force when it is resting in the barm-backs away from the beer, and there can be no question that exposed, as, of course, it should be, in shallow bulk, the total exclusion of daylight from our yeast stores is greatly to be advocated, while any dryness of the atmosphere, which is far more likely to be distinctly detrimental rather than advantageous, may well be obviated by an occasional spraying with atomized water.

Another point not to be lost sight of in this matter of the influence of light upon the produce of our breweries is that Continental workers, who, it must be confessed, are most scientific and thorough in all their methods, almost invariably employ a reddish amber glass for their beer bottles. That this practice is absolutely correct has been clearly demonstrated by Schulze and other investigators, who, by their experiments, firmly established the fact that this non-actinic color (reddish brown) afforded the best protection for the beer against the action of light. Brand also found that beer in green, and particularly bluish-green bottles, were strongly affected after thirty minutes' exposure to direct sunlight, which was not the case when the reddish colored glass was employed; this tends to confirm the conclusions arrived at by Purvis and Warwick, although in a somewhat different way.

And so it is, as time goes on, the supposed benefits of many modern and purely theoretical innovations are found to be quite illusory, while the absolute correctness of many old-established practical methods, which in numerous instances have been ridiculed as being quite contrary to the teachings of science, has by later research been more than vindicated after all.

A "DRY" FACT. "A State is 'constructively dry' when every man in it can get only a gallon of liquor each month." —(Philadelphia "Inquirer.")

Low Alcoholic Beers.

From a paper read at a meeting of the North of England Section of the Institute of Brewing,

by O. OVERBECK, F.C.S.

(Continued from page 235.)

The water jackets (shells), where these are used, must be filled beforehand with water, to prevent any rapid cooling by accidental draught, or to guard against an undue rapid rise. By Wednesday morning the gravity will have sunk to 1016 degrees, and the temperature should be between 60.5 F. and 61 F. At this stage we lower it gradually to 60 F. and keep it there.

In this way we can lengthen the process somewhat to fit in other rackings if necessary, but, above all, we minimize all risk of any undue multiplication of germs by limiting that rise of temperature favorable to them, let the food be what it may.

Upon the day of racking the manhole and back, or tun surface, as the case may be, is cleared absolutely of all trace of yeast-head (for by this time this has settled down to a close brown cap), the vessel covered again with its sheet, and the whole racked at a temperature of 60 F.—if working in summer, down to 57 F.

Each barrel, besides the usual cleansing, is allowed to stand all night, corked and loosely shived with the addition of a wineglassful of sulphurous acid solution of specific gravity about 1025 degrees, so that before filling the open pores of the wood may be sterilized. One-third the usual amount of finings having been added to each barrel previous to the period of racking, these are at once filled, shived tight, and rolled well, and in two hours are star bright, and ready to go out, possessing already thus considerable condition, as is abundantly exemplified by the froth of racking—due in its tenacity largely to the thin foreign malt used. For preservative we employ half the amount we used for our good old-fashioned beer of original gravity 1055 degrees. From those who have never brewed this kind of beer, we often hear doubts expressed as to its keeping powers. With us, as brewed above, at an original gravity of 1016 degrees during the months of July and August—the two hottest months of the year—we find that the barrels set aside for experimental purposes are still as good as ever, i. e., after four months' storage.

When brewed at table water gravity (1016 degrees) as above, and racked at 1008 degrees, the beer is within the temperance limit of 1 per cent. alcohol or 2 per cent. proof spirit roughly, but in time it will exceed this limit.

To be and remain a temperance drink attenuation gravity of the beer must not exceed 1010 degrees, but it is doubtful whether any sale could be effected, except during times of the year when low or moderate temperatures obtain. In any case the storage would have to be of short duration.

We must also not lose sight of the fact that that variety of acidity in beer which increases generally most rapidly is that due to the oxidation of the alcohol present into acetic acid through ferment action. Now these beers do not possess enough original alcohol to be even able to become very sour by these means alone. Again the percentage of other acidifying matters (decomposed albuminoids, etc.), is also, in a like proportion, low. The same may be said with regard to inherent liability to cloudiness. Given the best aseptic conditions of production and storage in barrel, not much need be feared on this score. The truth is the beers are too weak to be able to become seriously sick at all. Little endeavor seems to have been made towards the production of a really good strong beer, of low alcoholic content,

fully fermented and therefore possessing the completed and perfected beer character, and so as usual we must still look abroad for such a product, turning our attention especially towards the Belgians. In Belgium especially many curious drinks of a beer nature command a good sale.

"S. Thermantitonum Beer."—Thermantitonum yeast, as its name implies, ferments at a high temperature; and fermentation ceases at 60 F. A very dextrinous wort is necessary. This yeast settles densely and quickly, thus assisting clarification; the gas pressure may be preserved to a certain extent in the beer. Such beers drink, however, very thin.

Danish Beer.—The Danish yeasts which rise or sink, according if high or low, at a 1–2 per cent. of alcohol content in the beer are very valuable, since they can then be cleansed on the surface or decanted. One Danish yeast should be of great value, since it is said not to be able to produce more than 1 per cent. of alcohol under any circumstances!

Of course, we can always check fermentation by fall of temperature. This, however, must be gradual, or we may have to reckon with "yeast bite." In some cases even double filtration is resorted to, firstly rough, secondly fine.

Restriction of Diastatic Action.—Processes for the limitation of diastatic action are legion. What we have to avoid in these are set mashes, stick goods, and cloudy worts, and especially soluble starch, not to speak of any loss of extract at the present price of malt. Just as soluble diastase has been used to counteract this drawback, so have also papain and pepsin been employed to clarify beer in barrel or bottle, clouded from insoluble albuminoids. The best preparations convert 6,000 times their weight of albuminoids. This is especially of value in raw grain worts.

Pasteurisation.—Pasteurisation, or the crippling of ferments in the bottle, is generally carried out at 135–140 F., the lower the better. This is not, however, universally true. The increased pasteurisation deposits thus produced at the higher temperatures are the reason for this. If the heat be too high the flavor may also be affected or even ruined.

Later improvements mark great advances, however, on this process, the great secret being that the maximum temperature permitted should also be the highest temperature available. Beers treated by these processes appear to be, however, somewhat sensitive to light. In Denmark all bottled beer is pasteurised.

Long cold storage, of course, acts beneficially so far as clarification is concerned, but is too costly. In America these difficulties appeal to them far more strongly than they do to us. Many Danes, like the Belgians, are dram drinkers; here again, to such the stronger beers appeal most strongly. Stopped at "temperance stage" these, however, often taste "worty." To assist clarification again, agar-agar is, after having been soaked, thrown into the copper some few minutes before turning out. It, however, spoils the pitching yeast and deteriorates the sludge character for draining-off purposes.

Beers of original gravity 1020 degrees, arrested at 1010 degrees, primed, chilled, filtered and pastuerised, "sound" all right. They, however, lack all character.

A beer of original gravity 1016 degrees fermented with special yeast, bottled and matured slowly, gives an aromatic good beer, but unfortunately also much sediment. It can easily be made to remain at 1007 degrees and be a real temperance beer. If brewed at 1014 degrees the 2 degrees can be made up by priming. If this is added to the "up" beer, it has been proposed to cool it and saturate it with carbon

dioxide first to prevent subsequent flatness due to absorption of the gas.

A composite process employs two tuns and two pressure vessels. In one is a hopped wort of specific gravity 1016 degrees, in the other a hopped pure cane-sugar solution of specific gravity 1040 degrees. This latter, after having been skimmed above 1031 degrees, is run into one pressure vessel (filled), where it develops an aroma during its secondary fermentation. It is blended finally, chilled, filtered and bottled.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

March 15th—April 14th, 1917.

The samples received during this month were classified as follows:

Malt	208
Malt Adjunct	41
Colorants	9
Hops	24
Grains	6
Water	12
Wort	56
Yeasts	219
Beers and Ales.....	278
Temperance Beverage	22
Fuels	19
Miscellaneous	48
Total	942

Malts.

Of the Malts examined, 164 were Western malts, 41 California malts, and 3 Caramel malts.

The Western malts showed an average moisture of 4.20 per cent. with an extract of 69 per cent., which, calculated to dry basis, corresponds to 72.0 per cent.

The California malts, while considerably higher in yield than the Western malts, showed a somewhat lower extract than the samples received during the last month. The average figures found were: Moisture, 4.10 per cent.; extract, 70.87 per cent., and Extract, calculated on dry basis, 73.9 per cent.

The three samples of Caramel Malt were all satisfactory; one was made from California barley.

Malt Adjuncts.

The 41 samples under this heading were classified as follows:

Corn Grits	17
Corn Meal	8
Refined Grits	5
Rice	1
Brewing sugars	10

With the exception of excessive moisture in five samples, the unmalted cereals were all of satisfactory brewing value. One sample of unhulled Rice was submitted, but its analysis showed it to be unavailable for brewing purposes.

Colorants.

A sample of various malt and sugar Colors were received.

After very exacting tests in various media and at various temperatures, these were all found to be satisfactory for their respective purposes.

Hops.

The samples received during this period were all Pacific Hops of 1916 crop. Eight of the samples contained an excessive amount of mouldy cones; while the remaining 16 samples were of satisfactory quality and good brewing value.

Grains.

Five (5) samples of mash tun residue were analyzed, and all showed by their composition that the mashing and sparging operations had been carried out in a competent manner.

Waters.

All samples of Water were as usually subjected to a biological test, determining their destructive power on wort, beer and ale respectively; 2 samples were also analyzed as to the nature and quantity of their mineral composition.

Worts.

Forty-seven (47) samples of Lager Beer Wort and 9 samples of Ale-Wort were analyzed. Their chemical composition was found to be normal and satisfactory; 2 samples were examined as to their biological purity. In both cases this was found to be satisfactory, indicating proper hygienic conditions during cooling operations.

Yeasts.

Eighty-one (81) samples of Ale Yeast were examined; 6 of these contained an excessive amount of lactic acid ferments and were considered unsuited for further use. The other 75 samples were entirely satisfactory. Of the 138 samples of Lager Yeast, 4 were from the Pure Yeast Department; these samples were all entirely free from infection and of general excellent character. Twenty-one (21) samples were infected above the safety limit, mainly by *Sarcina* and *Saccharobacillus Pastorianus*, while 113 samples were in a satisfactory condition for pitching purposes.

Beers and Ales.

118 samples of Ales were examined in the biological as well as chemical laboratories. The average chemical composition of 42 samples was as follows:

Original gravity	13.2 deg. Balling
Alcohol by weight.....	4.28 per cent.

160 samples of Lager Beer were examined; a complete chemical analysis was made of 64 samples showing the following average composition:

Original gravity	12.1 deg. Balling.
Alcohol by weight.....	3.48 per cent.

Temperance Beverages.

22 samples of various low-alcoholic Beverages were analyzed, showing the average composition as follows:

Original gravity	5.9 deg. Balling.
Alcohol by weight.....	0.37 per cent.
Alcohol by volume.....	0.46 per cent.

Fuels.

Of the 19 samples of Coal analyzed in the fuel laboratory, 8 were found to contain excessive amounts of ash, the highest being 23 per cent.; 11 samples were pronounced as satisfactory fuels.

Miscellaneous.

The 48 samples classified under this heading comprise mainly Filtermass materials, Cleansers, Pitch, Soaking Solutions, Lubricants, and Gasolene.

INIQUITOUS PROPOSITION. "Prohibition is an iniquitous proposition that violates the fundamental principles of human freedom, and fails to accomplish the curing of the drink evil."—(Samuel Gompers, President of the American Federation of Labor.)

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

R. S. There is no fixed rule known to us that you can apply to the preparation of your raw cereal mash. You must be guided entirely by your own intelligent initiative and the nature of the plant with which you have to operate. It has been our experience in almost every case which we have been called upon to investigate, that every practical brewer has ideas of his own on this subject. Speaking broadly, the most intelligent way is to use 25 per cent. to 40 per cent. of malt in the raw grain cooker mash; to start at a temperature of approximately 35 deg. R., raise the mash without any stop to the boiling point and boil vigorously for about 45 minutes, with the exception of the so-called Refined Grits, which requires only 5 to 10 minutes' boiling. There are some cases and some materials which require a longer period than this for their complete gelatinization and liquefaction, but these are not included in our generalization. A very important point, however, which is frequently overlooked, is the consistency of the raw cereal mash which ought to range from 2.5 to 3 by weight of water to 1 of grist.

J. B. S. The only remedy we can suggest at this time of the year is that you endeavor to provide sufficient ventilation in your fermenting cellars. The foul odor which you describe as coming from the sewers will undoubtedly have an injurious effect upon your beers. You must, therefore, keep your fermenting room as cold as possible; pay as much attention to the sewers as is compatible with their defective construction; pitch your beers at 6.5 R. and work the fermentations through as quickly as you can. As soon as the desired attenuation has been reached, cool the beers down in the tub to about 2.5 R. and then run them, through an outside intermediate cooler, into the storage or chip casks at 0 R. The best and most sensible procedure for you to follow would be to employ a competent architect and civil engineer and let him devise some better and more practical arrangement of your sewerage system.

H. A. T. We have always objected to the use of large quantities of yeast in ale wort because the crop of yeast for further pitching purposes is skimmed off the top and ought to consist mainly of young, uniform cells which should not be suffering from mal-nutrition and ought to enjoy plenty of space for proper development. It is a fact which seems to have escaped general observation, that when only a moderate, but properly calculated amount of yeast is used for pitching the ale wort, it is in much better condition to suppress contaminating organisms, because its power of resistance has not been weakened by overcrowding and it has not been exposed to detrimental influences by the poisonous excreta from metabolism.

F. B. We do not care to express an opinion on the relative merits of the two barley cleaners. Both of them are in active operation in many of our most important malthouses, and it would be better for you to write to two or three prominent maltsters and get them to give you the benefit of their experience.

N. W. There are a great many reasons for the position we have always taken concerning the amount of non-nitro-

genous adjunct that may be used with malt in the production of bottling beer. One of the most important reasons is that the greater the amount of adjunct, the smaller will be the amount of residual nitrogenous bodies in the finished product. Next in importance comes the fact that the greater the amount of adjunct, the smaller will be the amount of phosphates in solution and the yeast will gradually become less vigorous and less able to furnish sufficient attenuation. We admit that different types of yeast may differ in their behaviour under all these conditions, but it is a wise plan to accept the results of practical experience.

F. R. The chemical composition and the biological condition of your beers appear to be entirely satisfactory. The main defects, however, are their odor, lack of foam-keeping qualities, and a slightly disagreeable "cooked" taste. We believe that these defects arise in the bottling shop and that your brewmaster should not be held responsible. The beer is being bottled too warm; the bottles are not being properly filled, and the actual pasteurizing temperature to which they are subjected is much too high. You have a well known brewing expert within a short distance of your plant, and we advise you to call him in for consultation on this subject.

F. C. W. Your yeast is in a most unsatisfactory condition. It is grossly contaminated by wild species and by an unusually large proportion of *Sarcina* and Long Rods. You should discontinue the use of this yeast immediately and obtain a new supply of pure culture yeast from a reliable source in sufficient quantities to pitch an entire brew. May we not suggest that you have your yeast examined regularly at least once a week, and also the beers at the end of fermentation by a brewers' laboratory in your vicinity?

S. N. We have absolutely no knowledge of the composition and the method of production of the material which you mention, but if you will send us a sample together with the directions how it is to be used, we shall make a thorough examination of it and charge you a reasonable fee for the analytical and experimental work. We have frequently tried to impress upon brewers the inadvisability of using in their brewings any material or compound, the composition and nature of which is not known to them.

G. W. R. We are rather surprised about your question concerning the use of Ozone as a disinfectant. Ozone has been employed for disinfecting purposes for quite a number of years, and especially for purifying drinking water. Manufacturers of apparatus for ozonizing have also been successful in introducing them into breweries. Tests made with apparatus of this kind in our laboratories show that ozonized air of a certain concentration acts upon the organisms contained in water; pure culture yeasts and several wild yeast species are also attacked by ozone, the former much less vigorously than the latter. Acetic acid bacteria and *Sarcina* seem to be particularly sensitive to ozone, the *Sarcina* being destroyed by a concentration of less than 0.3 gm. of ozone per 100 c.c. After an exposure of 1 hour, a concentration of 0.6 to 0.7 gms. of ozone in 100 c.c. was sufficient to destroy the organisms detrimental to beer.

F. K. The main facts to be borne in mind in connection with Boiler Compounds of all varieties is that they should cause certain reactions in the boiler and precipitate the salts of lime and magnesia, so that they can be easily gotten rid of by "blowing off." It may be stated as a general rule that whenever the hardness of a boiler feed water is over 10 degrees, a boiler compound is required, but the most important part to be remembered is to blow off the boiler at frequent intervals so that the precipitated salts may not pack nor accumulate on the inside.

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AND

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c. o. Citizens' Brewery, 2762 Archer Ave., Chicago
CARL A. NOWAK.....Recording and Corresponding Secretary.
2027 Railway Exchange, St. Louis.

The Trade's Aid to the Government.

Like all patriotic Americans, the brewers in the United States are loyal citizens and determined to do whatever lays in their power, economically, intellectually and, if need be, physically, to aid and assist their government in the present dread emergency of war. The brewers of all European countries have done so during the last nearly three years, and they are still sacrificing their property and, many of them, their lives. Thousands of brewers, brewers' sons, brewmasters, officers and employes of breweries have been slain in battle, and millions of dollars have been spent in financially aiding the powers to which they, through their geographical situation, or free choice, owe allegiance. Thousands of brewery motor trucks are serving, in the respective armies, for the transportation of troops, supplies and wounded soldiers. Hundreds of breweries have been converted into factories for the production of ammunition and other necessities of war.

All this can and will be done, if required, by the brewers in this country. Most of them have already offered their services to the various departments of the United States Government, declaring that they are ready to serve their country whenever the call comes to them. Hundreds of brewers' sons and brewery employes have been drilling and preparing themselves for the arduous duty that awaits the citizens of this great and powerful nation, the entrance of which into the world's war, it is fervently hoped, will assure to hasten the end of the dreadful conflict.

No one who actively takes part in the great tragedy asks for, nor expects, an individual reward. We all do our duty, no matter what may happen to any of us. But there is one thing that the members of the trade shall demand of the governments of our States and the nation is, that they must not be deprived of the resources from which they obtain the means of assisting their country. To do that would be treason! And, as the law sternly says: "The punishment for treason is death."

To now pass Prohibition laws by which breweries are destroyed, the lives of owners and their many thousands of workmen are placed in jeopardy, would mean to deprive the government of powerful economic and physical agents. The army and the navy would be crippled by legislation which results in taking from the nation a trade which produces enormous wealth and from which hundreds of millions of dollars have been flowing into the country's treasury every year for more than half a century.

This demand is not made in a sense of selfishness. It is made for the welfare of the entire nation, which cannot spare one single soldier from its fighting hosts, nor a single dollar necessary with which to purchase guns, cartridges, uniforms, bread, meat, beer, tobacco, ships, coal, kerosene and all the multifarious things that are required to render the terrible work of an army and navy victoriously successful.

The fools, fanatics and political swashbucklers of the Prohibition outfit who would persist in carrying out their destructive aims under present circumstances must be branded as enemies of this nation, and it is the duty of the National and State governments to treat them as such.

Nuff said!

No RIGHT TO FORBID. The State has as much right to forbid cigarettes as it had to forbid liquor. It also has as much right to forbid coffee, tea, soda, pop, hard-boiled eggs, strawberries or oysters whenever the legislature decides that these things are deleterious to the health of individuals.—(St. Louis "Post-Democrat.")

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Not Yet!

Among the few hysterical calamity howlers who assert that by closing all breweries and distilleries during the war we might save the grain used in producing alcoholic beverages, so that it might be eaten by human beings, as well as by animals providing them with meat, is Mr. Henry J. Waters, president of the Kansas State Agricultural College, who has declared that in brewing and distilling 618,508,095 bushels of grain are used per year. The statement, of course, is false, as only about 85,000,000 bushels of grain is the correct amount.

But there are others who would close breweries and distilleries: The Prohibitionists. They also now give reasons similar to those advanced by the Kansas College president who, no doubt, is a Prohibitionist himself. That the Prohibitionists are insincere in their sudden alleged solicitude for the welfare of the nation need hardly be pointed out. They only drag their new "argument" into the discussion because they hope it will be more telling for the consummation of their antiquated and absurd scheme of "making the nation dry."

We are not yet starving here in the United States. Nor will we be for some time to come. The government and, under its advice and the direction, the farmers and all others engaged in providing the people of this country with all they need to sustain life and health, are doing all that is possible to raise immense crops, and these will be large enough not only to feed everybody on American soil, but also to send a large surplus to the countries now fighting with us the common foe.

Malt liquor and a certain amount of spirits are as necessary in carrying on a war as are guns, powder, ships and all other things required for warfare. Aside from this, the government needs the money that brewers and distillers can pay in the form of taxes.

"Let us try to be sane," says one of our contemporaries, advancing the same arguments we have here submitted, adding: "There are two great dangers looming up in the immediate situation. One is the band of calamity howlers; the other is the herd of triflers who are getting their names into print with teaspoon suggestions for keeping up high water mark in the ocean. Let us be sane, like France. Let us have more enlistment, quicker approach to actual participation in the war and less blind thrashing around with bombastic words. Let us keep cool and keep our heads clear."

And another friend of the trade, the Cincinnati "Times-Star," denouncing the Prohibitionists for trying to close breweries and distilleries under their new false and insidious pretense, says:

"We have no great idea of the patriotism of the man who tries to take advantage of present-day conditions to advance the interests of class or a propaganda. We have entered upon what should be the people's war. All Americans, rich and poor, 'wet' and 'dry,' have a highly personal interest in victory. Americans have one great duty at the present time. That is to do everything within their power

to assist their country in the great struggle upon which it has entered. The man who under present conditions can not think in terms of the whole people, but must keep driving at some selfish personal or class interest, is hanging very close to the edge of treason."

If ever we should be reduced to starvation by war or the utter failure of crops, it will be time enough to close breweries and distilleries. To that extremity we have not yet been driven and we probably never will.

Discussing the situation, Julius Liebmman, president of the S. Liebmman's Sons Brewing Co., Brooklyn, N. Y., and former president of the United States Brewers' Association, has said:

"The attempt on the part of Prohibitionists to take advantage of the present situation concerning the food question would not be resented by the brewers if their statements were true. They assert that more than 600,000,000 bushels of cereals are used in brewing and distilling. As a matter of fact, brewers use annually 48,000,000 bushels of brewing barley and 19,000,000 bushels of corn and rice, and these figures can be verified by United States revenue officials, to whom brewers make monthly reports.

"Of these cereals, little barley is used for food purposes except a small amount that is utilized in making soups. Besides, more than 30 per cent. of what the brewers do use is returned to the farm for cattle feed, and the milk producers consider it one of their best foods. Then the claim that the cereal used in brewing is wasted is not based on fact, for 60 per cent. of the food value is transferred to the beer drinker.

"Not a single European country, even after two and a half years of war, has absolutely stopped brewing. On February 24th of this year, in asking for a curtailment of brewing in Great Britain, there appeared a statement in our daily papers by Lloyd George. He said:

"I say at once that we are not approaching this from the viewpoint of temperance or increased sobriety, but purely as a method of competing with the submarine methods. * * * We must guard against the danger in doing this of driving the population from beer to spirits. That would be a serious disaster."

"The British Government in taking over the control of the shipping, to make the most effective use of the ships has published a list of more than 100 articles which may not be imported into Great Britain, but brewing is considered one of the necessary occupations in Great Britain. Only yesterday a large shipment of brewing barley went to Great Britain from New York. Germany in order to maintain the efficiency of its troops has requisitioned 20 per cent. of the total output of its breweries for the soldiers in the field. Russia, which has prohibited the sale of whiskey, has not prohibited the brewing of beer.

"We have no reports from Belgium during the year 1916, but even after the beginning of the war and during the whole of 1915, beer continued to be brewed in Belgium and the local Belgian commission, which has charge over the

indigenous grain, allotted a certain quota to the brewers for brewing.

"The United States Government has informed the brewers that they are going to increase the internal revenue tax, which at present amounts to about \$338,000,000. Under the new schedule they expect to collect about \$500,000,000, which is equivalent to an interest payment on \$14,000,000,000 in bonds."

Call a Halt to the Traitors!

The spirit of the Prohibition laws which have of late been imposed upon millions of American citizens is inherited from the Puritans who fled to our hospitable shores centuries ago. That Cromwellian policy still dominates our parson-led rural populations and it has been sweeping onward until present conditions have precipitated us into the world war. It has partly engulfed the West, and unless the East wakes up we too might be submerged. The responsibility for the situation rests upon the public, and the politico-preachers who are the driving force of this diabolical system, knowing the disinterestedness of the public, are intrenching themselves behind breastworks that will not easily be demolished when the people shall have awakened to the dangerousness and power of these false reformers. But they shall no longer tyrannize us. The war will stop them. They are engaged in a cabal of treason which, unless inhibited, would result in crippling the resources from which alone can flow the power of the government enabling it to carry the war to a victorious conclusion.

The day of the American saloon, as it has been conducted all these years, may be gone. But the day of Americans drinking good beer and light wines hasn't gone by a long shot. And it won't go by very soon either.

Paraguay tea is said to be more intoxicating than rum of 80 per cent. And its leaves can be grown in any window exposed to the rays of the sun. The plant is known as the *ilex* and it is rapidly becoming popular in all "dry" fool places. The effects of Paraguay tea are ten times worse than those of imbibing the exhalations of "Demon Rum." But what of that? As soon as the Demon has been driven out, a political party for suppressing the *ilex* plant will be formed—in the mind of the Prohibs.

Prohibition politics is partly pure cussedness, while all of it involves immoral purposes, harmful to the economy of the nation not only but also of the character of the people, because it inoculates into their minds the poison of fanaticism, which is a species of insanity; it makes for universal hypocrisy and deadens the sense of justice inasmuch as it condones the destruction of economic values and gloats over the misery of its victims whose property, occupation and liberty it destroys without rendering compensation.

There are things that must not be done while a nation is fighting for its life and for the liberty of its citizens. One of these things is to insist upon political fads and fancies. To permit that the harmful agitation for Prohibition be continued at present, would be suicidal for the American people. Let the Prohibitionists, at least those of them that are not physically unfit, enlist and carry a gun, while the others put the money they collect from their dupes in the churches, at the disposal of the government's war fund!

Alcohol in Wars.

George Washington, who was not only a great general, but also a distiller, and his soldiers of the Revolutionary army, drank alcoholic beverages while at the front and in camp. So did Ulysses S. Grant and his volunteers and regulars. And so will the minute men of 1917. It is not true that the army that uses least alcohol will win in war. If it were, the European governments would not give the men in their armies one drop of alcohol to drink. No war can be won without alcohol. All great generals of all times knew this, Alexander of Macedonia, Julius Caesar, Hannibal, Charlemagne, Quintilius Varus, Arminius, Napoleon Bonaparte, Nelson, Farragut, the Spanish conquerors and all the Dutch Admirals of old and new—they all were drinkers of wine, rum, gin, beer and cordials and so were the men whom they led to victory on land and the sea. Take alcohol from an army and you will have a body of disgruntled and insubordinate men with whom you cannot win your battles.

The fact that the manufacture and sale of alcohol has been forbidden in Russia, restricted in Germany and England, has nothing at all to do with the efficiency of the army. Those were temporary war measures, made necessary by economic reasons, to regulate the distribution of food among the civic population, and after the war is over, that sort of prohibition will be a thing of the past in Europe. There nations cannot be led by their noses by economically crippled parsons and cowardly politicians. Nor will Americans tolerate their mischievous doings as long as they are at war.

The officers and sailors of the German steamships, now interned on Ellis Island, New York, are receiving daily rations of beer, paid for by the United States Government. Prohibitionists will please raise a mighty howl against the awful "outrage!"

When American soldiers arrive at the front in Europe they will find that their comrades in arms, as well as their enemies, are regularly provided with light wines and beer as part of their daily ration, and the Americans will get good drinks likewise. Where is the scoundrel who would deprive them of these?

Reports were submitted showing that of 16,861 Methodist pastors more than 2,500 receive less than \$300 a year salary, and that 10,116 get \$1,000 or less.—*News Item.*

Just so. Not only Methodist pastors, but the pastors of all other Protestant denominations are earning less per year than the average American mechanic, and that explains why those "gentlemen of the cloth" are hoping that by destroying the industries producing alcoholic beverages they may turn the dollars and cents now being spent by the masses for "drink" into their own pockets. But will the destructionists succeed?

Whenever Anti-Saloonists and Prohibitionists are yelling for "home rule," meaning that people should be permitted to destroy the alcoholic beverage industry by so-called Local Option, they demonstrate their brazen hypocrisy and duplicity; as it is their practice, wherever they can, to deprive communities opposed to Prohibition of their right to avail themselves of home rule, state and national legislation being resorted to for the purpose of overwhelming the popular vote by the vote of single individuals called "legislators," who are intimidated and threatened with a political boycott unless they do the bidding of agitators, fanatics and schemers.

Throwing off Their Mask in Maine.

The politicians of Maine have once more shown what they think of Prohibition and why they keep it up in their poor little State.

The lower house of their legislature, by a vote of 100 to 31, has killed a "bone-dry" Prohibition bill.

They do not want Prohibition that prohibits—that really prevents people from obtaining drinks the intemperate use of which injure the drinker's body and soul. They want Prohibition only in name—as a slogan by which to win, in other words to manipulate popular elections to keep themselves in office and their fists deep in the public purse. There are so many fools and old fogies in the rural districts of Maine who have been taught, during more than sixty years, to believe in Prohibition as they believe in Christ's gospel, that, to take it out of their political catechism, would bring about chaos and confusion most confounded in the entire political system of their State. And, therefore, the Prohibition bait is carefully preserved by the anglers for rural votes.

But the voters in the cities must be pacified also and, for that reason, Prohibition is prevented from prohibiting. The "blind tiger" is coddled and liberally fed; the sacred institution of the kitchen speakeasy must not be disturbed. If Prohibition were made to prohibit in the cities of Maine, the politicians would be given short shrift and they would have to work for a living. So, hypocrisy and shameless political prostitution remain triumphant in Maine, as a fine example to be emulated by the politicians of other states who would prevent economic disaster to overtake them unless they played their game of Prohibition shuttlecock for the "rubes" and provisioning with bad booze battledore the "city guys."

"Billy" Sunday's Easter Performance in New York.

On Easter Sunday, April 8th, when opening his big circus and money-making ring in New York, the unspeakable ruffian "Billy" Sunday had this to say about the "damnable, hellish, vile, corrupt, iniquitous liquor business." With one foot on a chair and the other on the pulpit, he shouted: "My life has been threatened from one end of the city to the other. This God-forsaken whisky gang is the worst this side of hell. They offered money to the editor of one of the biggest papers in New York to print their dirty lies about me, and he told them to go to hell. He's a church member, too. They want to get every preacher and priest to knock me; so if a man knocks me, you know who his master is. They've raised, I understand, \$500,000 to get me. I say to them, 'Come on, you God-forsaken, weasel-eyed, white-livered, black-hearted gang of thugs. Come on! I defy you. I've put them out of two hundred million dollars' worth of business. I ask no quarter from the dirty bunch and I give them none.'"

Why does the fellow not give the name of the paper and its alleged would-be purchaser, and the names of the men who would raise \$500,000 to "get" him? If there were any such papers, or people, "Billy" would surely make the most of them, in perfect accordance with his bawling, blustering, brutish methods. But he cannot. The story originated in his bestial brain and it is only calculated to impress such of the weak-minded persons whom he expects to "hit the sawdust trail" and, what is more important to him, to contribute dollars and cents to his personal bank account, which to swell, he cleverly announces that all he takes in this time he will give to the American Red Cross and the Y. M. C. A., a sly hint to unsophisticated patriots and scheming multi-millionaires, backing him for the sake of

averting from them the ever growing wrath and unrest of the laboring masses, to reimburse him for his feigned patriotic liberality when the New York circus folds its tents and "Billy" slinks away to some other fertile "field."

However, the first day of his New York performances was not very prolific for this peculiar mental contortionist, as it yielded but the meagre sum of \$1,902.22, although at least 20,000 people attended the boisterous show, a fact which probably demonstrates that New Yorkers are more curious to see something out of the ordinary than willing to throw away their hard-earned money for anything altogether valueless to them. After nine days, the amount "offered" by the average visitor to "Billy's" circus was a little over 2½ cents.

That no intelligent and educated man, woman or child, believing in the beautiful teachings of the mild-mannered carpenter of Nazareth could be "converted" into a howling "Billy" Sunday trail hitter, of course, goes without saying, and that every one believing in the progress of humanity and civilization must abhor this brutal rowdy, should appear from the fact that, wriggling his body like a maniac, he yelled, "I do not believe in the universal Fatherhood of God, or the universal brotherhood of man either!"

This is how the New York "Hotel Review" thinks the Prohibitionists may be successfully fought in the United States: "Let the distillers select one big man, the brewers one big man and the wine growers one big man. Form a board of three. Give them full authority. Let them be men outside the industry. Submit to them every question which arises and every difference between interests. Let their decision be final. Don't spend a nickel in the anti-prohibition movement, for advertising or for anything else, except through that Board. Then support that Board by an agreed percentage, however infinitesimal, of your gross business in the traffic of alcoholic beverages, and with that nucleus you will start an organization which would quickly spread into kindred lines and bring us all into one great, powerful body which will, I predict, once and for all turn the ebb tide into a flow and rescue this wonderful country of ours from the clutches of misguided agitation and wild fanaticism."

The Anti-Saloon League's agitators who fear that they may be deprived of their jobs are furiously fighting against "bone-dry" Prohibition in all States where it has been introduced or is about to be introduced. They want to drive out the saloon, because that is a popular proposition, but then they hypocritically wink their eye to the "blind pig" which they have invited by eliminating the saloon. Was there ever a more contemptible and barefaced fraud than that which calls itself the Anti-Saloon League?

No nation ever owed anything to any man who tried to deprive its citizens of things that they enjoyed to eat or drink, and the most horrid example among the would-be Prohibitionists was Mohammed, the Prophet of Allah, the idol of the Turks, the fellow whose teachings have led them to moral, political and economic destruction.

William J. Bryan and "Same Old Bill" Sulzer have offered their services to the President, the former as a private in the ranks and the latter as general of a division. Their offer should be accepted by all means. They may then shoot off guns for liberty, instead of their mouths, as they have been doing for some time for the enslavement of their countrymen under the despicable yoke of Prohibition.

Offering a Gold Brick to Cost \$10,000.

Charlie Stelzle, the discredited metal worker and now self-styled fake "reverend"; John B. Lennon, the ex-tailor, Prohibitionist and treasurer of the American Federation of Labor, and a few parsons and alleged "reformers," after having formed what they call a "Federal Council of the Churches of Christ in America," recently inaugurated an alleged "Campaign for the Conservation of Life," in pursuance of which Stelzle sent out a circular to employers, in which he asserted that the bartenders' and brewery workers' unions are trying to dominate every Central Labor Union in America for the purpose of fighting Prohibition, wherefore employers, to protect themselves and their employes from the "terrible liquor evil," should at once contribute \$10,000 to assist the "Federal Council of Churches" in its laudable humanitarian work.

That the bartenders' and brewery workers' unions should be trying to "dominate" all other workmen's organizations in this country is, of course, a fiction originating in the fertile, although stupid brain of the Stelzles, Lennons and the parsons and "reformers" who are making a scanty living by their "working" for Prohibition and that they are a little "hard-up" for funds just now sufficiently excuses their appealing to unsophisticated employers for that little plum of \$10,000.

However, we wonder how many intelligent employers will be found among those who are disposed to purchase Charlie Stelzle's gold brick?

Some of our daily contemporaries are exhorting the Prohibitionists to be led by common sense. Don't they know that such a request involves an impossibility?

Some of the alleged "arguments" of the Prohibitionists are deliberate and preposterous insults to all who can think logically and who are not totally ignorant, and some of the agitators go even so far that it seems as if the sole purpose of their doings were to making themselves at once ridiculous and detestable.

England, France, Switzerland, give compensation to the liquor trade wherever within their jurisdiction it is injured by temporary or permanent, prohibition. Is the United States to be less just, less considerate?

The lobbyists of the Anti-Saloon League in Washington, D. C., are "working" desperately against "bone-dry" legislation because they know that as soon as the whole country goes "dry," their occupation goes and with it their fat salaries. No paid agitator wants to have the limb of the tree sawed off upon which he so safely perches.

Arthur Brisbane recently said that when people are unable to obtain alcohol they commence to think and, for that reason he believed that the Russians, having commenced to think after the Czar took vodka away from them, they arrived at the conclusion that it was necessary to kick the autocrat from his throne. If Arthur can persuade the Rockefellers, Carnegies and other philanthropists of that type, that Prohibition makes rebels of the working masses, they will probably stop handing out bagfuls of coin to "Billy" Sunday, the unspeakable Anderson, and all the rest of the anti-saloon howlers and agitating parsons, of whom they hope that they will be able to prevent the masses from attaining the full measure of liberty and justice, which will be withheld from them as long as the Rockefeller system prevails upon American soil.

Enlisted Industry.

The day has come when our loyalty and patriotism will no longer be judged by high-sounding phrases and oratorical utterances; action, concerted, vigorous action, is now the standard of measurement of Americanism. Industry has made America, and industry must save it.

As Americans we can no longer argue why's and wherefore's or use such terms as pacifist, pro-German, anti-British or any other combination of words to describe treason and cowardice.

We must act, and act with all the vigor and determination that marked the birth of this Republic and built industrial America. We must confirm our patriotic words and promises by production of materials and munitions to protect the nation with all the speed we can attain, with all our money, organizations and individuals; we must support our elected and appointed authorities with military accuracy and unity of purpose.

Truly this is a war of the workshops and resources, where generalship, endurance and heroism are not confined to the scenes of the bloody conflict and the battle-scarred fields of "no man's land" but are shared equally by the "silent men who do things" that need to be done, at home, because they need to be done. And the success or failure of our enterprise depends on the team-work of the men on the front line and the men in the rear who keep constant streams of necessities flowing in the channels of greatest usefulness.

As we have been greatest of neutral nations and the greatest lovers of peace, it behooves us, if we must, to wage the greatest war for the permanent peace of the world, with no selfish ends to serve, with no desire for conquest of territory and no claim for material compensation for the sacrifices we shall freely make.

Let the captains of industry write heroism in our history in this great conflict, and let industry serve America as she has never been served before.—("American Industries.")

MENACE TO LIBERTY. "Prohibition is a menace to the civil and religious liberty of the American people. It is an un-American, intemperate, non-Scriptural and un-Christian. If this statement can be proven, then every honest-minded voter should rally around the polls at the coming election in November, and by an avalanche of ballots so overwhelmingly defeat this wolf in sheep's clothing as to effectually silence the bleating of this lamb and the growl of this wolf for many years to come."—(Rev. Baker P. Lee, Los Angeles, Cal.)

ABSURD ADVICE. "The results of prohibition are largely analogous to those which attend the visitation of a plague of locusts or of a ruthless army of invasion. Ruin and destruction follow in its wake. Its slogan should be: 'If we can destroy, it matters not who builds.' 'If thine eye offend thee, pluck it out!' admonished our Lord. He did not counsel the cutting off of the entire head. Obviously, such advice had been absurdly illogical; but it would have been no more absurd, no more illogical than the stand of the prohibitionist advocate, who, because abuses have been permitted to creep into the liquor business, refuses to be content with anything less than its complete destruction. Following out this line of argument to its inevitable conclusion, all business should be done away with, because business abuses are not unknown; our entire political system should be eliminated from the scheme of government, in that politics are not guiltless of corruption; and, finally, the government itself, which is not flawless, must give way to anarchy."—(Chicago "Interurban Magazine.")

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

Washington, D. C. One of the topics of chief importance in the discussion of war revenues is as to how much additional tax can be crowded on the liquor traffic, one proposition (Rainey, of Illinois) claiming that fully \$200,000,000 additional can be raised by increasing taxes on beer and whiskey. While it is hardly likely that such extreme measures will be adopted, it is altogether probable that beer, whiskey and wines will be included in the taxable "luxuries," according to the bill now drawn up and in the hands of the House ways and means committee.

Many propositions affecting, more or less seriously, the liquor traffic are under consideration by both Senate and House, among which are these: By Congressman Little (Kansas)—Bill prohibiting the sale of intoxicating liquors within twenty miles of any camp, barracks, fort, post, navy yard, school or station of the army, navy or marine corps of the United States. By Senator Gore (Oklahoma)—To place a prohibitive tax on all food cereals and grains used for the manufacture of whiskey and beer. By Congressman Randall (California)—To authorize the government to take over all breweries and distilleries for the purpose of munition-making and to regulate the operation of saloons or to close them altogether during the period of the war. By Senator Sheppard (Texas)—National prohibition amendment as a "war emergency measure." Other bills, it is understood, are in process of preparation.

The initial step in a movement to gain a postponement of the operation of the new District of Columbia prohibition law until August 1st, 1918, has been taken in the House by Representative Cary, of Wisconsin, a member of the committee on the District of Columbia. Mr. Cary has offered a resolution which provides for the proposed delay of nine months, and also for a continuation of the life of the excise board during that time. The law as now written will become effective on November 1st next. Leaders in Congress are now hopeful of favorable action on the resolution, notwithstanding it has been suggested that great hardship and loss would result to property holders here who invested in the liquor business as a legitimate enterprise, which it is. The tendency in Congress, it was said, is to restrictive measures with respect to liquor, and the fact that the country is now engaged in war may have the effect of oppressing the liquor business still further.

A group of representative liquor dealers, brewers and distillers appeared before the Senate committee on agriculture on April 7th and demonstrated that the consumption of grain by their industry would not seriously affect the supply for food purposes. Joseph Beber, president of the National Distillers and Wholesale Liquor Dealers' Association, volunteered, if need be, to cut down the amount of grain to be used during the coming year by 15,000,000 bushels by restricting the manufacture of liquor. It was asserted, but it is not so, that the brewers and distillers of the country require approximately 640,000,000 bushels of grain annually in their business. Most of that used by the distillers is dead loss, but the brewers conserve all but five per cent. of their grain by employing it in making meal and

other food mixtures after the brewing process is completed. The plan of the liquor producers, by which the amount of liquor would be voluntarily reduced, provides for a high tax on the materials that go into its manufacture. This would cut down the amount of whiskey distilled and force out a great deal of that now in bonded warehouses. In addition to saving 15,000,000 bushels of grain, the committee intimated, a heavy tax on materials going into the manufacture would divert between forty and fifty million gallons of molasses annually into food channels.

The administration is known to be planning tremendous increases in taxes on distilled spirits and beers. A prominent Senator, close to the administration, said that as much as \$500,000,000 of the war revenues will be raised in this way at once, and later there will probably be still further increases. According to present plans, Secretary McAdoo will recommend that taxes on liquors be increased from \$1.10 to \$2 a gallon, while the tax on beer is to go up from \$1.50 to \$2.50 a barrel as a starter.

Representative Dyer, Missouri, has introduced in the House a bill for the appointment by the President of a commission to determine and fix valuation of property made valueless by Prohibition. The bill also provides that compensation be fixed on the valuation of the class of property to be valued and that persons or corporations whose business has been damaged or destroyed by legislation of the Federal Government be paid for their loss; that all malt, distilled, or vinous liquors now on hand in the possession of manufacturers or wholesale or retail dealers, or producers of same, or in storage in private, public or United States bonded warehouses, may be sold pending the result of the investigation by the commission. Furthermore, provision is made for the compensation of employes to the extent of one year's wages or salary; a fund of at least \$100,000,000 to be collected annually from the liquor industries to compensate for the property destroyed by prohibition. Goodwill is to be considered under the provisions of the bill in fixing compensation, and the property confiscated is to revert to the United States.

On Thursday, April 19th, Congressman Howard, of Georgia, introduced a resolution for nation-wide prohibition as a "war-time precaution," as he calls it. In his speech introducing the resolution Mr. Howard said that he was satisfied that the administration will bring forward measures for national prohibition on account of the existence of war. A decision as to the President's power to stop the manufacture of liquor is understood to be in the hands of Attorney General Gregory. It is said that, if feasible and necessary, the legislation authorizing the President to act will be introduced in Congress. It is said that the sentiment in favor of either temporary or permanent restrictive measures in the matter of making and selling liquor is strong in both Senate and House.

On the same day the Democratic caucus indorsed national prohibition as a war measure by a vote of 87 to 60 and immediately reconsidered its action without a roll call. Stormy protests against the prohibition indorsement were made by members who voted against it, Tammany Hall

Democrats heading the insurgents. Representative Kitchin, of North Carolina, himself an ardent supporter of prohibition, quelled the revolt by asking the caucus to rescind its action. It finally was agreed that the legislative programme for the special session shall be confined to such war measures as the President shall urge. This leaves it open for the President to ask for national prohibition as a war measure. Unless he does this it is regarded as certain that the House will take no action upon a prohibition amendment. Mr. Kitchin told the caucus he believed Congress would be able to pass the necessary legislation and adjourn by June 1st.

Representative Smith, New York, introduced a bill to keep liquors from soldiers, sailors or marines in uniforms.

To allay the fears of hysterical persons howling for Prohibition, the United States Brewers' Association had an official statement submitted to members of Congress, showing that the brewing industry of the United States consumed only 67,000,000 bushels of grain during the last fiscal year, or about 1 per cent. of all the grain produced by the nation. Of this grain the brewers consumed 48,000,000 bushels in barley, 17,000,000 in corn, and 2,000,000 in rice. The statement adds: "Half of all this is returned to the farms for cattle feed in the form of dried grains and by-products."

In his report to Congress, submitted April 20th, the Secretary of Agriculture, advising emergency measures for the nation's food supply, said: "Some of the European nations have secured a considerable addition to the food supply either by reducing the production of malt liquors or by reducing or prohibiting the production of distilled liquors. It has been roughly estimated that the value of food materials entering into the manufacture of alcoholic beverages in this country in one year, on the basis of prices lower than those now prevailing, is approximately \$145,000,000." It became known on the same day following a meeting of the Cabinet that the Administration did not regard the Prohibition question as a really pressing one either in connection with the conservation of the food supply or in its intrinsic importance. The Government considers that there are many far more urgent problems to be considered at present, and has no intention, it is understood, of devoting any of the energy needed for other things to forcing the prohibition question. The serious consideration of that will be allowed to wait until the problem becomes of more immediate concern. It was also said that the only form in which prohibition has come up for discussion by the Cabinet is in connection with the organization of the new army. Means will be taken through administrative measures, it is understood, to see that the training camps are kept free from intoxicants.

April 21st Senator Cummins introduced an amendment to the Anti-Spy bill, to prohibit the employment during the war of grain for the production of alcohol.

One thousand persons had a petition submitted to Congress April 23rd, demanding national Prohibition as a war measure. Among the signers were: John D. Rockefeller, Jr.; Judge Elbert H. Gary, chairman of the Steel Trust; Frank A. Vanderlip, of the National City Bank, J. P. Morgan's huge money-making machine; Winston Churchill, novelist; Luther Burbank, horticulturalist; Orville Wright, aviator; Judge Ben Lindsey, John Wanamaker, Jane Adams, William J. Bryan and Mrs. Carrie Chapman Catt, the militant suffragette.

Governor Capper, of Kansas, and a number of other "dry" governors, on April 20th, sent a letter to President Wilson asking him to urge Congress to vote for Nation-wide Prohibition. That the President will not heed the foolish ad-

vice ought to become evident when it is considered that on the same day the House leader laid plans for raising by new taxation \$2,000,000,000 for war expenses, confident in the session of Congress. Even many of the most optimistic prohibition champions now are hoping for no more than a law taxation \$2,000,000,000 for war expenses, confident in the case against any attempt at general prohibition legislation has been based on the arguments that a constitutional amendment could not be adopted and put into effect in less than a year or more, and that the Government needs the revenue from liquor taxes for the war chest. The Ways and Means Sub Committee which is drafting a preliminary revenue bill is to increase the levies on whiskey and beer to the highest possible figure.

Juneau, Alaska. The Alaska Prohibition bill provides that from January 1st, 1918, "it shall be unlawful for any person, house, association, firm, company, club, or corporation, his, its, or their agents, officers, clerks, or servants to manufacture, sell, give, or otherwise dispose of any intoxicating liquor or alcohol of any kind in the Territory of Alaska, or to have in his or its possession or to transport any intoxicating liquor or alcohol in the Territory of Alaska unless the same was procured and is so possessed and transported as hereinafter provided. Whenever the term 'liquor,' 'intoxicating liquor,' or 'intoxicating liquors' is used in this act it shall be deemed to include whiskey, brandy, rum, gin, wine, ale, porter, beer, cordials, hard or fermented cider, alcoholic bitters, ethyl alcohol, and all malt liquors, including all alcoholic compounds classed by the United States Internal Revenue Bureau as 'compound liquors': Provided, That this act shall not apply to methyl or wood alcohol. That any person or persons, or any house, company, association, club, or corporation, his, its, or their agents, officers, clerks, or servants, who shall, directly or indirectly, violate the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not more than \$1,000 or shall be imprisoned for a period of not more than one year, or by both such fine and imprisonment."

Sacramento, Cal. The House of the California Legislature has killed the Rominger bill prohibiting the sale and serving of strong liquors in public places, and limiting their possession of liquors containing 14—21 per cent. of alcohol to the place of manufacture and to towns, cities and consolidated city and county governments.

The Senate has defeated the Carr county option bill by a vote of 23 to 15. The Wylie law, now in effect, provides for local option by incorporated towns and cities and by supervisorial districts.

Hartford, Conn. Characterizing it "an act to commercialize the Sabbath," Governor Holcomb of Connecticut has vetoed the local option bill, passed by both branches of the General Assembly, relating to sports and other forms of entertainment on Sunday. The bill would have given cities and towns of 10,000 population and over the right to say what form of sports or entertainments should be permitted within their limits on Sundays.

Dover, Del. In the closing hours of the Delaware Legislature a final effort was made in the Senate to have reconsidered the House bill providing for resubmission of the liquor license question in Wilmington and rural New Castle county. The motion to reconsider received only eight votes and nine were necessary.

Tallahassee, Fla. Both houses of the Florida Legislature have adopted resolutions for submission in 1918 of a State-wide prohibition amendment.

The Senate bill to prohibit shipment of more than one quart of "liquor" per month to families in "dry" counties was passed by the House on April 18th. The bill also would provide that no one in Prohibition territory except the head of a family may order liquor. The Senate adopted the House bill to bar so-called locker clubs from "dry" counties.

Atlanta, Ga. Governor Harris has signed the "bone-dry" bill passed by the Georgia Legislature. The new law prohibits the possession of liquor even for personal use, and its transportation into or within the State.

Springfield, Ill. The Illinois Senate has rejected the resolution to provide a referendum on amending the State constitution to permit woman suffrage. It was supported by the Illinois Suffrage Amendment Alliance and opposed by the Illinois Woman's Suffrage Association.

Topeka, Kan. President Wilson has been urged to recommend to Congress that the waste of grains and other foodstuffs in the manufacture of alcoholic drinks be prohibited immediately in a telegram sent to him by Governor Arthur Capper. Letters also were sent by Governor Capper to the Governors of all States in the Union urging them to send similar messages to the President and to ask Senators and Congressmen from their States to support the plan.

Annapolis, Md. Officials of the Maryland Brewers' Association on April 17th announced in a letter to Governor Harrington that they would ask the Maryland Legislature to order an immediate reduction of 50 per cent. in the production of beer, in an effort to solve the grain shortage.

Augusta, Me. The lower house of the Maine Legislature on April 7th rejected a "bone-dry" bill by a vote of 100 to 31.

Boston, Mass. State-wide Prohibition has been defeated in the House of the Massachusetts Legislature by a vote of 72 to 32.

The Massachusetts Anti-Saloon League has abandoned its campaign for the license Limitation bill and center its efforts on the "Pony Express Permit" bill.

The Supreme Court in an opinion submitted to the Legislature April 17th declared that the latter body had no authority to define the word "people" in the act providing for a convention as meaning both men and women, and had no power to amend the act or take other steps to permit women to vote.

Lansing, Mich. The Michigan House of Representatives has passed the Wiley bill making State-wide prohibition effective in this State on May 1st, 1918. It prohibits the personal possession of liquor and the State Dairy and Food Department is to enforce the measure.

St. Paul, Minn. The bill for a referendum on State-wide Prohibition in November, 1918, to become operative January 1st, 1920, has been passed by the Legislature of Minnesota.

The roadhouse bill was also passed. It prohibits the sale of liquor outside of municipal limits, and also affects the wholesale liquor houses not located in cities and villages.

Jefferson City, Mo. The lower house of the Missouri Legislature has passed a bill prohibiting the carrying, shipping or transportation of any intoxicating liquors into any local option county in this State. Bills revising the liquor tax have been enacted, one taxing wholesale liquor dealers \$500 annually, and the other raising the State saloon license tax to \$400 annually.

Helena, Mont. The Sunday closing of saloons bill has been killed in the Senate of the Montana Legislature.

Lincoln, Neb. An investigation of prohibition is advocated by Governor Neville, of Nebraska, who wants a na-

tional commission to consider a possible solution of the liquor question.

The Senate passed the woman suffrage bill April 21st, and Governor Neville has signed it.

Carson City, Nev. The Senate of the Nevada Legislature has defeated a bill to create a State Board for the regulation of the liquor trade, while the House passed a bill designating the county commissioner, sheriff and district attorney as a Liquor Board, to have supervision over the issuance of licenses outside of city limits.

Concord, N. H. The New Hampshire Senate, by a vote of 14 to 9, has passed the House bill providing for State-wide Prohibition to become effective May 1st, 1918.

Governor Keyes signed the Prohibition bill April 17th.

Albany, N. Y. The New York Legislature will adjourn within a few days. It has been settled among the Leaders that this year a Local Option bill for the City of New York is not to be passed, as the Antis have been persuaded that for some time to come the Metropolis cannot be treated like a country village. But the Hill-Wheeler bill is to be reported favorably with an amendment providing that the people of the big city are to vote on a referendum on Local Option next year. It is said that Governor Whitman favors the amended bill.

The excise bill, raising saloon licenses all round, is to be passed to-day in both houses.

Protection to breweries and distilleries in cities which may vote "dry" on a local option referendum is provided in an amendment to the liquor tax bill. It provides that liquors can be manufactured and stored in "dry" territory.

Raleigh, N. C. All Prohibition bills on the calendar of the North Carolina Legislature have been killed; some of them were to prohibit the sale and manufacture of wine, to prohibit the advertising of liquors, to forbid clubs from keeping liquors and to stop persons from carrying more than a quart of liquor each on highways in the State.

Columbus, Ohio. The Legislature of Ohio has adjourned after passing only one bill relating to the trade. It was the bill advocated by Gov. Cox, changing the time for issuing liquor licenses from November to May. The bill changing the liquor law to the effect that it would be illegal for a licensed dealer to sell liquor to a woman under twenty-one years of age instead of eighteen was passed in the House, but failed in the Senate.

The "Democratic Dry Federation of Ohio" has passed resolutions demanding that Congress should prohibit the use of grain for the manufacture of beer and spirits during the present war.

Harrisburg, Pa. Local option has been defeated in the lower house of the Pennsylvania Legislature by a vote of 127 to 72.

Representative Isaac K. Ulrich of Lebanon county has introduced a bill to provide for compensation to holders of liquor licenses which the courts shall revoke or refuse to renew, such as has been advocated by D. Clarence Gibboney, head of the Law and Order Society of Philadelphia.

Senator Snyder of Schuylkill county submitted a bill making it unlawful for any person, partnership, association or corporation holding a license to conduct a brewery to maintain an office or offices or to have an agent or agents soliciting business in any county, unless there is in such county an agency license for the sale of the product of such brewery, violations of the provisions of the act to call for the revocation of such brewery license.

Other bills now being considered are to make it a misdemeanor for any person under twenty-one years of age to

procure or attempt to procure intoxicating liquors; to make it unlawful for licensed dealers or their employes to furnish or give away any liquors to any person who has not paid for the same; to prohibit the offering or giving of any premium or present by any partnership or corporation or dealer licensed to sell vinous or spirituous liquors; and to prohibit cabarets, dancing and moving pictures in places where beer or liquors are for sale.

Providence, R. I. The Rhode Island Senate, by a vote of 32 to 3, has passed a bill giving the women of this State the right to vote for Presidential electors.

Woman suffrage was defeated in the House, April 17th, by a vote of 101 to 94.

Nashville, Tenn. The Tennessee Senate has passed a bill providing that no medicine shall be sold by druggists containing over $\frac{1}{2}$ of 1 per cent. of alcohol; by another bill, also passed, educational institutions are to be permitted the use of alcohol for chemical and experimental purposes.

Montpelier, Vt. The House of the Vermont Legislature has defeated the Senate bill providing for a referendum each year on the question of liquor licenses.

Governor Graham has signed a bill prohibiting the sale of liquor in bottles while the country is at war.

Madison, Wis. A bill calling for a referendum on the question of women suffrage at the general election in 1918 was passed by the Wisconsin Senate, April 11th.

The Evjue prohibition referendum bill went to final passage in the Assembly on March 29th, the vote being 56 for and 37 against.

The bill to prohibit the voting on the saloon question oftener than once in five years, and to raise the number of signatures necessary to submit the question of saloon licenses to from 10 to 35 per cent. of the voters as well as two other liquor bills, one extending to wards in the city the right of option on the liquor question, and the other prohibiting the sale of liquor in any of the towns in the State, have been defeated.

**Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc.
Action by Civic Bodies and Others For or Against Prohibition.**

Alabama, April 18th. A sheriff's party at Girard destroyed \$200,000 worth of liquor seized by State officials in prohibition raids about a year ago.

Arkansas. Circuit Judge Paul Little, Fort Smith, has ruled that, although this State is "bone-dry," persons may bring liquor into it for personal use.

Connecticut. About \$8,000 worth of beer, wine and whiskey seized in blind tigers at Moosup last month has been poured into the manure under the barn floor of the Tillinghast livery stable at Central Village, members of the W. C. T. U. singing hymns while the performance was going on.

Georgia. "Moonshine" whiskey is made in Georgia in ever increasing quantities and very few arrests are being made of the "moonshiners" by Federal officers, so that some of the Prohibition fanatics have decided to offer a reward of \$100 for each arrest to stimulate the activity of Uncle Sam's Secret Service men.

Illinois. Last month's spring elections made a number of Illinois cities and towns "dry," among them as a real surprise the State's Capital, Springfield, where the antis won by a majority of 458 votes, the "wets" having polled 10,333, against the "drys" 10,791. The women did it. While in 1914 only 4,300 women voted against saloon licenses, their vote this year rose to 6,072, and the men's "wet" vote decreased from 7,681 to 6,596, while the men's "dry" vote increased from 3,956 to 4,719.

The following townships also voted against saloons: Cen-

tralia, Maine (1,998 "drys" and 797 "wets"), Sandoval, Boisdarc, Litchfield, Union, Hampshire, Wauconda, Shawnee, Atkinson, Alba, Cornwall, Riceland, Clear Lake, Pawnee, Highland, Lake, Meridian, Brookside, Gold, Danforth, Carterville. Of these Sandoval, Union, Wauconda, Atkinson, Pawnee, Highland, Lake, Gold and Danforth had heretofore been "wet." Only two towns changed from "dry" to "wet," namely Vernon and Goode; those voting to remain "wet" were Harmon, Otto, Sigel, Grandtower, Ottawa, Hopkins, Divernon, South Fork, Valley. Over 250 saloons have thus been closed in Illinois this time.

Additional elections held April 18th resulted in the "drys" turning out saloons from 14 "wet" cities and towns, among them Danville, with 68 saloons. Only three "dry" cities were voted "wet," namely Gardner, New Douglas and West Chicago. Those remaining "wet" are Amboy, Carlinville, Carlyle, Elmhurst, Elmwood Park, Galena, Herrin, Havana, Maple Park, Nauvoo, Pana, Tamms. The following voted "dry": Andalusia, Auburn, Danville, Effingham, Fairfield, Harris, Henry, Johnston City, Lacon, Lebanon, Litchfield, Morris, White Ash, Wamac.

"The women in the cafés had scarcely any clothes on," was the reason given by Mayor William McConochie of Rock Island for revoking café permits of the Colonial and New Harper hotels in that city.

Indiana. The authorities of Indianapolis are in a quandary over the question of how to replace the \$340,000 per year from saloon licenses when the Indiana Prohibition law goes into effect. Probably 100 policemen and many other city employes will have to be discharged, or the municipal taxes must be increased on real estate.

So far over 80 politicians who were indicted for election frauds, owing to which this State is to become "dry," have pleaded guilty to the charges against them and they are awaiting their punishment.

Iowa. The Anti-Saloon League is suing Iowa railroads for delivering liquors in this State seeking injunctions to prevent such shipping. In the case against the Milwaukee railroad, Judge Lawrence De Graff, at Des Moines, has refused to grant an injunction, declaring that the law offered no excuse for enjoining a railroad as a nuisance, and that if any action could be brought against shipments of liquors from other States, it must be of a criminal nature.

Kansas. Assistant State Attorney General W. P. Montgomery has rendered an opinion that the Kansas search and seizure law does not support the "bone-dry" cause for the simple reason that the law in the latter case does not contain a provision making it applicable. Furthermore, the "bone-dry" law doesn't contain one word relative to the drinking of liquor, merely prohibiting possession of it. Under the Montgomery opinion a person who is in secret possession of liquor can take a drink if no one sees him and he hasn't maintained a nuisance unless persons are permitted to gather in the home for the purpose of drinking. "There isn't a thing in the law that permits an officer to search a grip or suitcase in a man's possession," said Montgomery. "The bone-dry law does not contain a search and seizure provision."

Contrasting with this County Attorney James Luscombe, of Wyandotte county, has declared that even though the wine is used for religious purposes in Kansas it is a violation of the "bone-dry" law and persons disregarding it will be prosecuted. This he stated to a number of Jewish Rabbis, who wanted to know if they could have wine in their possession during the Passover festival.

Attorney General Brewster has ruled that the law is constitutional which prohibits the circulation in Kansas of

newspapers and magazines carrying cigarette advertisements.

Kentucky. The Liberal League of Louisville, an organization of intelligent and determined businessmen, has been formed in that city to fight against Prohibition. With similar organizations in other States the new League will co-operate.

Louisiana. When Ville Platte recently voted in favor of licensing saloons, the "drys" immediately brought suit to enjoin the town from granting licenses.

Maine. It now cost \$300 per week to pay for alleged enforcement of the Maine Prohibition law in Bangor, and yet the 15 "liquor deputies," who are to ferret out violators, have not succeeded in ridding the city of its hundreds of "blind pigs" and kitchen "speak easies."

Sheriff T. Henry White, of Penobscot county, who has been ruthlessly seizing liquor shipments, is now being sued by persons who insist that they have a right to procure "liquor" for their own personal use.

Finding it somewhat difficult to get their ordinary supply of liquor, the Maine lumberjacks have been fermenting the prunes included in their camp supplies and producing "slivovitz," a fiery compound that yields a jag lasting for several days. So extensive has the manufacture of this concoction become that the lumber interests of Maine have given orders that no more prunes are to be sent to the camps.

Massachusetts. City Solicitor William D. Regan has advised the License Commissioners of Lowell that they may grant liquor licenses to clubs in that city.

Southwick, "wet" until 1915, and "dry" after that until this Spring, has returned to the "wet" column.

Minnesota. Duluth went "dry" on April 3rd by a majority of over 1,000 votes. Saloons were also voted out in Elgin, Randolph, Lakeville and Sherman, while the town of Foley, which had been without saloons for one year, welcomed them back. Of seventeen other towns voting, nine remained in the "dry" column and eight remained in the "wet" column.

The Minnesota Commission of Public Safety has ordered the closing of saloons in the Bridge Square District of Minneapolis, on the ground of "military necessity to stimulate recruiting."

Missouri. At a meeting called by Secretary of Agriculture Houston and held in St. Louis April 10th to consider the food situation of the country, Henry J. Waters, president of the Kansas State Agricultural College, suggested that all breweries and distilleries in the United States be closed during the war, to "save for bread over 600,000,000 bushels of grain now annually used for producing beer and spirits," his statement being false, as the liquor industries in this country consume not much more than 86,000,000 bushels of barley, rye, corn and rice.

The Missouri State Beer Inspection Department collected last month \$32,777.50. This was an increase over collections in March, 1916, of \$1,030.18, due somewhat to the mild winter. "At the rate our receipts are growing," said Inspector Mosby, "I predict a banner year for the collections in this department, provided we have a hot summer and good industrial conditions in the cities, regardless of the receipts from the inspection of soft drinks, as to which I am not as yet able to form an estimate."

The Progressive National Convention held in St. Louis last month made arrangements for an amalgamation with the Prohibition party.

New Jersey. The organized saloonmen of Trenton are waging a determined war against undesirable elements in the retail trade. Wherever objectionable conditions are

found to exist the proprietor is summoned, notified and given 30 days in which to remedy the same. If he fails so to do, so a protest will be entered against the renewal of his license.

Judge Daily, New Brunswick, is refusing to grant more saloon licenses, saying that there is no need to increase their number.

The City Commissioners of Milville have passed an ordinance prohibiting "the importation by any common carriers, the hauling by expressmen, or the receiving by any consignee of any alcoholic liquors within the city limits."

Mayor Patterson, of Red Banks, a straight Methodist, has been elected president of the Red Bank branch of the Monmouth County Local Option League.

President Woodruff, of the Elizabeth Board of Excise, has called upon the residents of the downtown district of Elizabeth to assist him in an effort to reduce the number of saloons in that part of the city.

Under an amendment adopted by the council of Salem to provide for the payment of extra policemen, license fees for hotels have been increased from \$800 to \$1,000; bottlers' from \$200 to \$400, with a fee of \$1,000 if a liquor license is granted in addition.

City Counsel Francis Scott, of Paterson, has advised the police of that city that out-of-town brewers and dealers in bottle beer will have to obtain licenses to escape prosecution.

New Mexico. Attorney General Harry F. Patton has ruled that the New Mexico law which states that a license shall not be granted except within the limits of a city, town or village containing at least 100 inhabitants means that there must actually be that minimum number of inhabitants, and that the entire number of inhabitants in the precinct cannot be taken into consideration, and that the issuance of a license to sell liquor outside of a city, town or village violates the provisions of this statute.

New York. The City of New York is at present undergoing the affliction of having the religious maniac, strike-breaker, blasphemer, plagiarist and, above all, money-grabber, "Billy" Sunday in its midst. He is shouting and jumping, cursing and threatening for all he is worth, consigning to "hell" the brewers, distillers and saloonmen "who are sending 600,000 drunkards to the grave every year," etc., etc. The performance is as grotesque and as disgusting as ever. But it appears that the people of New York are not readily loosening their pursestrings while they flock to "Billy's" circus, and that makes him so much the more furious. During the first days of his contortions and lying tirades, over 40,000 persons contributed only \$2,802.08 to "Billy's" strong box.

In the meantime Mayor Mitchel has done something in the line of preparedness and economy during the time of the world war. He has issued an order peremptorily closing all drinking places, saloons, hotels, restaurants, clubs, etc., at one o'clock in the morning, and the trade has applauded and welcomed the Mayor's action.

At the annual convention held in New York last month by the Manufacturing Perfumers' Association of the United States, its president, A. M. Spiehler, declared that teetotal legislation would ruin the perfumers' business. The use of alcohol in many perfumes, he said, would be rendered impossible if the measures as drawn are permitted to become law. On the same day the annual conference of the Methodist Episcopal church was in session, also in New York, and one of the speakers, Rev. Dr. Ferdinand C. Iglehart, of Syracuse University, characterized the action of the United States Brewers' Association in pledging the resources of its members in aid to the war against the German Kaiser and

Prussian militarism, as "sublime sarcasm and colossal effrontery," adding: "As a conference representing the opposite of what the brewers do, we suggest that they make good their offer of service to this country by closing their institutions at once and turning them into mills where grain may be ground into food instead of being rotted into poison. Our Stars and Stripes have no earthly symbol—no Roman she wolf or Chinese dragon, or Russian bear, or British lion, or German eagle—only the blue sky and the shining stars, only the morning dawn with its streaks of red and white. It shall not have a Gambrinus or a beer stein. It shall not have a Bacchus or a whiskey demijohn. Freed by the decision of the Supreme Court and the vote of a free people it shall fly a stainless flag over a saloonless nation."

Although a strong effort was made by the "drys" to carry North Hempstead, L. I., at this Spring's town election, the "wets" won by at least two to one; they also won in Southampton. The "drys" carried Easthampton, Geneseo, Livonia, Mount Morris, Shelter Island and Southold. Avon, Conesus, Leicester remain "wet," and Danville, Caledonia, Groveland, Nunda, Ossion, Portage, Springwater, West Sparta, Sparta and York stay "dry."

The New York "Evening Journal" recently gave the brewers some advice which we quote at the request of some of our friends in the trade: "We give the brewers some good advice. They will be sorry if they do not take it. Better give up your real estate partnership with whiskey, which means drunkenness, crime, disease and poverty, and be content with your profitable breweries, which stand for sobriety where whiskey is not sold. If you decline now to give us the real estate profit that whiskey brings, you will find that you have chosen to give up both the whiskey and your breweries. The Hearst newspapers feel that absolute prohibition is not the solution of the temperance problem, for this reason: Absolute prohibition does not stamp out the sale of drugs, the sale of moonshine whiskey. It does drive out the milder stimulants which cannot be easily hidden. If whiskey could be absolutely abolished, if the only alcoholic drinks obtainable were the light wines and light beers, the temperance problem would be practically solved in the United States, as it is solved in Italy, in France and in Germany. Cut off your partnership with whiskey. Be wise in time."

North Dakota. "In this fine Prohibition State," says the Bismarck "Tribune," "intemperance is undoubtedly a crime factor. Among 245 inmates in the prison when Warden Talcott prepared his report, July 1st, 1916, 148 were classed as 'intemperate,' 93 as temperate, and of four no record was available. All, except 30 negroes and three of Indian blood, were white. Sixty-one bootleggers were received at the prison during the year; 63 were discharged, and 19 remained. Fifty-two of the convicts at the end of the year were in for one year, and 16 were in for five. Of the whole number in prison June 30th, 1916, 182 were born under the Stars and Stripes and 63 under foreign flags. The prison reached its maximum population in 1916, with 296; the number in 1915 was 289. The warden comments in his report on the recent epidemic of escapes, when 20 made their getaway, 14 from within the walls. The cost for caring for prisoners at the penitentiary is \$250 per annum per capita, and it is estimated that \$190,000 will be required to operate the institution during the ensuing year."

Ohio. Pomeroy has increased its "wet" majority from 197 to 282.

Northwest township, Williams county, and Pemberville, Wood county, have voted "dry."

Pennsylvania. An important conference was held in Pittsburgh, April 12th, between United States District At-

torney E. Lowry Humes and Attorneys Joseph O'Brien, of Scranton, and Charles A. Fagan, of Pittsburgh, representing the seventy-two brewing corporations of Pennsylvania and the United States Brewers' Association of New York, under indictment for alleged "illegal" use of money in political campaigns. It was said that the defendants are to plead "nolle contendere."

Upon being fined \$800 in the United States Court at Pittsburgh for spending more than \$5,000 in his campaign for election, Orrin D. Bleakley, Republican Representative-elect from the Twenty-eighth Pennsylvania Congressional district, has sent his resignation to Speaker Clark, at Washington.

A victory for brewers who also conduct a bottling business, was won when Judges Finletter and Martin, in the Philadelphia License Court, announced that they dismissed the remonstrance filed against the Fred Feil Brewing Co. The remonstrance was filed by the Philadelphia Bottlers' Association, and alleged a violation of the law, which, they alleged, forbids the supplying by brewers of beer to consumers. The real purpose of the remonstrance was to determine whether or not brewers, under their license, were permitted to furnish bottled beer direct to the consumer. The Judges, by dismissing the remonstrance, held that such a trade was permissible.

The Philadelphia License Court has also warned saloonkeepers applying for licenses they would lose their business certificates if they sold liquor to chauffeurs while on duty.

Out of 47 applications for licenses Judge Baldwin, of Beaver county, has granted only six, without giving any intelligible reason for his arbitrary action.

A malicious suit has been brought in the Clearfield County Court by the local "Dry Federation" against the DuBois Brewing Co., DuBois, and the Edward Schwem Co., wholesalers, who are charged with selling liquor without a license by Dr. J. C. A. Borland, pastor of the First Methodist Episcopal Church of Dubois.

Texas. The saloonmen of Dallas have raised the price from 5 cents to 10 cents per glass of beer.

Virginia. Fully 70 per cent. of the drunkenness in Richmond since the Virginia prohibition law became effective is caused by some substitute for whiskey, of which there are many, according to police officers.

Washington. Mayor H. C. Gill, Chief of Police C. L. Beckingham and four city detectives of Seattle, who had been indicted for having accepted bribes from liquor dealers to protect them from the consequences of having violated the Washington State Prohibition law, have been acquitted in the Federal Court at Seattle.

People who wanted to make whiskey and beer in their homes have stolen books containing technical advice upon fermentology from the public library in Seattle and other books of reference have been mutilated and cut by the would-be "moonshiners."

Wisconsin. Madison, the State Capital of Wisconsin, was made "dry" by a majority of about 400 on April 3rd. Other "wet" towns going "dry" were: Abram, Armstrong, Baldwin, Bayfield, Baraboo, Belmont, Clinton, Cobb, Delavan, Elroy, Fort Atkinson, Galesville, Glenwood, Hancock, Iron River, Ladysmith, Linden, Madison, Markesan, Mellen, Merton, Mondovi, Nekoosa, New Lisbon, Osseo, Park Falls, Pleasant Prairie, Reedsburg, Ridgeway, Schley, Sharon, Somers, Spring Valley, Stanley, Suamico, Waupun, Wausaukee, Whitewater, Wonewoc. "Dry" towns which voted "wet" are: Blanchardville, Browntown, Hudson, Lime Ridge, Menomonie, Muscoda, New Richmond, Platteville, River Falls, Superior, Westfield.

The organized saloon men of Marinette, Oshkosh, Green Bay and several other Wisconsin cities have agreed to close their places on Sundays during the war.

Canada. Licenses have been granted to 35 hotel keepers in Welland county and Niagara Falls. Last year 50 hotel licenses were granted in the county, so that the Ontario Temperance Act has resulted in a reduction of 15.

Mexico. General Francisco Murguia, commander of the northeastern military zone, issued a decree March 28th ordering that all who sold liquors of any kind be put to death at once without trial. Copies of the decree were received in Juarez in letters from the State capital, and it was said in one of these letters that three saloonkeepers at Chihuahua city had been executed for violating the decree.

Australia. In a recent report of the New South Wales State Labor Branch to the Premier, it was stated that the liquor trades would be pleased if the Government would consider the advisability of bringing in an Act to prohibit boys and girls under the age of fifteen working in factories where intoxicating liquors are handled. A request was also preferred for the registration of barmaids. The Premier has been in communication with the Attorney-General in regard to the matter, and it has been decided that it shall have consideration when any general amendment of the Liquor Act is in contemplation.

CONFISCATION—ROBBERY! "Even if it could be shown that this industry and the trade under it comprehend the sum total of the social and political ills from which we suffer, the confiscation of its property without compensation would lack all justification."—(John Koren.)

LIFE-SAVING ALCOHOL. "During convalescence from acute disease, or during long periods with those who suffer from chronic ailments, a suitable amount of stimulant is frequently required. Whenever there is a call for urgent action in shocks, heart failure, syncope from any cause, life often hangs on a thread, as it were, and alcoholic stimulant is not seldom our main reliance."—(Dr. Beverly Robinson, New York.)

MORE POLICEMEN REQUIRED IN DRY CITIES. "Prohibition cities are not law-abiding cities; prohibition States are not leaders in virtue. They lynch almost as many in prohibition Mississippi as are killed in license Philadelphia, despite the fact that the populations are about the same and congested centers usually breed crime. Nor must it be forgotten that a lynching has always been preceded by another crime. One policeman for every 981 of your population suffices for Minneapolis; one is needed for each 809 in bankrupt prohibition Nashville; one for every 735 in Memphis, and dry Atlanta needs one for every 647 of her inhabitants."—(C. M. Bryan, City Attorney, Memphis, Tenn.)

"PROHIBITION'S PRICE. Prohibition is a Pontius Pilate that condemns Liberty to the Cross—do you want it at that price? Let us concede for the moment that prohibition would do all it is claimed it will do—even at that price, do you still want it? I would rather be a free man in rags than be a slave and be decked with the costliest robes that ever came from the storied looms of the languorous and luxurious East. Nay, more, I would rather be a free man and struggle and fail and fall and commit sin, and have no one to blame except myself, than be possessed of virtue and purity and be compelled to say that my virtue was the product of the legislature of the State. Think of going through the world with no better recommendation for your uprightness, your honor, your honesty, than a certificate issued at your State capitol! Do you want prohibition at that price?"—(Dr. John Emerson Roberts.)

Prohibition and the Tropics.

By FREDERICK J. HASKIN.

What will be the effect of trying to enforce absolute prohibition of alcoholic liquors upon a people who regard drinking as no more immoral or deleterious than eating? Likewise, what are the political ethics of such legislation?

To one traveling in the Caribbean possessions of the United States at a time when national prohibition is looming large on the congressional horizon these questions insistently suggest themselves.

We have recently added three new Caribbean islands to our domain by purchase from Denmark, and have extended American citizenship to the Porto Ricans. We are keeping order in four small Caribbean republics—Cuba, Santo Domingo, Haiti, and Nicaragua. Add to this our interests on the other side of the globe in Hawaii and the Philippines, and you realize that the scope of American influence in the tropics is really large and growing.

The people of all these countries cherish to some extent American ideals, but they do not quite grasp this idea of a free land where you cannot take a drink, and they do not see, further, why any one should be prohibited from taking a drink.

The difference of viewpoint toward this matter illustrates the fundamental difference between the North American and what, for lack of a better name, might be called the Equatorial American. The term Latin American really is not nearly inclusive enough; in fact, no one word could convey an adequate idea of the racial complexity of the tropical melting pot—of the part that Hebrew and Irish blood have played in the Virgin Islands, for example, or the Turkish strain in Haiti and Santo Domingo. These people are almost as mixed in blood as we are, but owing to the fact that men move along parallels of latitude they are really all from southern countries—mostly southern Europe, Africa, and the Orient.

Now, these people have much in common with North Americans. They, too, are largely descended from ancestors who moved westward in search of freedom, and our ideals of liberty and independence are theirs. But the idea of suppressing natural desires and appetites on the ground that they are sinful, of suspecting the devil in everything that is pleasant, is to them ridiculous.

It is the moral aspects of this prohibition question that fascinate us. Now, to the Equatorial American, who did not have a single puritanical ancestor, this aspect of the question is non-existent. He sees no moral wrong in warming his blood and loosing his tongue with a glass of wine. The horrors of drunkenness do not appall him, because he never gets drunk. The police in Panama will tell you that when any one gets drunk in Panama City it is almost never a native. In St. Thomas you can see drunken sailors, and in Santo Domingo Americans may occasionally be observed celebrating in the well-known Saturday night style; but in neither of these places will the native be heard talking too loud or seen taking a zig-zag course homeward.

BEING KIND TO HER. A colonel's wife, who is doing real nursing at a certain London hospital, was recently offered a tip of sixpence by an honest old couple in gratitude for her care of their soldier-son. Tact personified, she slipped the sixpence back into the father's hand, saying, smilingly, that nurses weren't allowed to accept gratuities. "Oh, that'll be all right, sister. I'll not say nothing about it. Just take it, and get yourself a drop o' gin in your off-time!"—"Tit-Bits.")

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building
Randolph and 5th Avenue.

CHICAGO, April 27th, 1917.

The output of the Chicago breweries during the month of March, 1917, amounted to 385,254, a large increase over the production in March, 1916.

The local Spring election, held April 4th, was another crushing defeat for Chicago's would-be autocrat, Mayor Thompson inasmuch as his pet candidates for Aldermen were overwhelmingly beaten by indignant Democrats, men and women, who captured the City Council by almost a two-thirds majority, a net gain of eleven new members for the Anti-Thompsonites. All of which goes to show that Thompson, owing to his betrayal of the trade, has made himself the most unpopular politician in Chicago. Let the politicians of New York and other big cities take this as a solemn warning!

Thus you see that the ball is rolling and the members of the trade have started it on its way. They will not be contented with their local success and for that reason they have organized the National Legislative Voters League, whose principal aim is to defeat all candidates, particularly for Congress, who are apt to permit themselves to be used as their tools by the Anti-Saloon League and the Prohibition party. The new N. L. V. L. is now publishing as its official organ the "Rural Conservator," to subscribe to which all independently thinking and liberty loving citizens throughout the country are cordially invited. The paper's publication office is at 1637 West 18th Street, Chicago.

The Manufacturers' and Dealers' Association of America, whose largely attended annual meeting was held at the Hotel Bismarck April 12th, has elected these officers: Fred W. Vullmahn, president; Allen Laird, vice-president; E. A. Siebel, secretary; William Scown, treasurer. At the banquet following the election, Charles J. Vopicka, one of the founders of the Atlas Brewing Co. and United States Minister at Bucharest, Roumania, from where he recently returned, was the guest of honor. Mr. Vopicka, answering one of the toasts, gave a vivid description of the condition in the Balkan States during the present war and his patriotic remarks with which he fired the enthusiasm of his audience elicited unbounded applause and appreciation, as did his speech which he delivered at the annual meeting of the American Society of Brewing Technology, attended by him yesterday evening.

In his annual report the secretary of the Manufacturers' and Dealers' Association says: "Our membership shows a steady and healthy growth. The association has become well-known throughout the whole country as a power politically and commercially. Our endeavors have produced substantial results. The headquarters of our associations has been a very busy place during the past year. We have placed in round numbers 700,000 pieces of educational literature direct with the voters, both male and female. By hand and mail, that placed by hand was done by reliable tried men who distribute in factories and large plants when allowed, and when not, it is done during noon hour as the

employés pass in and out; different districts are covered each week, to dwellings, apartments, stores, factories, office buildings outside of loop, and automobiles standing in the streets in the loop. All printing matter is sealed in envelopes. We find by this method the public will keep and read same. Do you know what 700,000 pieces of literature means? It means in weight tons of good arguments and facts that goes direct to the voters. The occupants in all loop office buildings are covered each month by mail with individually addressed matter. All associations, clubs and trade unions receive good stuff twice each month by mail. All clergymen and women's clubs in Chicago get convincing arguments every week by mail. Every social and business club, association, league and settlements, both male and female, get literature at least twice each month by mail.

All public office holders, such as Aldermen, State Representatives and Senators receive good arguments and facts each week. Every United States Senator and Congressman is sent literature each week by mail. This work was suggested by the men themselves, as they wanted to know the true facts. 4,723 women who identified with the different political organizations in Illinois get personally addressed letters with enclosures each week by mail. We have supplied more than 500 applicants during the year with material to be used in school, church and club debates. 50,000 'Current Thoughts' have been issued during the past year. 'Current Thought' is for the purpose of conveying to members and friends the truth and facts in regard to so-called prohibition. 50,000 'Boosters' were issued; the 'Booster' is for the purpose of boosting Chicago and members, it is what its name implies, a 'Booster.' 100,000 'Facts' and 'Kansas,' two booklets compiled by Publicity Department, were distributed during the year. This association issued a challenge to William J. Bryan to meet Chas. Windle in a debate (Bryan did not accept). Our Classified Business Directory, the connecting link in our cooperating system, has proved a big success, it has been the means of all the different buyers knowing 'Who is Who.' The slogan of all is 'We prefer to buy all of our materials from members of the Manufacturers' and Dealers' Association of America.' We have supplied a great amount of educational literature to many towns throughout Illinois to be used in local elections. Our association is looked upon as an authority in political matters, are called on continually for information pertaining to matters in Washington and Springfield. A great deal of our endeavors, which has brought good results, was done in ways not known to the public. We are co-operating with other commercial organizations in matters that are most important to the welfare of Chicago. This association was the first to discover that the Anti-Saloon League as a 'League' is a myth, a fraud, there is no such thing legally in Illinois, it has no membership, no one is accepted as a member—they collected \$51,000 in Illinois during 1916—who got it? There should be a demand made for an investigation and an accounting by State authorities. Manufacturers' and Dealers' Associations are absolutely the only logical outlet for literature used for the purpose of educating the general public in regard to the fallacy of so-

called prohibition, as all printing matter will be read coming from a Commercial Association. We reach the same people that the Prohibitionists are fooling."

Federal Judge Landis has ruled that alien saloonkeepers who kept their places open before Mayor Thompson's Sunday closing order may not be admitted to citizenship until October 10th, 1920. The alien naturalization law holds that an applicant must have been a law-abiding resident during the five years previous to the filing of his application. This temporarily wrecks the citizenship aspirations of more than 200 saloonkeepers.

A whiskey sour is preferable to patent soft drinks, in the opinion of Dr. George B. Foster, professor of theology at the University of Chicago. He said as much in a prohibition debate with Robert McMurdy, former president of the Illinois Bar Association, before the Young Men's Associated Jewish Charities. Dr. Foster kept his hearers in an uproar with arguments he made against prohibition and in answer to the question, "Why do men drink?"

At a banquet by big business men held a few days ago, S. S. Kresge, owner of 165 five and ten-cent stores, who has given \$100,000 to the Anti-Saloon League, was scathingly denounced as a greedy and cruel exploiter of women and girls whom he is employing at starvation wages.

Richard Ostenrieder, treasurer of the Peter Schoenhofen Brewing Co.; Herman Wollenberger and Paul A. Wendland, proprietors of the Breakers Hotel, have given the Chicago Title & Trust Company a trust deed to obtain \$250,000 for eight years at 6 per cent. This is subject to a prior incumbrance of \$600,000. The Breakers is a handsome new hotel being erected at the southwest corner of Fifty-fifth street and South Shore drive.

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, Cal., April 19th, 1917.

Still the most perplexing question before the Legislature of the State of California is the liquor question. The Rominger bill which, if carried, would have eliminated the saloon from the State as well as ardent spirits, and under severe restrictions would have permitted the sale of fermented beverages with meals and in packages. This bill, which was but a stepping stone toward bone-dry prohibition, passed the Senate, after a reconsideration vote, by a vote of 22 to 17. The Assembly recognizing the vote of the people at the last general election, when Constitutional Amendment No. 2, which would have eliminated saloons, was defeated by a handsome majority, were in favor of regulation and not prohibition, therefore were in favor of the bill known as the Ashley bill, which would have limited the number of saloons in the State to one for every five hundred inhabitants and Sunday closing.

The "dry" element in the Legislature were not in favor of this measure for fear that it would defeat the Rominger bill when that measure would come to the Assembly. After several amendments to the Rominger bill had passed the Assembly and it was returned to the Committee on Public Morals, the Ashley bill came before the House and was carried by a vote of 46 to 32, and upon motion for reconsideration, reconsideration was voted down by a vote of 47 to 21.

After the passage of the Ashley bill in the Assembly the Rominger bill came up for consideration and was killed by a vote of 47 to 31. Now since the Rominger bill had been defeated and the Ashley bill has left the House and passed on to the Public Morals Committee of the Senate, the trained lobbyists of the Hearst publications in the State

together with Senator Rominger are attempting to amend the Ashley bill with the text of the defeated Rominger bill, but indications at the present writing look as though the Ashley bill, which is for regulation, will never leave the dry Public Morals Committee of the Senate.

Proposals for new labor contracts have been submitted by the International Union of United Brewery Workmen, as the contracts under which the unions are working at the present time expire May 15th, 1917. The changes asked for in the new contracts are as follows: Increase in brewery workmen and maltsters from \$25.50 to \$28 per week, increase for overtime and holiday work from 75 cents per hour to 85 cents, and increase to apprentices for first year from \$16 per week to \$18.50 per week, and for second year from \$18 per week to \$20.50 per week. Keg beer drivers and stablemen ask for an increase of \$2 per week over old schedule, and eight hour day and 75 cents per hour for overtime over old schedule of 65 cents. Bottle beer drivers and stablemen ask for an increase of \$2 per week over old schedule, with eight consecutive hours to constitute a day's work with one hour interval for meals, and same to be worked between the hours of 7 A. M. and 5 P. M., with commissions eliminated, and no Sunday work except to halls and picnics, and all such work to be classed as overtime and to be paid for at the rate of 75 cents per hour. Bottle house employes ask an increase in wage from \$22.50 per week to \$24 per week and eight-hour day, elimination of apprentices and many minor changes as to working conditions in general. It is also requested that all these new proposed contracts expire May 15th, 1920.

The license or no-license contest in San Bernardino on April 9th was won by the "drys" as follows: 3,130 no-license and 2,579 license, giving a majority in favor of no-license of 551. San Bernardino has always been in favor of license, and by voting no-license we lose about twenty odd licenses, and the hope of a strong local organization in the coming State-wide election.

Needles, in the same county of San Bernardino, voted on April 9th in favor of license by a majority of 41.

At the present time there is a hotly contested campaign taking place in Imperial, which will vote upon the question of license or no-license April 30th.

John Pope, president of the North Star Brewing Co., San Francisco, died April 4th after a lingering illness of about a year. Mr. Pope was well known in the brewing industry of California, and the trade has lost a highly esteemed member.

Albert Fisher, proprietor of the A. Fisher Brewing Co. of Salt Lake City, is sojourning in San Francisco at present. Mr. Fisher has recently undergone a serious operation by the Mayo Brothers of Rochester, Minnesota, and after spending three months at Arrowhead Springs, Southern California, is again in good health and will soon return to Salt Lake City to close his business affairs, as Utah will be in the dry column August 1st, 1917.

The annual meeting of the Brewers' Protective Association of San Francisco will take place on Friday, May 18th, for the election of officers and such other business as may come before the meeting.

The Hearst publications in California, namely the San Francisco "Examiner," Los Angeles "Examiner" and the San Francisco "Call" have declared themselves in favor of absolute prohibition since the defeat of the Rominger bill.

"To advocate the total abolition of cakes and ale because people sometimes eat or drink too much is to confess a lack of resourcefulness in dealing with the problems of the day."—New York "Sun."

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., April 9th, 1917.

In his annual statement regarding the National Drink Bill, the secretary of the United Kingdom Alliance says: "The consumption of intoxicating liquors in the United Kingdom during 1916, measured in terms of absolute alcohol, shows a decline of 12 per cent., as compared with the year 1915, and 18 per cent. as compared with 1914. The expenditure on intoxicants shows, however, an increase of at least 12 per cent. over that in 1915, and of 24 per cent. over the figures for 1914, and is, in fact, the highest on record for the United Kingdom. The factors making for a reduction of consumption have been the withdrawal of at least 2,000,000 men and the operation of the Output of Beer (Restriction) Act, 1916. The Central Board of Control (Liquor Traffic) is the third factor with its important orders prohibiting treating, restricting hours of sale, etc. The final factor is the rise in the price of beer and spirits, which has probably been less effective than it will be after the war, when wages can hardly be maintained at the present high rate. I estimate the amount spent on alcoholic liquors in the United Kingdom in 1916 at £203,989,000, as compared with £181,959,000 in 1915, and £164,463,000 in 1914. The total consumption of absolute alcohol was approximately 69,700,000 gallons as compared with 78,750,000 gallons in 1915, and of this quantity 75 per cent. was taken as beer, 23 per cent. as spirits, and 2 per cent. as wine. The taxation collected by the trade from consumers of beer, spirits and wine was approximately—1915: Beer, £33,500,000; spirits, £25,800,000; wine, £1,000,000. 1916: Beer, £31,700,000; spirits, £21,100,000; wine, £1,000,000. The percentage of taxation to expenditure was, therefore, in 1916, 26 per cent., as against 33 per cent. in 1915."

The restriction to 10,000,000 barrels of the annual output of beer is causing large numbers of public houses throughout the country to be closed, the proprietors and licensees being unable to obtain beer in quantities sufficient to yield a profit at being sold to guests. To compensate the retail trade for loss thus sustained its organized members have inaugurated a movement which is to result in Parliament passing an appropriate measure.

In view of the fact that the Central Board of Control favors the brewing of beers of a very low alcohol content, the Institute of Brewing has submitted to the Board a memorandum, declaring: "Although it is difficult, if not impossible, to arrive at any conclusions as to the definition of 'beer,' we are of the opinion that a malt beverage of an alcoholic strength of 2 per cent. of proof spirit (equivalent to about 1 per cent. of alcohol) cannot be called 'beer.' Owing to the fact that the Excise authorities have, in the past, allowed such a beverage as described above to be manufactured free of duty, many attempts have been made within the last fifteen or twenty years to produce palatable beverages of this nature, which have been sold under various trade names. All such attempts have failed to induce the public to accept these as beer, or as substitutes for beer, and we think that it is improbable that similar attempts would, in the future, achieve anything in the nature of a permanent success. The standard which the Control Board now desire to introduce for so-called 'beers,' which are to have the privilege of being sold during all hours, was empirically fixed by the Excise for the protection of the Revenue; such a standard has no meaning in relation to the objects which, it is presumed, the Board have in view. A palatable, wholesome beer can, however, be produced at a reasonable orig-

inal gravity with no more than 3 to 3.5 per cent. of alcohol (equivalent to about 6 to 7 per cent. of proof spirit)."

The price of beer has been raised by brewers almost everywhere, in some cases 100 per cent.

Malt has not been kilned by many maltsters and brewers since late in February, barley not being available.

The question whether the Board of Control possesses the power to prohibit the consumption as well as the sale of intoxicants has been denied by the High Court of Appeal in Glasgow.

The Brewers' Society has been seriously discussing a scheme of restriction and centralization under Government control with the assistance of brewers' local committees, some of the principal proposals being: A small Government commission to hear appeals against such schemes and to render final decisions. Licensed drinking establishments closed now to have their full rights restored at the end of the war. The trade to be allowed to make special financial provision for licensed houses during their suspension. A sort of liquor moratorium to be declared involving immunity from obligations or loans, mortgages and covenants in leases regarding the maintenance of licenses, schedule of prices, etc. Special regard to be given to efforts for economy of man power, requirements of troops and the sale of liquor in areas where munitions are produced.

The president of the Institute of Brewing, Professor Adrian J. Brown, has been asked by the Ministry of Munitions to bring to the notice of the members of the Institute that the services of a number of operative brewers and others on the technical staffs of breweries can be utilized in Explosives Factories. The period of engagements will be for the duration of the war, subject to one month's notice on either side. Salaries will be paid at the rate of £150 and upwards per annum, according to the training, experience and present salary of the applicant.

Some of the principal hop growers recently discussed the position of their industry in view of the drastic reduction of the brewers' output and they adopted resolutions asking the Government to prohibit the importation of hops for a period of ten years after the war, or, in case licenses were granted for import, to impose a duty of not less than 9d. per pound, also asking the Board of Agriculture to fix definitely the amount of land that could be placed under cultivation for hops.

The masses of the people in England are bitter against the Prohibitionists who, in spite of the fact that the production of beer and spirits has been reduced to a paltry minimum, persist in howling for total and permanent Prohibition. However, they recently met with a stern rebuke when their mouthpiece in Parliament, the ridiculous Leif Jones, had delivered one of his stereotyped harangues, Sir George Cave, on behalf of the government, replied to him: "It was with some regret that I noticed the old tone of controversy in your speech. The case presented in the way you have presented it does no good; it does great harm. You ask the working people to give up what they, rightly or wrongly, think is a good and a desirable thing."

The officers of the Docker's Union have administered a stinging rebuke to the teetotal fanatics, protesting against their campaign of lies and insult levelled at the working classes, saying: "While the working classes have given their lives by the hundred thousand, and every home is pouring out its blood and treasure, the 'Hun Stigginses' do their deadly work. Their charge of drunkenness against the workers, mouthed by ministers who should know better how to respect those bearing the burden of war, has been seized by the German propagandists with avidity. German

propaganda from the first has set too many of the French nation against the English workers by quoting speeches made in Parliament and articles appearing in the English press dealing with the subject of workmen's drunkenness. Must the cant and hypocrisy of the fanatics go without challenge? Except for the penalizing of the worst type of British Prussianism there is no need whatever for the curtailment of individual liberties. We have no reason to imitate the example of the Turks—a nation of teetotallers, which has murdered a million Armenian Christians, yet no teetotal organization has protested against this awful calamity. We call upon the Prime Minister and the Cabinet to stay the imbecile progress of these fanatics."

The Crown Cork Co., Ltd., who contributed £10,000 to the War Loan, is affiliated with the War Savings Association, and has already made arrangements among its employes for the encouragement of savings towards the same object. Their efforts in this direction have met with the most gratifying results.

By Cable. Leeds, England. The Independent Labor Party conference has adopted resolutions unanimously urging the Government to prohibit the use of foodstuffs in the manufacture of intoxicants during the period of the war.

Brewing News from the European Continent.

It is reported from Amsterdam that the brewers of Germany have not received any barley from the Imperial Government's stores since February 15th. However, some of the large brewery companies are said to have a stock of malt that may not be exhausted until the end of June next. No decree has as yet been issued to close all breweries in North Germany.

There was very little "bockbier" in Berlin and Munich during the Easter week, and there will be no "Octoberfest" in the Bavarian capital this year, the first time since 1810.

The universal lack of metals from which cartridges might be made, among other heretofore thought to be indispensable things, has now also impelled the Imperial Government to commandeer the lead covers of "steins" and beer glasses throughout Germany.

The trade in France is duly excited over an additional tax of 0.50 franc per degree hectoliter as proposed by M. Ribot under the pretext that the municipal excise duties must be "replaced," the mysterious meaning of which phrase only spells: more money to be disbursed from the pockets of the brewers, already sadly depleted by the onerous burdens the war has placed upon them. The municipalities received about 13,000,000 francs per year from excise duties before the war and now they get over 32,000,000 francs from beer alone. The brewers, therefore, quite naturally ask themselves why they are still more to contribute to the funds of cities and towns? The new tax is to date from January 1st, 1918, and it is no longer to be known as an excise duty, but a tax on consumption.

In a memorial submitted to the Minister of Finance the Association of Brewers in the Invaded Regions, protesting against the new tax, the fact is pointed out that of the 2,800 French breweries, more than 1,700 are located in the Northern Departments, occupied by the enemy, who destroyed hundreds of them and their brewing material. Therefore, two-thirds of the breweries of France are not available for the purposes of taxation. However, those still operating and furnishing the population as much, or even more, beer for consumption than before the war, are to be taxed quite out of proportion when compared with the taxation to which the wine and cider industries are subjected, there being practically no taxes to speak of upon the consump-

tion of wine and cider in the rural districts where municipal excise duties do not exist, although the overwhelming quantity of wine and cider is being consumed in those very districts. The Government is therefore requested to agree to a degree-hectoliter tax of 0.25 franc, instead of 0.50 franc, and also to a treatment as tolerable as that with which the wine and cider industries are favored.

The Minister of Armament and Munitions has submitted to the French Chamber of Deputies a bill to empower him to commandeer all copper available for the manufacture of ammunition. Under that law conditions in the breweries of France would soon resemble those prevailing in the breweries of Germany, where brewkettles, tubing and all other apparatus made of copper or brass have been taken away by the authorities.

Several weeks ago rumor had it that the Government of Switzerland were about to prohibit all exports of beer from that country; but when the organized brewers made inquiry upon the subject they were officially notified by members of the Federal Council that the rumor was premature. At that time malt was exceedingly scarce in Switzerland, there being but a few carloads available, it was stated, because the railroads could not possibly furnish a sufficient number of freight cars. What little malt there is, mostly comes from France and the Netherlands. The Swiss brewers are very anxious to obtain barley, malt and hops from the United States.

Discussing the subject of "Alcoholism in Munich," the "Münchener Medizinische Wochenschrift" says: "At the twentieth annual session of 'Abstinent Physicians of the German Speaking Area,' held in Munich last September, the lessened consumption of alcohol combined with greater drunkenness in Munich at the present time was discussed and was accounted for as follows: Many drinkers have gone to the front, while the stay-at-homes have neither time nor money to spend in dissipation. Saloon hours are shorter, beer has a lowered percentage of alcohol, and is therefore less indulged in, and festivals are few. On the other hand, those invalided home have a diminished tolerance of alcohol as a result of the nervewrecking conditions of the trenches. Many of these men were formerly drinkers, and while they may have learned moderation at the front, there is a tendency to indulge on the return home, especially because of the general custom of treating the 'gallant warriors.' Hence, despite a considerably lowered consumption, the number of men under treatment for alcoholism is much larger than normal."

Petrograd. The provisional Government of Russia has modified the rules governing the sales of alcoholic drinks by the introduction of the following regulations: The sale of alcoholic drinks containing a percentage of alcohol in excess of one and a half degrees is prohibited throughout Russia; export to foreign countries of wine is permitted regardless of their percentage of alcohol; in wine-growing districts the sale of wines produced locally and not containing a percentage of alcohol in excess of 12 degrees is permitted.

EVERYTHING EVIL IF ABUSED. "We do not care how great a majority can be piled up for prohibition, it can never be made to believe that it is right to forfeit one man's liberty because of another man's act, that it is right to make strong men hobble about on crutches because a few are lame, or that it is reasonable to abolish the use of anything because it is capable of abuse. The best things in this world result in the most evil when abused. This is as true of women as it is of wine. Majorities cannot make right wrong, nor wrong right."—"Current Thought.")

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—R. Meza Ayau y Cia, Santa Ana, Salvador, C. A., have arranged to increase the capacity of their model brewery by adding to their already large complement of Pfaudler Glass Enameled Steel Tanks, 22 Upright Closed Storage Tanks and 2 Upright Closed Compartment Tanks of two compartments each.

—Bond Bottle Sealing Company, Wilmington, Delaware, are about to erect a five-story addition at Fifth and Monroe Streets. Their building permit has already been issued to a local contractor, George W. Raudman, who erected their addition two years ago. This structure is required to meet the constant expansion of their business which has grown to an enormous volume. The new addition will contain 20,000 square feet of floor space. It will be of slow burning construction and equipped throughout with automatic sprinkler protection like the rest of their plant.

—George Brehm & Son, Baltimore, Md., are installing a Pfaudler Glass Enameled Steel Bottling Tank, of the horizontal type in their cellars. In addition this firm has purchased additional sections for the enlargement of Pfaudler Tanks already installed.

—Central Consumers' Co., Louisville, Ky., recently placed their fourth order for Glass Enameled Steel Tanks with The Pfaudler Co., this last item calling for an upright closed sectional tank of large capacity.

—Cerveceria de Maracaibo, Maracaibo, Venezuela, have ordered of the Pfaudler Company, through the Pan American Supply Co., of New York City, a horizontal Chip Tank of Glass Enameled Steel.

—Chattanooga Brewing Co., Chattanooga, Tenn., will increase the capacity of some of their Pfaudler Glass Enameled Steel Tanks by the addition of extra sections for which an order was placed recently.

—Cincinnati Brewing Co., Hamilton, Ohio, are enlarging their ice making plant by addition of a 40-ton ice making unit, at a cost of about \$20,000. When completed, this will make total capacity of ice plant 170 tons daily.

—Class & Nachod Brewing Co., Philadelphia, will soon install another Pfaudler Glass Enameled Steel Bottling Tank, of the Upright type, in their Bottling Cellars.

—Clausen-Flanagan Brewery, New York, erects an addition to its garage and stable, at a cost of about \$10,000.

—Columbus Brewing Co., Columbus, Neb., are converting their plant and equipping it with new machinery for the production of "near beer."

—Consumers' Brewery of Buffalo, Buffalo, N. Y., are increasing the capacity of their refrigerating plant by a large addition to their ice storage structure, the cost of the improvement being estimated at over \$2,000.

—Dayton Breweries, Dayton, Ohio, recently installed a 40-ton steam condenser, made by the Frick Company, Waynesboro, Pa.

—Frontenac Breweries, Montreal, Canada, recently ordered ten horizontal storage tanks, three horizontal bottling tanks and two compartment tanks, all of Glass Enameled Steel, to increase their already large installation of Pfaudler Tanks.

—Independent Brewing Co., Pittsburgh, will increase the capacity of Pfaudler Glass Enameled Steel Tanks in-

stalled in their Monessen Brewery by the addition of 18 new sections and heads.

—David Mayer Brewing Co., New York City, recently placed their fifth order for Pfaudler Glass Enameled Steel Tanks, this last order calling for one 10-foot O. D. Upright Closed Tank.

—National Brewing Co., Steelton, Pa., have installed the necessary material and apparatus for changing their freezing tank to operate on the flooded system, including suction and liquid headers and a 20-in. x 8-ft. ammonia drier-cooler-purifier, all furnished by the York Company, York, Pa.

—Obermeyer & Liebmann, Brooklyn, N. Y., are erecting a new three-story stable at the corner of Noll and Bremen Streets, adjoining their brewery. The cost will be about \$4,000.

—O'Keefe Brewery Co., Ltd., Toronto, Ont., Canada, have ordered a Pfaudler Glass Enameled Steel Tank to be mounted upon a motor truck. It is understood that the outfit will be used for the transportation of water.

—Pilsener Brewing Co., Cleveland, Ohio, have installed direct expansion piping for their new fermenting room, and an 80-ton atmospheric ammonia condenser, all furnished by the Frick Company, Waynesboro, Pa.

—Rieger & Gretz Brewing Co., Philadelphia, recently placed an order with The Pfaudler Co., Rochester, N. Y., for 2-partition heads, enameled on both sides, by means of which certain Pfaudler Glass Enameled Steel Tanks previously installed will be converted into compartment tanks.

—Jacob Ruppert, Inc., New York City, have placed an order with The Pfaudler Co., of Rochester, N. Y., for two Upright Glass Enameled Steel Fermenters, one open, the other closed; also for two Upright Storage Tanks and two chip Tanks, likewise of Glass Enameled Steel. The Ruppert installation of Pfaudler Enameled Steel Tanks is one of the largest in the country and includes the Rectangular Fermenters which have aroused so much interest.

—Smith Brewing Co., Youngstown, Ohio, are adding a new 50-ton refrigerating machine to the equipment of their ice making plant, the capacity of which is to be increased 100 per cent.

—Standard Brewing Co., New Orleans, La., recently installed a 30-ton shell and tube brine cooler, furnished by the York Company, York, Pa.

—John Strohm, of Jackson, Cal., is enlarging and improving his brewery, some of his new installments being a large refrigerating machine and an electric power plant.

—White Ribbon Beer Co., Los Angeles, Cal., have ordered a two compartment Pfaudler Glass Enameled Steel Tank for installation in the plant of the Seattle Brewing & Malting Co., in Seattle, Wash.

—Worcester Brewing Corporation, Worcester, Mass., are about to install six Upright Glass Enameled Steel Bottling Tanks in their bottling cellar. They will comprise the sixth lot of Pfaudler Tanks installed in this brewery.

—United States Brewing Co., Newark, N. J., are to erect a new bottling house for their Peter Hauck & Co. plant at Harrison, N. J., the cost to be about \$60,000. The structure covers 43x110 feet of ground and it will have two stories, built of reinforced concrete, steel and brick.

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

New Corporations. Ironton Brewing Co., Ironton, Ohio (formerly Otto Ebert & John W. Truby); capital, \$75,000. Incorporators: Otto Waginger, Vessie Gee, John W. Truby, Edward P. Newman and Otto Ebert.

Officers have been elected by brewery companies as follows:

Appleton Brewing & Malting Co., Appleton, Wis.: President, Nicholas Dohr; vice-president, August Kneueppel; secretary-treasurer, superintendent and brewmaster, John Haug.

Bellevue Brewing Co., Cincinnati, Ohio: President, George Klotter; general manager, George Osterfeld.

Bernheimer & Schwartz Pilsener Brewing Co., New York: President, S. S. Housman; vice-president, Charles Meyer; treasurer, William R. Rose; secretary and general manager, Arthur G. Freeland; brewmaster, August Wagner.

British-American Brewing Co., Ltd., Windsor, Ontario, Canada: President, Mrs. Ida Irion; vice-president and secretary, W. R. Bonds; general manager and treasurer, L. A. Irion; brewmaster, Adam Finkbeiner; additional directors, A. L. Irion, Mrs. B. Bonds, Mrs. E. Moore, and R. E. Irion.

Buffalo Brewing Co., Sacramento, Cal.: Additional directors, P. C. Drescher, O. F. Heilbron, and S. J. Mathews.

Butte Brewing Co., Inc., Butte, Montana: President and general manager, J. Harrington; secretary and treasurer, C. Lewis; brewmaster, Thomas Teuschl.

Capital City Brewing Co., Trenton, N. J.: President, secretary and general manager, Charles H. Reichert, Jr.; vice-president, Charles Reichert, Sr.; treasurer, Sophia Reichert; brewmaster, George Rosey.

Congress Brewing Co., Ltd., Brooklyn, N. Y.: President, Henry Seidenberg; vice-presidents, Frederick Lewisohn and James J. Long, Mr. Long also being general manager; secretary and treasurer, Max Drey. The brewmaster is Casper Graef.

F. W. Cook Brewing Co., Evansville, Ind.: President, Michael Daussman; vice-president, Henry E. Cook; secretary-treasurer, Gus B. Mann; additional directors, Charles W. Cook and A. B. Schmidt. The brewmaster is Louis Ernst.

Covington Brewing Co., Covington, Ky.: President, J. H. Mersman; secretary and treasurer, C. P. Lang; brewmaster, Rudolph Spitznagel.

Crockery City Brewing & Ice Co., East Liverpool, Ohio: President, S. J. Wainwright, Jr.; treasurer, G. W. Meredith; secretary, T. N. Meredith; general manager, A. E. Webber; brewmaster, Anton Zix.

Dixie Brewing Co., New Orleans, La.: Additional directors, John T. Holmes, Henry Worner, Gaspare Pietre, A. Vidak, William Brandt and Frank Simone.

Henry Elias Brewing Co., New York: President, William J. Elias; first vice-president, Fred W. Kroehle, Sr.; second vice-president, Arthur E. Duerr; treasurer, Fred W. Kroehle, Jr.; secretary, George H. Elias; brewmaster, Adolph Steinhardt.

Fell Brewing Co., Carbondale, Pa.: President, superintendent and brewmaster, Peter Krantz; vice-president, Charles Reedy; secretary and treasurer, Frank Krantz.

Ernst Fleckenstein Brewing Co., Faribault, Minn.: President and general manager, William M. Fleckenstein; treasurer and brewmaster, Alfred A. Fleckenstein; secretary, Edward R. Fleckenstein.

Freeland Brewing Co., Freeland, Pa.: President, Coudy O. Boyle; vice-president, James J. Timony; treasurer, John Shigo; secretary, James S. Brogan; brewmaster, Hans Muffler.

Fuhrmann & Schmidt Brewing Co., Inc., Shamokin, Pa.: Additional directors, G. G. Kulp and Nicholas Huber.

George Guenther, Jr., Brewing Co., Baltimore, Md.: Superintendent, John Merzbacher, formerly with the National Brewers' Academy and Consulting Bureau, New York.

Hagemann Brewing Co., San Francisco, Cal.: President, treasurer and general manager, Fritz Hagemann; vice-president and secretary, John Buchner; additional directors, Henry F. Hagemann, Marie Hagemann and Mrs. Johanna Thode. The brewmaster is Rudolf Turner.

Charles Hamm Brewing Co., Random Lake, Wis.: President, general manager and brewmaster, Charles N. Hamm; vice-president, Mrs. Anna Liefer; secretary-treasurer, W. J. Hand.

James Hanley Brewing Co., Providence, R. I.: President, Walter H. Hanley; vice-president, Gerald T. Hanley; treasurer, George C. Dempsey; general manager and secretary, Spencer H. Over; superintendent and brewmaster, James K. Carroll.

John Hauck Brewing Co., Cincinnati, Ohio: President, Louis J. Hauck; vice-president, P. W. J. Hauck; treasurer and secretary, Edward J. Schultz; additional directors, Jacob Frech and Mrs. Emilie L. Frech. The brewmaster is Charles Butz.

Hausmann Brewing Co., Madison, Wis.: General manager, Carl J. Hausmann; superintendent, William P. Hausmann; brewmaster, Joseph F. Hausmann.

Hinckel Brewery Co., Albany, N. Y.: President, George G. Schaefer; vice-president and treasurer, Simon Uhlmann; secretary, David Heller; superintendent and brewmaster, Ernst Uhlmann.

Hollencamp Brewing Co., Dayton, Ohio: Brewmaster, August J. Senf.

Simeon Jones, Ltd., St. John, New Brunswick, Canada: President, R. Kellie Jones; vice-president and general manager, F. Caverhill Jones; secretary and treasurer, Simeon A. Jones; brewmaster, Thomas Campbell Dickson.

Jung Brewing Co., Milwaukee: President, Philip Jung, Jr.; treasurer, Ernst Jung; secretary and manager, Fred Schneider. The brewmaster is Otto Roesch.

Kunz-Bleser Co., Manitowoc, Wis.: President and secretary, Daniel B. Bleser; treasurer and brewmaster, Louis Kunz.

Kurth Company, Columbus, Wis.: President, John H. Kurth; vice-president, John Kurth, Jr.; treasurer, general manager and brewmaster, Henry J. Kurth; secretary, Anna Kurth; superintendent and brewmaster, Henry J. Kurth; additional director, C. Kurth, Jr.

C. & J. Michel Brewing Co., La Crosse, Wis.: President, general manager and treasurer, Carl F. Michel; secretary, Max F. Platz; superintendent and brewmaster, Ernst Chitel.

Michigan Brewery, Detroit, Mich.: President, Chas. H. Ley; vice-president, John C. Lensky; general manager and treasurer, Charles H. Koerber; secretary, Peter Neckel; superintendent and brewmaster, William G. Koerber.

Fred. Miller Brewing Co., Milwaukee: President, Ernest G. Miller; secretary and treasurer, Emil P. Miller; brewmaster, Adolf Binder; additional director, Fred A. Miller.

Milwaukee Malting Co., Milwaukee: President, G. J. Zimmermann; vice-president, A. W. Asmuth; secretary, Bruno E. Fink; general manager, Joseph Stolz.

National Brewing Co., Chicago: President, William H. Rehm; treasurer, Jacob F. Rehm; secretary and general manager, Fred W. Wollin; brewmaster, George P. Süss.

People's Brewing Co., Duluth, Minn.: President and general manager, F. G. Sandstedt; vice-president, C. M. Forest; treasurer, M. J. Gleesen; secretary, Theodore Tenker; additional directors, Frank Horgan, Charles Peterson, F. Vanderyacht, M. J. Doyle and Gustave Anderson. The brewmaster is Frank Luckow.

Pennsylvania Central Brewing Co., Scranton, Pa.: President, A. J. Casey; vice-presidents, William Kelly and H. W. Jacobs; secretary and treasurer, W. G. Harding.

C. Pfeiffer Brewing Co., Detroit, Mich.: Second vice-president, Florence Pfeiffer Manning.

Phoenix Brewing Co., Bay City, Mich.: President, Frank H. Mohr; vice-president, Christopher Mohr; secretary-treasurer and general manager, Louis W. Hine; brewmaster, Hans Behrens.

Piel Brothers, Inc., Brooklyn, N. Y.: President, Gottfried Piel; vice-president, Mrs. Maria Piel; secretary and treasurer, W. J. F. Piel; technical director, Henry Piel. The brewmaster is Conrad Boss.

Plymouth Brewing & Malting Co., Plymouth, Wis.: President and general manager, J. E. Curtiss; vice-president and brewmaster, John U. Kraft; secretary and treasurer, C. A. Lamm; additional directors, Mrs. J. E. Curtiss and H. J. Goelzer.

Popel & Giller Co., Inc., Warsaw, Ill.: President, Martin Popel; vice-president, O. Giller; general manager, Walter J. Giller; secretary-treasurer, John N. Giller. The brewmaster is Charles Wagner.

Reading Brewing Co., Reading, Pa.: Assistant brewmaster, A. Ramstein.

Reisch Brewing Co., Springfield, Ill.: President, George Reisch, Sr.; vice-president, Joseph Reisch and Annie Reisch; secretary and treasurer, Frank Reisch; additional directors, Frank Reisch and George F. Reisch, Jr.; brewmaster, Conrad Griesser.

Rettig Brewing Co., Pottsville, Pa.: President and treasurer, Leo Schimpff; vice-president and general manager, William B. Shugars; secretary, F. J. Helreigel; brewmaster, Charles F. Ost.

Peter Schoenhofen Brewing Co., Chicago: President, Peter S. Theurer; first vice-president, G. Arthur Buhl; second vice-president and general manager, C. Sippel; secretary-treasurer, C. J. Sheridan.

Storck Brewing Co., Schleisingerville, Wis.: President, general manager and brewmaster, Henry N. Storck; vice-president, William Storck; treasurer, August Storck; secretary, Charles D. Storck.

Susquehanna Brewing Co., Nanticoke, Pa.: Brewmaster, Thomas F. Healey.

Tivoli Brewing Co., Detroit, Mich.: President and general manager, Louis W. Schimmel; vice-president, A. James Singelyn; secretary and treasurer, Elwood M. Bayne. The brewmaster is Adolf Wandrei.

D. G. Yuengling & Son, Inc., Pottsville, Pa.: President and general manager, Frank D. Yuengling; vice-president, C. D. Rishel; secretary and treasurer, Charles W. Rigg. The brewmaster is Nicholas Dennebaum.

—The St. Louis Brewing Association, St. Louis, have raised their price to the retail trade fifty cents per barrel.

—Plans for the erection of an additional big hotel have been decided upon by the J. Leinenkugel Brewing Co., Chippewa Falls, Wis.

—The Indianapolis Brewing Co., Indianapolis, will continue to pay the wages of any of their employes who should decide to enlist in the United States Army or Navy.

—Officials and employes of the Citizens' Brewing Corporation, Albany, N. Y., performed a flag-raising ceremony April 2nd as a demonstration of their loyalty to the United States.

—The assets of the Mutual Brewing Co., St. Louis, were sold at auction April 2nd under foreclosure proceedings by a number of bondholders, the property bringing a total of \$142,810.

—The National Capital Brewing Co., Washington, D. C., have offered for sale their eighteen business properties in that city, owing to the fact that the District of Columbia has been placed under the savage yoke of Prohibition by Congress.

—The new colossal "Bevo" plant of the Anheuser-Busch Brewing Association, St. Louis, was recently inspected by a large number of wholesale grocers from Arkansas, who, after being shown through were given a luncheon and a taste of that beverage which has taken such great hold in "dry" territory.

—George W. Boyd has bought the \$150,000 Mercer County Brewing Company's plant at South Sharon, Pa., for \$41,200. Included in the purchase, which was made at a receiver's sale, were 900 barrels of beer which Boyd could sell for \$5,000, but he decided to dump the beverage into the sewer. Boyd will use the old brewery as an artificial ice plant and cold storage.

—The mandamus proceedings brought by John McLaughlin and John Sullivan, as small stockholders, against the officials of the Lembeck & Betz Eagle Brewing Co., Jersey City, N. J., in an effort to gain access to the corporation's books, has been discontinued by the relators. In discontinuing the suit, their attorneys said that they are "satisfied with the disclosures made by the company and that such disclosures shall not be made the basis of any subsequent proceeding."

ONLY MORAL EDUCATION WILL SOLVE THE QUESTION. "In dealing with the question of Prohibition we must be careful to take into consideration the character and disposition of the people involved. Prohibition in Italy, for instance, would be nonsense. There is no need for it in that country. There wine is not only the drink, but it is also the food of the people. Here in America we will not obtain the desired results by enacting prohibitory laws. In such cases the very ones against whom the law is especially directed will find means of secretly evading it. No matter what laws you may make, people without a moral education will find a way of violating them."—(Monsignor Diamede, Apostolic Delegate to U. S. Government.)

Personal Mention.

John Bopp, who holds a confidential position on the staff of George Ehret, New York, and Mrs. Bopp, have announced the marriage of their daughter, Linnie Aurelia Bopp, and Augustus Rogers, the wedding having been celebrated in New York, March 31st.

Augustus A. Busch, president of the Anheuser-Busch Brewing Association, St. Louis, is busily recruiting for the Red Cross Society. So far nearly one thousand men and women have been enrolled by him, many of them employed by the Association over which he so ably presides.

Peter Doelger, Jr., president of the Peter Doelger Brewing Co., Inc., New York, and his wife, have announced the marriage of their daughter, Phoebe Doelger, to Charles Bissell, also of New York, the wedding ceremony having been performed on Tuesday, April 24th, at St. Patrick's Cathedral, Fifth Avenue, by the Rev. Father McQuade. At Mr. Doelger's city residence, 266 West End Avenue, New York, the happy young couple gave a reception to their numerous relations and friends, from whom they had received many beautiful and valuable wedding presents.

George Ehret quietly celebrated his eighty-second birthday, April 6th, while sojourning in Switzerland, where he went with his daughter, the Baroness Anna von Zedlitz, when the United States had severed its diplomatic relations with the Imperial German government. Mr. Ehret was congratulated, by cable, by the members of his family in New York and many of his friends in this country, who fervently hope that he may soon be with them again. It was on November 20th, 1857, that George Ehret set foot on American soil as an immigrant, then 22 years of age. He was a full fledged brewer then, who thoroughly knew his business. His first job was at the brewery of Roendel & Co., New York. From there he went to Adolph Hupfel's brewery, where he soon was advanced to the position of foreman and then he became a brewmaster. In 1866 Mr. Ehret founded his Hell Gate brewery, developing it from modest beginnings to its present magnificent and up-to-date modern efficiency and annual capacity of over 1,000,000 barrels.

Martin Kalin, brewmaster of the Hedrick Brewing Co., Inc., Albany, N. Y., who held that position since 1894, and has been in the trade for more than fifty-five years, has retired to spend the rest of his life in well merited leisure and comfort. At his last birthday, Mr. Kalin was seventy-three years young.

H. W. Ladish, one of the founders of the Ladish-Stoppenbach Co., Milwaukee, who have manufactured malt for more than twenty years, has been elected president of the Milwaukee Chamber of Commerce, defeating the administration candidate, William O. Goodrich, by a decided majority. Announcing his plans for the coming year, Mr. Ladish said: "The active members of the Chamber of Commerce want a business and a progressive administration, and desire to see the Chamber of Commerce improved, enlarged and broadened in scope, which sentiment I believe also is that of the younger members who make up the active membership of the organization. I certainly am in favor of economy—that is, economy of the right kind. But above all I believe the Chamber of Commerce should be conducted in a business-like manner, and so far as I am concerned I will try to give it a business administration and conduct it just as I would my own business."

Gustav W. Lembeck, president of the Lembeck & Betz Eagle Brewing Co., Jersey City, N. J., has returned after an absence of five and a half months on a business trip through Central America and South American countries. Mr. Lem-

beck, during his travels, on which he was accompanied by his wife, visited Venezuela, Colombia, Panama, Costa Rica, Nicaragua, Honduras, Salvador, British and Dutch Guiana, and the English island colonies off the coast. During all his travels at sea Mr. Lembeck traveled on belligerent ships during the time the German raiders were busy in the South Atlantic, but not one of the ships on which he traveled was molested. In all, Mr. Lembeck traveled on fourteen sea-going vessels. Mr. Lembeck reports that his trip was a thorough success from a business standpoint.

Edwin A. Lemp, third vice-president of the Wm. J. Lemp Brewing Co., St. Louis, donated 5,000 large candy Easter eggs, which were distributed among the children taking part in the Annual Easter Egg Hunt at Forest Park, St. Louis, April 7th.

Joseph Lippman, vice-president and general manager of the Salt Lake Brewing Co., Salt Lake City, Utah, is on the Pacific coast, and it is understood that he is making investigations there of articles that may be manufactured in the breweries of Utah after their usefulness has been destroyed by the ill-advised, however recently enacted, Prohibition law.

Jacob Loewer, as president and representative of the Valentine Loewer's Gambrinus Brewery Co., New York, has been admitted to membership in the Merchants Association of New York.

Thomas McNiery, secretary of the New England Brewing Co., Hartford, Conn., who spent the winter season in Florida, has returned to his work at the company's office, much improved in health and entirely recovered from the effects of the operation he had to undergo shortly before he left for the South.

Louis F. Neuweiler, Allentown, Pa., recently distributed \$50,000 among his children, surprising them with the splendid gift at a family dinner, when he stated that his business was so prosperous that he could well afford to make those happy who are nearest and dearest to him in all this world.

Col. Jacob Ruppert and other German-American citizens of New York have organized a committee to counsel the "doubtful and misinformed" among the Germans and help the Mayor of the city to preserve normal conditions during the war against the Imperial Government of Germany. Mayor Mitchel gladly accepted their offer and commended their spirit of loyalty.

Frederick Schimper, president of the Daniel Bermes Boulevard Brewery, Union Hill, N. J., celebrated the eightieth anniversary of his birth, April 18th, being the recipient of congratulations and gifts appropriate to the rare occasion, tendered the veteran brewer by the members of his family, the employes of the brewery and by his innumerable friends. Mr. Schimper and his wife, who were married more than fifty years ago, both enjoy the best of health and both are as active in their daily work and as devoted to each other as they were in the heydays of their glorious youth.

Captain Herbert Spender-Clay, Burton-on-Trent, is one of the members of the British War Commission, now co-operating with government officials in Washington to efficiently carry on the war against the Imperial Government of Germany. Captain Spender-Clay is a unionist Member of Parliament from the Tonbridge division, Kent, and is wealthy in his own right, having inherited a large fortune from his father, J. Spender-Clay, one of the principal stockholders of Bass, Ratcliff & Gretton, Limited, the famous brewers of ale in Burton-on-Trent.

Hon. Charles A. Stadler, New York, has returned from his fine estate at Seminole Grove, near Fort Myers, Florida, where he and his family spent the winter season.

Alonzo G. Van Nostrand, president of the Bunker Hill Breweries, Inc., Boston, Mass., has announced to the employes of that corporation that he will stand behind every man who enlisted in the United States service by paying half of the man's wages to him as long as he was in the service of the government. Mr. Van Nostrand also gave assurance to every man that at the end of his service his position would be waiting for him. The announcement was received with enthusiasm by the employes and was especially welcomed by such as are members of the national guard.

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

24086. A man in Nicaragua desires to secure an agency for the sale of bottled beer. Correspondence may be in English. References.

24116. An importing firm in Spain wishes to secure an agency for the sale of metal bottle caps with sealing devices. References.

24128. A firm in Bolivia desires to enter into business relations with American manufacturers and exporters. No particular line mentioned. Additional information in regard to the firm may be had on application to the Bureau or its District Offices.

24133. A man in Peru desires to purchase a plant for sterilizing water for a soda-water factory and bottling works, with a capacity of 700 dozen bottles per day, and a plant for sterilizing bottles. Quotations should be made c. i. f. Callao. Correspondence should be in Spanish. References.

24170. A French business man is desirous of representing, on a commission basis or small salary, American manufacturers and exporters who desire to open offices in France. References. He is now in the United States to confer with American exporters.

24189. A company in England would like to represent American manufacturers and exporters. No particular line is mentioned.

24192. A man in Russia wishes to secure an agency for the sale of American products. He mentions no particular line. Correspondence may be in English. References.

24293. A company in Arabia wishes to purchase 100 barrels of draft ale and 400 dozen bottles of ale. Samples, prices and full information should be submitted, so that order may be cabled without further correspondence. Quotations should be made c. i. f. destination, or f. o. b. American port with estimate of transportation costs. Payment will be made by sight draft. Correspondence may be in English. Reference.

MAY PROHIBIT CORSETS. "Of three evils—the corset, white plague and whisky—the corset is the greatest. This is the declaration of Mrs. Anna Lee, who has drafted for introduction in the Indiana legislature a bill prohibiting the manufacture of corsets. There is more tuberculosis in children of corset-deformed mothers than in whisky-drinking fathers," she declared. "Intoxicants have been in general use for centuries; tubercular children were never known until the corset was invented. Thousands of deformed children are the result of the wearing of corsets by mothers."—(Toledo [O] "Blade.")

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. President Wm. F. Carthaus in an address to the members of this organization, has said, among other things:

"Colleague Silberschmidt, in an appeal to the districts advocates a special meeting of the board of trustees, to determine what our Association would be willing to do in the Iowa fight for the re-establishment of our business. I had intended, and Secretary Nowak did, make this question, in my opinion the most important, the first part of his address to the three districts visited by him. I take the position that it is a debatable question, which is the greater loss, that of the value of business and buildings, or the loss of the opportunity to earn a livelihood in one's chosen path; to work in a trade whose practice and science were taught us by honorable men. I considered ourselves most vitally interested and affected by the prohibition movement, but Secretary Nowak reports that each of the districts dismissed the question 'as not concerning the Master Brewer, but the owner.' Under the circumstances I do not consider myself justified to call a special meeting.

"Colleague Silberschmidt also includes the query, what can be done for the Master Brewer losing his position, due to States entering the prohibition column? I agree that something should be done, but I don't see what we alone are able to do, except follow my suggestion made years ago to meet the representatives of the brewing schools in a friendly spirit and see what can be done. The teachers know their scholars better than we do, and will continue to be asked, and properly so, to recommend them for positions. We can only request favors for deserving members and should request a conference realizing that fact. We are not even justified (at least I decline to do so) to ask favors for such members as Secretary Nowak describes, that prefer to remain in the bar-room during convention sessions. It seems to me that the seriousness of the times would teach us that the sooner we lose such members, the better we are off. They always have been a mill-stone around our necks. The next convention should designate representatives to meet the representatives of the brewing schools, in a centrally located city, for the discussion of the entire situation for our mutual benefit. This conference should also consider the question of entrance qualifications to Brewers' schools."

District Meetings.

ALBANY. Colleague Mittenzwei has been elected treasurer of the Albany District, to succeed the late Harry F. Bowler. The members of the district are of the opinion that, "the funds in the treasury being so low, we think it absolutely impossible for the Association to donate funds, directly to aid in the fight against prohibition; and believe the only advisable manner to aid is for every District and individual member to do all in their power in their own locality. If any money is available to use in our fight against prohibition it should be spent for publishing small articles of educational value, to enlighten the public, through the newspapers, especially in those parts of the country where the prohibition agitation is greatest." The funds might be increased by printing the "Communications" in English only, and by assessing each member $\frac{1}{2}$ of 1 per cent. of his annual salary.

BALTIMORE. Four members of the Baltimore District having lost their position in Washington, D. C., through cowardly and ill-advised legislation by Congress, the District has abandoned its arrangements for a banquet this year.

BOSTON. The members of the Boston District want the "Communications" to be published both in English and

German, and they are opposed to the National Association's funds being used as such for fighting Prohibition.

BUFFALO. This District has adopted the following: "Resolved, That District Buffalo is absolutely opposed to any national control of district funds, and furthermore, District Buffalo reserves its right to spend the funds as it sees fit." Colleague C. S. Lappe, upon retiring as secretary, has been presented with a valuable fountain pen. At this month's regular meeting, to be held in Rochester, N. Y., Colleague Carl R. Hirzel is to discuss the following questions: "At what temperature, while mashing, should a brew be held to obtain the greatest result for the foam-keeping quality of beer?" To the Red Cross Society the District has given \$500.

CHICAGO. The following members of the Chicago District have been suspended for failing "to discharge their obligations:" James Riedel, John Woelfel, Louis Krauss, and Fritz Giesner.

CINCINNATI. Withdrawal cards have been issued by the Cincinnati District to Colleagues Aug. Gerst, of the Wm. Gerst Brewing Co., Nashville, Tenn., and Peter Reis, of the John Watson Brewing Co., Listowel, Ont., Canada, and the Secretary was instructed to take this matter up with the National Secretary.

CLEVELAND. Secretary Alfred Graf reports that the Cleveland District has indorsed the movement of the Cincinnati District to call the convention on a later date, adding: "The wet and dry campaign in our State will be the hottest one ever fought in the Union and no Colleague can conscientiously be absent during the campaign." On Decoration Day the members and their wives will enjoy a spring outing to Miller's Clubhouse, Broad View Road, and the District summer picnic will take place on July 8th.

DETROIT. As about fifty colleagues will be thrown out of employment if Michigan should practically become "dry," the members of the Detroit District are of the opinion that the National Association should not remain entirely passive in the fight against prohibition. Although we are well aware of the fact that many of the brewery owners do not demand our participation in these matters there is no question in our minds but that such participation would be appreciated by them."

LA CROSSE. The members of the La Crosse District desire that the National Board of Trustees should consider ways and means to create a separate fund to be used for the purpose of hiring men to start an educational campaign in the different States that are going to vote on the prohibition question. This district will guarantee \$500.00 for the purpose.

MILWAUKEE. The Milwaukee District has decided that the fight against Prohibition should be carried on by the proprietors of breweries, the Master Brewers' Association not to use its funds, as such, for the purpose. Colleague Frank Feiner has been admitted to membership.

NEW ORLEANS. The members of the New Orleans District have agreed to the proposition that this year's convention, to be held in their city, be postponed until after the fall elections, should a majority of the Districts so decide.

NEW YORK. The New York District held its regular monthly meeting on Saturday, April 14th. In the absence of the President, Vice-President Max Papai presided. In memory of the deceased Colleague Wenzel Scheich, the chairman requested those present to arise from their seats. Colleagues John Merzbacher, now with the George Günther, Jr., Brewing Co., Baltimore, Md., and Franz Voigt, with the Muessel Brewing Co., South Bend, Ind., applied for transfer cards. The colleagues being in good standing,

their requests were granted and recommendation made to the National Secretary to issue the cards.

JOHN KOENIG, Secretary.

SAN FRANCISCO. Colleague John W. Beckmann, of the Old German Lager Beer Brewing Co., Oakland, Cal., has been admitted to membership in the California District.

ST. PAUL-MINNEAPOLIS. The members of the St. Paul-Minneapolis District have advised the national officers that the Association should "actively participate in the fight against prohibition. In order to accomplish this a special meeting of the Board of Trustees should be called as soon as possible, the object being to devise ways and means as to how to proceed in this matter, and the funds necessary for this purpose to be derived from advertisements in the 'Communications' and special assessments of all members of the Association."

Annual Meeting and Dinner of the Alumni Association of the National Brewers' Academy and Consulting Bureau.

The annual meeting and dinner of the Alumni Association of the National Brewers' Academy was held at the Academy's Assembly Hall on Saturday afternoon, March 31st. The attendance was unusually large and many letters and telegrams were read from those who were unable to attend. Many questions of vital importance, not only to the members of the Association, but to the brewing industry at large, were debated upon and the discussions proved extremely interesting. The meeting was presided over by Mr. Louis A. Wehle, of the Genesee Brewing Co., Rochester, N. Y. One of the most important motions passed at this meeting was to foster a further increase in the membership of the Association, and it was decided to nominate membership committees in the various cities where graduates of the National Brewers' Academy are located, who will endeavor to enroll all those who have not as yet joined the Association, so as to make it as strong and flourishing as possible.

The Honorable Treasurer, Mr. C. E. Jetter, presented his annual financial report, which was very gratifying to all, especially in view of the fact that heavy expenditures had been made during the past year.

Mr. Albert M. Groh, the Honorable Secretary, also read his annual report, stating that ten graduates had applied for membership, and all of them were elected by a unanimous vote, together with the two new graduates, Mr. Wm. S. Bernheimer of New York, and Mr. Fred Dihlmann of New Orleans, La. Owing to the fact that the graduating exercises were postponed until April 14th, the usual prize awarded by the Alumni Association to the graduate obtaining the highest possible number of marks was not presented at the meeting, but, by unanimous vote, Mr. Schlichting, the president of the National Brewers' Academy, was requested to present the prize, consisting of a beautiful set of special saccharometers suitably inscribed. The prize was won by Mr. Wm. S. Bernheimer, who accepted the same with a deep feeling of gratitude at the time of his graduation.

After a long discussion as to the city where the Association should hold its next Midsummer-Reunion, it was unanimously voted to accept the invitation tendered by the city of Rochester, especially after Mr. Wehle had presented letters of invitation from the following: The Rochester Chamber of Commerce, the Bartholomay Brewery Co., the Genesee Brewing Co., the Brewers' Exchange, the Pfaunder Company, and the Master Brewers' Association of Rochester. It was understood that elaborate preparations will be

made for a very cordial reception of all the N. B. A. graduates and members of the Alumni Association and their friends, and it is hoped that the members will take advantage of this opportunity and make every effort to attend.

The officers for the ensuing year were then elected and, although several of those who have held office for several years asked to be relieved, the members considered their services so valuable that they would not entertain their resignation and upon motion of James K. Carroll all the present officers were unanimously reelected as follows:

Louis J. Wehle, President;
James A. Bain, 1st Vice-President;
Thomas A. Morton, 2nd Vice-President;
Albert M. Groh, Hon. Secretary;
Christian E. Jetter, Hon. Treasurer.

After a vote of thanks had been tendered to the officers of the Association for their successful work, and to the staff of the National Brewers' Academy for their valuable assistance, the annual meeting was adjourned and the members prepared themselves in order to attend the festivities to be held in the evening.

The annual dinner was very well attended by graduates and many of their friends, who assembled at 7:30 at Cavanagh's Restaurant on West 23rd Street. Mr. James A. Bain, of Philadelphia, presided as toastmaster, and addresses were also made by the following gentlemen: Dr. Carl Rach, Dr. Harold E. Lippincott, Mr. Frank W. Rickers, Mr. Morton, Mr. Carroll and Mr. Dreesbach.

Owing to a serious attack of grippe, Mr. Schlichting was prevented from addressing the dinner guests, but he had delegated Mr. Lippincott to express his heartfelt thanks to the graduates and their friends for the very successful meeting and the splendid attendance. It was pointed out that this year's meeting and dinner was one of the most successful affairs ever held by the Association, and a strong plea was made to everybody to participate in our visit to Rochester this coming summer. Many old acquaintances were renewed and all present had a very enjoyable time, to such an extent that the evening passed very quickly and all felt that bond of friendship and mutual interest which form the backbone of the Association. There was much cheer and song and the guests left resolving that they should all meet each other in Rochester.

TO DECREASE LOSS OF BOTTLES. Members of the Eastern Wisconsin Bottle and Case Association met in the City Hall of Chilton, Wis., Tuesday, March 20th, and discussed measures for decreasing the loss in bottles and cases by the breweries each year. They adopted a rule of charging a fee for each case as is already the practice in other places. Manitowoc, Green Bay, Two Rivers, Plymouth, Appleton and Chilton brewing companies were represented at the meeting.

"MOST OF THE TIME, of course, reformers do not reform, in the sense of making any real dents in life as the rest of us live it. H. G. Wells most appositely observes, through his alias, Mr. Britling, that the only people who want to change things change their minds first of all. On the other hand, just in so far as the aims of the average reformer are accomplished, so far do the human beings about him lose from the content of that personal liberty, that freedom of thought and taste and action for which enlightened persons have fought the battle of the centuries."—(Marguerite Mooers-Marshall, New York.)

Obituary.

George H. Amsdell, formerly one of the heads of the Amsdell Brewing Co., Albany, whose plant now belongs to the Citizens' Brewing Corporation, died suddenly in Albany, April 10th, at the age of fifty-one years. He is survived by his mother, Mrs. Esther J. Amsdell.

Eva Marie Bechtel, widow of the late George Bechtel, founder of the George Bechtel's Brewing Co., Stapleton, Staten Island, N. Y., died at her home on Van Duzen street, Stapleton, April 8th. She was born on Staten Island sixty-eight years ago and spent her whole life there, living only a few blocks from the home of her parents. She had married Mr. Bechtel nearly fifty years ago. Her survivors are three daughters and one son.

Charles G. Cook, former police judge and a director in the Trenton Brewing Co., Trenton, N. J., died suddenly in that city April 15th.

Frederick Max Huber, secretary of the Otto Huber Brewery, Brooklyn, N. Y., died from apoplexy April 6th at his home, No. 1002 Bushwick avenue, Brooklyn. He was born forty-one years ago on the site where his father, Otto Huber, erected his brewery, and was educated in the Brooklyn Polytechnic Institute and in Frankfurt-on-Main, Germany. Mr. Huber married Hattie L. Bossert, a daughter of Louis Bossert, the lumber merchant, and she survives him, together with two sons, Otto and Max, and two daughters, Evelyn and Elizabeth Huber. There are also surviving two brothers, Joseph Huber, president of the First National Bank of Brooklyn, and Charles Huber, of Asbury Park, N. J., and two sisters, Mrs. Frank Obernier and Mrs. Otto Seidenberg.

Gustav Mostler, editor of the "Brauer-Zeitung," official organ of the International Brewery Workers' Union, published in English and German, at the Union's office in Cincinnati, Ohio, died in that city April 7th. He was born at Aschersleben, 1864, learned the brewery worker's trade in Germany and came to the United States with his wife in 1890, settling in Omaha, Neb., to work in a local brewery. Subsequently he turned to journalism, working for several newspapers in Nebraska and Indiana and then the brewery workers elected him editor of their official publication which he edited with ability, and faithfulness, always upholding the principles of organized labor.

George Plamondon, president of the Saladin Pneumatic Malting Construction Co., and a brother of its founder, the late Charles Plamondon, who was sunk with the ill-fated "Lusitania," died at his home in Chicago, March 26th, aged fifty-six years. His widow and four children, Mrs. Catherine Deible, Mrs. Lillian McCourtney, Miss Dorothy Plamondon, and Carlson R. Plamondon, survive him.

John Pope, for twenty years president of the North Star Brewing Co., Inc., San Francisco, died at his home in that city April 9th, at the age of fifty-five years. He was a native of Hanover, Prussia, and came to the United States in 1881, settling in San Francisco in 1889. The deceased was one of the most successful and popular business men in the city of the Golden Gate and thousands mourn his demise. His survivors are his widow, several children and two brothers, the latter still living in Germany.

Wenzel H. Scheich, formerly brewmaster of the Eagle Brewing Co., Waterbury, Conn., and for many years a member of the New York District of the Master Brewers' Association of the United States, died at his home, in Brooklyn, April 1st, at the age of fifty-eight years, having been a sufferer from a complication of diseases for a long time.

Deaths in Foreign Countries.

Henry Blake, of J. H. & H. Blake, Ltd., Trowbridge, Wilts., England, aged 66.

Arthur G. Bristow, director in Robert Bobby, Ltd., Bury-St.-Edmunds, England.

Marcellus P. Castle, hon. member Brewers' Society, London, formerly with Tamplin & Sons, Ltd.

Benjamin Cobe, owner of the Grafton Brewery, Cheltenham, England.

William Hunter, of Wm. McEwan & Co., Ltd., brewers, Edinburgh, Scotland.

Frederick W. King, of Greene, King & Sons, brewers, Bury-St.-Edmunds, England, aged 89.

George R. R. Middlebrough, senior partner in John Middlebrough, Maltsters, Selby, England, aged 64.

D. J. Morgan, former chairman of the Northampton Brewery Co., Ltd., also an ex-Member of Parliament for Waltham, Bently Mill, Brentwood, Essex, England.

Alexander Poillot, proprietor of brewery at Châlons-sur-Saône, France, and vice-president of the Brewers' Association of Bourgoyne, aged 60.

Léon Pontfort, proprietor of brewery at Boyelles, Pas-de-Calais, France.

Lieut. Winter Nicholson, of Whitworth, Son & Nephew, brewers, Wath, England; died from wounds received in action.

Jonathan Seabroke, chairman of Seabroke & Sons, Thorrock Brewery, Grays, England, aged 60.

Edward Taylor, formerly partner in J. W. & J. L. Taylor, Anchor Brewery, Saffron Walden, England, hon. secretary-treasurer Essex Brewers' Association, aged 76.

William Wilkins, chairman of Wilkins Bros. & Hudson, Ltd., Pickwick Brewery, Bradford-on-Avon, England, aged 81.

Lieut. Charles F. Younger, director in Whitworth, Son & Nephew, Wath-on-Deane; died from wounds received in action.

FIRES. Heavy loss was sustained, March 26th, by the Sweetwater Brewing Co., Green River, Wyoming, their plant being partly destroyed by fire.

An explosion, occurring April 14th in the plant of the Weidemann Brewery Co., Orange, Conn., resulted in considerable damage to the buildings and machinery, while two men, among them superintendent August Durdell, sustained severe injuries, several others being slightly burned.

There was an explosion, April 10th, in the plant of the Ebling Brewing Co., New York, injuring two men quite seriously and resulting in serious damage to one of the buildings.

Slight damage was done by fire on March 26th in one of the buildings belonging to the Lembeck & Betz Eagle Brewing Co., Jersey City, N. J.

From burning oil tanks adjoining the plant of the Leonhard Michel Brewing Co., Brooklyn, N. Y., took fire April 24th; loss about \$5,000.

"THE CATHOLIC CHURCH considers the moderate use of alcoholic beverages as lawful and thoroughly consistent with Christian life. While alive to the fact that the business of selling alcoholic drink is invested with moral danger; and while insisting with her priests that they should endeavor to influence those of their flock engaged in this business to seek other means of obtaining a livelihood; yet she maintains that such a business, if properly conducted, is not in itself unlawful. She insists upon the right of the State to regulate the liquor traffic for the sake of order, decency, the protection of its citizens and for revenue."—(Rev. T. S. Dolan, in Baltimore "Catholic Review.")

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

NEW BREWERIES.

PENNSYLVANIA—Greensburg ..Greensburg Brewing Co.

TENNESSEE—MemphisTennessee Beverage Co.

FIRM CHANGES.

NEW YORK—Brooklyn.....Louis Karasik and Christopher L. Meyerdirks, Assignees of The Franklin Brewing Co., succeed Franklin Brewing Co.

WISCONSIN—Stevens Point....John S. Berkolt, Stephen H. Worzalla, Barney Polebelski, Assignees of National Brewing Co., succeed National Brewing Co.

BREWERIES CLOSED.

MINNESOTA—MantorvilleF. Schnagl Brewing Co.

" —St. Cloud.....Val. Udermann Brewing Co.

MISSOURI—St. Louis.....Wilhelm Griesser, Receiver for Mutual Brewing Co.

NEW YORK—Brooklyn.....Leonhard Eppig Brewing Co.

" — "Strasser & Schwing.

" —SchenectadyMohawk Valley Brewing Corporation.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1917 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, also in all other American countries where breweries exist, alphabetically arranged, with postal addresses, corrected to January 15, 1917.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries, firm changes and breweries closed recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

Book Review.

Brewery Accounts, by Thornton, 102 Pages. 1913. Price \$2.00.

This volume is one of the popular Ronald Accounting Series and it treats the subject of "Brewery Accounts" in a lucidly methodical manner, pointing out the fact that "No business has suffered from the general shrinkage of gross profit to which manufacturing operations in general have been subjected during the last twenty years. Increase in running expenses, cost of materials and bad debts have so reduced the brewers' margin of profit that it has become essential not only to have correct cost accounts, but to arrange the books so that the brewery managers may ascertain without delay the results of current operations."

This book facilitates the keeping of modern brewery accounts with the smallest amount of labor consistent with the prompt preparation of reliable operation reports.

Divided into XV chapters, the book gives practical hints how to arrange manufacturing accounts; consider general methods and conditions of selling; handle customers' accounts; calculate selling, distributing and administrative expenses; prepare monthly reports of operations; keep track of assets, plant, equipment, inventory, saloon fittings, customer's accounts, and bills receivable and cash on hand, also giving notes on forms and showing illustrative forms.

The book is invaluable for all proprietors of breweries who should not fail to embody it in their office library.

Those of our readers desiring to acquire Thornton's work, may write to our publication office, from where it will be sent to them when a remittance of \$2.00 accompanies the order.

—De La Vergne Machine Co., New York, erect an additional one-story brick shop.

Statement of the Ownership, Management, etc.

Required by the Act of Congress of August 24, 1912, of THE BREWERS' JOURNAL, published monthly at New York, N. Y., for April 1, 1917.

State of New York, County of New York, s.s.

Before me, a Notary Public in and for the State and County aforesaid, personally appeared Edward Bold, who, having been duly sworn according to law, deposes and says that he is the Business Manager of "THE BREWERS' JOURNAL," and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:-

Publisher, THE BREWERS' JOURNAL, INC., 1 Hudson Street, New York, N. Y.

Editor, THEO. F. CUNO, 1 Hudson Street, New York, N. Y.

Managing Editor, EDWARD BOLD, 1 Hudson Street, New York, N. Y.

Business Manager, EDWARD BOLD, 1 Hudson Street, New York, N. Y.

2. That the owners are: THE BREWERS' JOURNAL, INC.

Stockholders, holding 1 per cent. or more of the total amount of stock: Fred J. Alley, 80 Arch Street, Boston, Mass.; Edward Bold, 1 Hudson Street, New York, N. Y.; Fred Brückbauer, 911 8th Avenue, Brooklyn, N. Y.; August A. Busch, Trustee, 9th and Pestalozzi Streets, St. Louis, Mo.; Mrs. Elizabeth B. F. Cherouny, 21 Vandewater Street, New York, N. Y.; George Ehret, 217 E. 92nd Street, New York, N. Y.; Estate of August Finck, 324 West 39th Street, New York, N. Y.; Estate of Wm. L. Flanagan, 262 10th Avenue, New York, N. Y.; David Gerber, 96 Broadway, New York, N. Y.; Isaac Goldmann, 80 Lafayette Street, New York, N. Y.; Adolf G. Hupfel, 161st Street and St. Ann's Avenue, New York, N. Y.; Wm. H. Kurtz, 524 10th Street, Brooklyn, N. Y.; Estate of Henry Lindenmeyr, Bleecker and Mott Streets, New York, N. Y.; Lion Brewery of N. Y. City, 108th Street and Columbus Avenue, New York, N. Y.; Henry Osborne O'Hagan, 34 Old Broad Street, London, England; Fred Oppermann, Jr., Brewing Co., 332 East 45th Street, New York, N. Y.; Jacob Rupert, 1639 Third Avenue, New York, N. Y.; A. E. J. Tovey, 46 Cannon Street, London, England; David W. Tovey, 240 Riverside Drive, New York, N. Y.; Samuel Untermeyer, 120 Broadway, New York, N. Y.; Edward W. Voigt, 213 Grand River Avenue, Detroit, Mich.; C. M. Warner, 124 Front Street, New York, N. Y.; Josephine Weil, 317 East 156th Street, New York, N. Y.; E. G. W. Woerz, 291 West 10th Street, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who

do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

EDWARD BOLD (*Business Manager*).

Sworn to and subscribed before me this 29th day of March, 1917.

HIERONYMUS BREUNICH, *Notary Public, Bronx Co.*
Certificate filed in New York Co.

My commission expires March 31st, 1919.

Internal Revenue Decisions.

FERMENTED LIQUOR FORMS CHANGED. Commissioner of Internal Revenue, W. H. Osborn, on April 2nd, promulgated an order to collectors to internal revenue, to the effect that Form 7 (order for stamps—fermented liquor) and Form 18 (Brewers' monthly return), have been revised and will be used to the exclusion of all former editions on and after July 1 next, after which date all blank Forms 7 and 18 of former editions should be destroyed, brewers being given to understand that the old forms will not be accepted after that date.

Form 18 is the same as heretofore in substance, with the exception that details in the stamp account and in the fermented-liquor account are carried forward from month to month so as to represent the aggregate transactions for the year to the close of the current month. The method of arrangement has been changed somewhat and is believed to have been made more logical. Provision has been made for reporting the quantity of nontaxable beverages sold. The return will be in duplicate, as heretofore, as required by law, and the general provisions of the law and regulations relating to Form 18 will be observed.

Commencing with July 1 next, the collector's copy of Form 18 will be filed in a loose-leaf binder, alphabetically, by name of brewer, thus constituting an original record of each month's transactions by each brewer and taking the place of record 20, the keeping of which on and after July 1 next will be discontinued. The binders in sufficient numbers will be furnished collectors in time for installing the new system, and subsequently additional binders when needed on requisition to this office.

Commencing with July 1 next the revised Form 7 will be filed in collectors' offices in check-size drawers behind guide cards bearing the name of each brewer, forming an original record of orders for stamps for fermented liquors, and taking the place of record 19, the keeping of which on and after July 1 will be discontinued.

QUESTION TO BE DECIDED INDIVIDUALLY. "The prohibition problem is a question for every man to decide for himself. It is not a question to be passed on by Legislatures. Intemperance is as old as civilization and the individual who expects to wipe it out by the mere writing of a law is deluded."—(Rev. Dr. Wasson.)

SAME OLD STORY. An Anti-Saloon League representative blames the women for the increased consumption of liquor in wet communities. Other reformers have accused women of the responsibility for the increased consumption of cigarettes. Same old story we've heard ever since the first woman was blamed for the increased consumption of apples.—("The Beacon.")

Salvation by Force Majeure.

By W. V. HIRSH.

Two things have happened which constitute a curious commentary on the temperament of the American public. One is the incorporation of a man for the purpose of saving souls, the other is the favorable report of the Senate Committee on the bill for nationwide prohibition. Taking these remarkable incidents together, the plan appears to be to impose upon us the Sunday and Bryan type of Christianity by means of force majeure.

In the name of the gentlest and most tolerant of all men we are to be harangued in language unfit for use among clean people on the horror awaiting us if we do not subscribe to the doctrine of the incorporated evangelist. In the name of the Nazarene, so poor that He had no place to lay His head, we are asked to contribute to the building of a tabernacle large enough to hold a huge multitude, each one of which will in turn be expected to help line the already swollen pockets of the rich soul saver. Surely, paying for the privilege of hearing yourself cursed, of listening to slimy, filthy objurgations, appears to be a bit of unwarranted extravagance in these days. At a time when it costs so much to live I scarcely feel justified in paying any one for telling me how much it will cost me to die, if I don't die according to the constitution and by-laws of the incorporated evangelist. And I don't feel as though I wanted to do anything like that.

Fortunately there is escape from the maledictions of Mr. Sunday. I don't have to go to his tabernacle, not yet. But from the other feature of the latter-day scheme of salvation, should it be put into effect, there is no getting away. That unique personality known, I think, as the Demon Rum, who according to no less impeccable authority than the Hon. Richmond P. Hobson, slays yearly more victims than succumb to all wars, epidemics, accidents and natural deaths, I believe it's something like that, is to be knocked on the head and forever put out of his horrid game. This is the thing I balk at, quite unavailingly, I know, yet I balk. Why? Because I am so wretchedly depraved that I drink as much as a cocktail or a glass of wine or a bottle of beer two or three times a week at dinner.

And the worst of it is, I enjoy it. I don't care a hoot for the opinion of such scientific experts as Professors Bryan, Sunday, Hobson, Sheppard and the rest. I'm willing to admit that they know all there is to be known on the subject of prohibition and that they want to make this country dry only for my good and the good of my fellow unregenerates, but I'd rather stay bad. If indulgence in my unnatural appetite ultimately lands me in the place Mr. Sunday pictures in classic language and with vivid picturesqueness, I know I'll be in the company of a bad lot of folk, mostly the worldly men and women who have done nothing better than give us books to read, philosophy to study, science to harness the forces of nature, sculpture and paintings and music and poetry to stir our sinful emotions, medicine to cure our ills, all damnable things which the incorporated soul saver says are only fit for hell; but I'm not scared, I'd rather be in the company of those lost ones than in Sunday's or Bryan's. Honest to goodness I would. I'd rather spend a year with John Fiske or Mark Twain or Jim Riley or Raphael or Dr. Murphy or Heinrich Heine on the ragged edges of a dead world than fifteen minutes with all the professional evangelists and congressional reformers that ever lived.

I am not prepared to eliminate my reason, my judgment,

my desires, my inherited tendencies, my beliefs and substitute Billy Sunday and national prohibition. Utter annihilation would suit me better.

No theology of "Schrecklichkeit," no "be it enacted" type of virtue has any attraction for me. I refuse to be made good with a club. I decline to acknowledge the soul saving trust as the arbiter of my fate here or hereafter. And I hate to think that my country, boasting the first real democracy, is seriously thinking of following the example of Russia, the greatest of autocracies, in telling us that we are not fit to exercise our individual judgment, that we can only grow strong by having temptation taken away from us. That theory is so shallow, so saturated with sophistry and so un-American that I dread to think of what will happen if it is crystallized into law. And that calamity seems to be imminent. What a pity!—"Inside American."

WHY ARE THE PROHIBITIONISTS HYPOCRITES? "The master puts his slave to the task and lets him know he is master. It is up to the slave to free himself. But the prohibitionist masquerades in the name of free citizenship and attempts to rob us of that which is dearest—as dear as life itself, for without it life is not worth having—man's personal rights and liberties. Prohibitionists would call us a free people, yet deny us freedom. They would call this a free country, and yet take from us our inalienable guarantees. For that they are hypocrites. Man hates a hypocrite, and whether you drink or not, it is your duty as a man to fight off prohibition and slay the slimy monster of hypocrisy that ever strives to thwart human progress."—(W. B. Rubin.)

FULL COMPENSATION! "There is but one solution of the so-called liquor question. That is personal self-control and the practice of true temperance. This cannot be attained by legislation. But if the American people who have for years profited by the taxes derived from the brewing and distilling industries to the extent of \$325,000,000 annually, now decide to dispense with that income and levy other taxes, there is but one way to justly close the present controversy. If the destruction is to take place of the vast investment in distillery and brewery property used for the making of liquors, an occupation which the Supreme Court has recently declared to be 'a lawful business,' then this lawful business should be destroyed only with full compensation for the money invested in it. Any other method of procedure is confiscation pure and simple."—(Joseph Debar.)

"LACK OF MORAL CHARACTER, or of self-control, leads to excessive drinking and to crime. That ninety-nine per cent. of liquor drinkers are not criminals proves that it is the weak will of the one per cent. that is responsible for their criminal acts. If drinking liquor was of itself the cause of crime, all drinkers should be criminals. When the prohibitionists say that liquor-drinking makes criminals only of the weak-willed, they admit that it is weakness of will that is the source of crime. Even though it could be clearly shown that liquor-drinking is a factor in lessening self-control, this would not explain why a few people are injuriously affected, while ninety-nine per cent are not. It is a fair conclusion that if only one per cent. of liquor users are criminals, the origin of their criminal tendencies must be either some inherited physical or mental weakness, or the result of wrong training, or unfavorable environment."—(Educational Publicity Department, Manufacturers and Dealers Association of America, Chicago.)

Various Kinds of Prohibition.

"A person may with the utmost consistency favor state-wide prohibition and at the same time oppose nation-wide prohibition.

In the first place, the question of selling liquor is one that clearly comes within the prerogative of State authority.

Secondly, what States can manage to their own satisfaction ought not to be denied to them and usurped by the Federal Government.

Besides, State-wide prohibition will rest upon a stronger basis than nation-wide prohibition. The latter implies coercion of States that are not favorable to prohibition. In such States enforcement of the law would be attended by many difficulties.

A law is effective only to the extent that it is upheld by public sentiment. Unenforced prohibition laws directly tend to foster intemperance.

What is needed everywhere before prohibition becomes a reality is the proper treatment and caretaking of habitual drunkards. On that subject existing laws belong to a past age.

A habitual drunkard ought not to be fined; what he needs is treatment and work under government supervision. And he ought to be so held until he is thoroughly cured, no matter what length of time may be required—(Goshen [Ind.] "Democrat.")

"LAND OF THE FREE." Our forefathers kicked the lining out of King George because they objected to government without representation and objected to their tea being taxed. But what would they have done if the government which gave them no representation and no vote had prohibited the sale of tea and denied them the use of the beverage? Yet that is just what happened in the District of Columbia when the Senate passed the Sheppard bill. Are there no Americans left in America?—(Luke McLuke, "Cincinnati Enquirer.")

"DON'T BEFUDDLE YOUR BRAIN with the question whether these reformers are good men, but whether their reforms will work. Don't let the insolence or the pious virtue of these men overawe you. There is no insolence so obnoxious to me as the unconscious insolence of conscious virtue. A State can be as easily corrupted by the incorruptible as by others. In this city I have seen the money of a rich reformer lay its dead hand on the free spirit of men and clubs and movements. Good laws spring neither from good men or good statutes—they must spring from social needs and ideals. When you substitute the reformer or the policeman for the mother, and the law for the gentle arts of precept and example, you kill the forces which work for human growth and strength."—(O. F. Hershey.)

FANATICISM. "We are not progressing, but turning backward, when Congress undertakes to say whether a man shall read a newspaper in which an advertisement of liquor is published, and to say that a man must go to the penitentiary if he fails to live up to the prescribed code of morality. A long time ago in England there were laws under which many petty offenses were punishable by death. Shall we have in the future a law under which a man may be hanged, drawn and quartered for smoking a cigarette? And in a period in which few persons actually are punished, and fewer adequately punished, for murder? A difference in the form of government, not to be overlooked, is that in this country and in this age the people govern. The people may be, occasionally, financial, but there is hope for the same in the fact that fanaticism is not a permanent condition.—(Louisville "Courier Journal.")

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,221,328. Air heater and drier. Henry B. Hudepohl, Mount Healthy, Ohio.
- 1,221,357. Art of estimating the solid content of liquid food products. Julius John Mojonner, Oak Park, Ill., assignor to Mojonner Bros. Co., Portland, Me.
- 1,221,412. Drier. Richard Bernhard, Milwaukee, assignor to Worthington Pump and Machinery Corporation.
- 1,221,441 and 1,221,442. Clearing metals and preventing them from corroding. James H. Gravell, Philadelphia.
- 1,221,637. Air system for forcing liquids. Charles A. Waitz, Rouseville, Pa.
- 1,217,641. Compounds for Preserving Beer. Geo. Rottenkolber, Scranton, Pa. Filed July 21st, 1916. Serial No. 110,513.
- 1,221,851. Boiler-compound feeder. John W. Etienne, Clarion, Iowa.
- 1,222,100. Cloth for filter-presses. Hugo Henry Hanson, Boston, Mass., assignor to Berlin Mills Co., Berlin, N. H.
- 1,223,121. Process for making a non-alcoholic beverage. Alexander L. Straus, Baltimore, Md.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for the BREWER'S JOURNAL, by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C. London, England, and 10 Gray's Inn Place, W. C. London, England.

Specifications Published

- 1915.
- 17,969. Goodwin. Apparatus for forcing and raising liquids.
- 1916.
- 103,368. A. E. Vaughan. Sealing apparatus for casks and the like.
- 103,403. J. Plummer and G. B. Burrows. Electrical apparatus for indicating the depth of liquids in tanks or other vessels.
- 103,440. W. E. Silverthorne. Pour-outs for bottles and the like.
- 103,439. W. E. Silverthorne. Closures for pour-outs for bottles and the like.
- 103,513. H. Kapferer and Soc. Anon. Astra. Device for raising liquids.
- 100,083. C. M. C. Schou. Labelling machines.

For copies of published specification of Foreign Patents (25 cents each), address Messrs. G. F. Redfern & Co., 15 South Street, Finsbury, London, England.

The following Trade Marks have been definitely Registered:

- 115,956. Beer. Gipps Brewing Co., Peoria, Ill. Filed October 30th, 1916. Serial No. 98,978. Published January 23rd, 1917. Registration granted, March 27th, 1917.
- 115,959. Cereal food beverages sold as a soft drink. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed November 22nd, 1916. Serial No. 99,465. Published January 23rd, 1917. Registration granted, March 27th, 1917.
- 115,962. Non-alcoholic beverage made from selected grains and sold as a soft drink. Hemrich Bros. Brewing Co., Seattle, Wash. Filed March 25th, 1916. Serial No. 93,872. Published January 23rd, 1917. Registration granted, March 27th, 1917.
- 116,121. Non-alcoholic carbonated beverages. Columbla Brewing Co., Tacoma, Wash. Filed November 6th, 1915. Serial No. 90,453. Published October 3rd, 1916. Registration granted, April 10th, 1917.
- 116,197. Non-intoxicating cereal beverage. Anheuser-Busch Brewing Association, St. Louis, Mo. Filed October 25th, 1916. Serial No. 98,869. Published February 13th, 1917. Registration granted, April 17th, 1917.
- 116,235. Non-alcoholic malt beverage. Popel-Giller Co., Warsaw, Ill. Filed November 22nd, 1916. Serial No. 99,471. Published February 13th, 1917. Registration granted, April 17th, 1917.

BANKRUPTING CITIES. "Every city deprived of its income from saloons through the license system, on account of local option or prohibition, either is already bankrupt, or soon will be."—(Belleville [O.] "News-Democrat.")

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 98,869. Anheuser-Busch Brewing Association, St. Louis, Mo. Filed October 25th, 1916.

Particular description of goods.—A Non-Intoxicating Cereal Beverage.

Claims use since April 25th, 1916.



Ser. No. 99,471. Popel-Giller Co., Warsaw, Ill. Filed November 22nd, 1916.

Particular description of goods.—A Non-Alcoholic Malt Beverage.

Claims use since April, 1916.

TRYME

Ser. No. 99,940. Hinckel Brewery Company, Albany, N. Y. Filed December 14th, 1916.

Particular description of goods.—Brewed Malt Beverages.

Claims use since December 1st, 1916.

SNOW BALL

Ser. No. 101,936. North Western Brewery, Chicago, Ill. Filed March 6th, 1917.

Particular description of goods.—A Soft Drink or Beverage.

Claims use since on or about the 24th day of February, 1917.



Ser. No. 101,945. United Breweries Co., Chicago, Ill. Filed March 6th, 1917.

Particular description of goods.—Beer.

Claims use since on or about the 24th day of February, 1917.

LUX-O

Ser. No. 100,539. The Stroh Brewery Co., Detroit, Mich. Filed January 11th, 1917.

No claim being made in this application to the name "Stroh's."

Particular description of goods.—A Non-Intoxicating Malt-Brewed Beverage.

Claims use since December 29th, 1916.



Ser. No. 101,585. Henry Weinhard Estate, Portland, Oreg.; Louise Weinhard, Anna Wessinger, Louise Wagner, Paul Wessinger and Henry Wagner, executrixes and executors of the estate of said Henry Weinhard, deceased. Filed February 21st, 1917.

Particular description of goods.—Non-Intoxicating Malt Beverage.

Claims use since December 10th, 1916.



Ser. No. 101,623. The Salt Lake City Brewing Co., Salt Lake City, Utah. Filed February 23rd, 1917.

Particular description of goods.—Lager-Beer.

Claims use since October, 1914.

Te-To

Ser. No. 101,632. Willow Spring Brewing Co., Omaha, Nebr. Filed February 23rd, 1917.

Particular description of goods.—A Non-Intoxicating Cereal Beverage Sold as a Soft Drink.

Claims use since January 26th, 1917.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, April 28th, 1917.

Barley. The Barley market remains to be firm, with record prices, business not being particularly active. We quote: \$1.50@ \$1.70.

Buffalo, April 26th: "Practically no Malting Barley offered on this market, with the exception of a few cars of California Barley, for which they are asking \$1.55; and Low Grade Middle Western Barley, at about \$1.58. Choice to Fancy Barley would be from \$1.60 to \$1.65 if it were to be had."

Chicago, April 26th: "We have had a continuation of very moderate offerings of Barley for the past month. On many days there were more buyers than there were cars for sale. The demand has been steady, with a decided advance in values and quotations 15 to 20c. over a month ago. Apparently the amount of Barley still to be marketed is very moderate. Some Barley that would have been on sale before now is back because of the shipper's inability to get cars to load, but many of the Barley sections seem to be well cleaned up. We quote: Low Grade Malting, \$1.28 to \$1.35; fair-to-good, \$1.36 to \$1.44; good-to-choice, \$1.45 to \$1.50, with fancy up to \$1.56—this price being paid to-day with a number of cars traded at \$1.55. While these trades to-day were to pearlers and seed interests, malting bids were made close to the selling price."

Malt. The Malt market is strong in all positions, record prices prevailing and offering only Western Malt in very limited quantities. We quote: Standard Malt, \$1.66, cash New York; Bottle Beer Malt, \$1.74. Practically no demand just now. Very little inquiries and still less selling, due to the unsettled condition of things to-day.

Buffalo, April 26th: "Quote Standard Malt at \$1.64, and Choice \$1.70."

Chicago, April 26th: "There is only a hand-to-mouth business on the Chicago Malt market. Quotations: Standard Malt, \$1.56@ \$1.60; Bottle Beer Malt, \$1.64; Fancy Bottle Beer Malt, \$1.70; Coast, \$1.53; Coast Choice, \$1.56."

Corn Goods. Grits are quoted here at \$4.10; Meal, \$4.09; Corn Syrup, \$4.74; Corn Sugar, \$4.81.

Chicago, April 26th: "Grits are sold here at \$3.84; Meal, \$3.83."

Hops. The hop market was very quiet in April. Unsold stocks in growers' hands on the Pacific coast are not very large, but they are too much for the limited demand. The N. Y. State crop has practically been absorbed. Owing to uncertain conditions, brewers are buying sparingly and the market is more or less depressed. It is still to be determined what quantity of hop acreage will be plowed up on the Pacific coast, but according to our latest advices it will be considerable. There is a fair demand by exporters and more than the usual quantities of hops have been forwarded to South America and Africa, as well as some European countries where shipping is still possible. We quote: 1916 Pacific coast hops, 10@ 12½c.; 1916 N. Y. State hops—nominal, 40@45c.; 1915 Pacifics and States, 8@10c.; 1914 Pacifics and States, 6@7c.

SOLID IVORY. Many of the "bone dry" agitators are now feeling rather bone-headed, since it has become evident that the new federal statute will deprive them of their jobs.—(Jackson, Miss., "News.")

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Sheet Steel and Iron Works for Breweries.

The Gifford-Wood Company, whose main office and works are at Second Hill, Hudson, N. Y., design and manufacture steel tanks, troughs, casings, etc., also iron work of all kinds, gray iron castings up to 10,000 pounds, particular attention being given to work for breweries.

Specifications should be sent to the company whose service is always prompt and effective.

Guinness New Offices in New York.

Messrs. A. Guinness, Son & Company, Ltd., the world-renowned brewers of Guinness' Stout, whose plant was founded in 1759, and has been known since then as the St. James's Gate Brewery, Dublin, the office being at Salisbury House, London, E. C., England, announce that their New York branch office has been removed to the Astor Trust Building, 501 Fifth Avenue, New York City. Their telephone number is Vanderbilt, 4922.

Link-Belt Power Plant Equipment.

The Link-Belt Company's Power Plant Equipment stores coal, delivers it to the bunkers and furnaces, and disposes of ashes.

This company makes a specialty of designing and building machinery for the mechanical handling of coal and ashes and experts assert that Link-Belt installations make the records for low operating and upkeep costs.

For additional details and catalogs write to any of the company's offices in New York, Philadelphia, Chicago, Indianapolis, Boston, Pittsburgh, St. Louis, Buffalo, Cleveland, Detroit, San Francisco, New Orleans, Minneapolis, Los Angeles, etc.

York Manufacturing Company.

The York Mfg. Co., York, Pa., since their last report to this office have made ninety-eight installations of their refrigerating machinery and apparatus in all kinds of industrial establishments, factories, markets, stores, breweries, shops, private residences, hotels, public institutions, etc., among them for the South Atlantic Packing & Provision Co., Savannah, Ga., overhauling their plant, including the following new material: A 14"/24" x 24" cross compound poppet valve steam engine, replacing the old Corliss valve engine on their ammonia compressor, a 75 H.P. uniflow steam engine for driving auxiliaries, water and brine pumps, and the necessary material for changing their freezing system to the York improved raw water system; Wegner Machine Company, Buffalo, N. Y., one 85-ton, one 60-ton and two 42½-ton vertical single-acting high speed belt driven enclosed type refrigerating machines and condensing side, also a double pipe brine cooler and 5,200 feet of direct expansion piping. This installation was made for the Hoefler Ice Cream Co., of Buffalo, N. Y.; The Commonwealth Utilities Service Co., Colorado Springs, Colo. (ice), a 100-ton and an 85-ton vertical single-acting refrigerating machines, each direct connected to a uniflow poppet valve engine and condensing side complete, also a 100-ton ice-making system complete and 31,436 feet of 2-in. direct expansion piping for ice storage. This plant was installed in La Junta, Colo.; Pontotoc Cotton Oil Co. (Ice), Pontotoc, Miss., a 35-ton vertical single-acting refrigerating machine, direct connected to a Corliss valve engine and condensing side, also a 20-ton raw water flooded freezing system, a 20-ton distilling system and 570 feet of 1¼-in. brine piping for ice storage room; Smith County Electric Co. (Ice), Carthage, Tenn., a 12-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and condensing side, also a 5-ton flooded freezing system, a 5-ton distilling system and piping for ice storage room; Intermountain Railway, Light & Power Co., Colorado Springs, Colo., a 20-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side, also a 10-ton flooded freezing system, a 10-ton distilling system and 300 feet of 1¼-in. direct expansion piping for ice storage. This installation was made for the Mound City Electric Light & Ice Co., Stanberry, Mo.; Intermountain Railway, Light & Power Co., Colorado Springs, Colo., a 20-ton vertical single-act-

ing belt driven enclosed type refrigerating machine and condensing side complete, also a 10-ton flooded freezing system, a 10-ton distilling system and direct expansion piping for ice storage room. This plant was installed in Scotts Bluff, Neb.; Cross, Roy & Saunders (Cold Storage), Chicago, two 50-ton horizontal double-acting belt driven refrigerating machines and condensing side, also a refrigerating system, including about 75,000 feet of 2-in. direct expansion piping for their various storage rooms and all necessary connections; F. M. Young, E. L. Young & J. F. Lightsey (Ice), Fairfax, S. C., a 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete, also a 9-ton raw water flooded freezing system complete; Arctic Ice & Coal Co., Greensboro, N. C., a 125-ton vertical single-acting belt driven refrigerating machine; Fred Kortright (Ice), Columbia, S. C., a 32-ton horizontal double-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side, including two "Shipley" flooded double pipe ammonia condensers, also a 20-ton distilled water ice-making system complete; Swift & Company, Duluth, Minn., one 20-ton horizontal double-acting belt driven refrigerating machine and condensing side complete, also 7,580 feet of 2-in. direct expansion piping for storage rooms; Liebe & Company (Fur Storage), Portland, Ore., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Solvay Process Co. (Commissary), Searles Lake, Cal., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Kalispel Market, Kalispel, Mont., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Missouri Dairy Co., Prescott, Kan., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Missouri Dairy Co., Fulton, Kan., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; City Light & Traction Co. (Ice), Sedalia, Mo., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Victor Co-operative Creamery Co., Victor, Iowa, one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Crystal Ice & Coal Co. (Ice), Lima, Ohio, one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; W. C. Watkins (Chocolate Factory), Los Angeles, Cal., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Tribolet Packing Co., Ray, Ariz., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Chas. Page, Sand Springs, Okla., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; W. T. Dale (Grocery and Meats), Alton, Ill., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; McBride Mechanical Equipment Co., St. Louis, Mo., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Meridian Coca Cola Bottling Works, Meridian, Miss., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Standard Ice Cream Co., Detroit, Mich., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; J. M. Danziger (Dairy), Los Angeles, Cal., a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Tony Miller (Meats), Ute, Iowa, one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Inland Navigation Co. (Refrigeration on board Steamship), New Orleans, La., two half-ton vertical single-acting belt driven enclosed type refrigerating machines and high pressure side complete; Walker-Smith Co. (Wholesale Grocery), Brownwood, Texas, one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Installations made in breweries are recorded elsewhere in these columns.

Goetz Company Removed Their Shops.

The Goetz Co., Chicago, manufacturers of brewing machinery—copper, brass and tank work, have sent out the following: "Removal Notice.—After April 1st, 1917, our shops will be located at 2734 High street, near Diversey Boulevard and one block west of Southport avenue. Our office, at 30 North La Salle street, corner of La Salle and Washington streets, Room 1327-1328.

"We are fully prepared to give prompt attention to your inquiry and fill your orders promptly as before."

Thermometers!

The Taylor Instrument Companies, Rochester, N. Y., have been known for years as the manufacturers of reliable Thermometers of all kinds, and their instruments may be found in thousands of breweries throughout the United States and abroad: Pressure cooker thermometers, thermometers for mash tub operations, fermenting tubs, pasteurizers, pitching machines, etc. They also make close rake mash tub angle thermometers, straight thermometers, maximum registering and recording thermometers, as well as saccharometers. Any brewmaster who has ever used a Taylor saccharometer will testify to its reliability and durability. Ask for the companies' catalog and price list.

The B. T. Goodrich Rubber Company.

Henceforth, the B. F. Goodrich Co., Akron, Ohio, will be known as the B. T. Goodrich Rubber Co., the change having been agreed upon by the company's management last month.

The company also announce an important change in the personnel of its officials which brings L. D. Brown, who has been cashier of the First-Second National Bank of Akron, into the office of treasurer, succeeding W. A. Means. Mr. Means was elected second vice-president at the annual meeting, and at the same time Mr. Brown's appointment as treasurer was confirmed.

For almost twenty years Mr. Means has been associated with the Goodrich Rubber Co., and during that time he has seen it grow from a comparatively small plant with a \$2,000,000 capitalization to the ninety million dollar institution of to-day, which is rated as the largest of its kind in the world. For the past seven years Mr. Means has occupied the office of treasurer and for twelve years previous to that was assistant treasurer. This experience has qualified Mr. Means for the new responsibilities which the second vice-president is obliged to handle, for it has been during the past twenty years that the rubber business has seen the greatest growth and development.

Installations by the Frick Company.

The Frick Company, Waynesboro, Pa., recently made sixty-four installations of their refrigerating machinery in the plants of manufacturing concerns, private and public institutions, among them these: Carrier Engineering Corporation, New York, N. Y., for International Manufacturing Company, Montreal, Canada, one 120-ton vertical single-acting Corliss refrigerating machine and high side; Frick Ice & Refrigeration Company, Montreal, Canada, for Montreal Arena, direct expansion piping with necessary headers, valves, fittings for liquid and suction lines, etc.; Caribbean Petroleum Company, Philadelphia, for Maracaibo, Venezuela, 13-ton refrigerating machine, 1-ton freezing system and 1-ton distilling system, together with direct expansion piping, etc., for storage room; Marianna Ice & Storage Company, Marianna, Ark., one 18-ton vertical single-acting refrigerating machine, engine with belt to pulley on agitator, pump, etc., for raw water freezing system, and high side; Rennie Dairy Company, Richmond, Va., one 30-ton vertical single-acting Corliss refrigerating machine and high side; J. J. McPherson Packing & Ice Company, Norfolk, Va., one 25 H.P. engine for present ammonia compressor, receiver, accumulator, valves, fittings, etc.; Ottenheimer Bros., Baltimore, Md., for Fox Hall Farm, Norfolk, Va., one 3-ton vertical single-acting belt driven enclosed type double cylinder compressor and high side; Davis Ice & Coal Company, Berlin, Md., piping, valves, fittings, etc.; Albert Emanuel Company, Dayton, Ohio, for Texas Public Service Company, Vernon, Texas, one 12-ton vertical single-acting Corliss compressor, 13-ton flooded freezing system, room piping and parts for present machine; Gold Buckle Association, East Highlands, Cal., direct expansion piping for storage rooms, etc.; Buffalo Refrigerating Machine Company, New York, N. Y., one 15-ton vertical single-acting belt driven refrigerating machine and high side; Cardenas Ice Company, Cardenas, Cuba, agitating system, 30-ton ammonia condenser, steam condenser, etc.; Ottenheimer Bros., Baltimore, Md., for Crownsville State Hospital, Crownsville, Md., one 10-ton vertical single-acting refrigerating machine, engine, etc.; Pennsylvania Engineering Company, Philadelphia, Pa., for City Hall, Pittsburgh, Pa., one 10-ton vertical single-acting Corliss driven refriger-

ating machine and high side; R. E. Huthstainer, El Paso, Texas, for Copper City Brewing Company, Douglas, Ariz., one 15-ton flooded freezing system and distilling system; Georgia Land & Cattle Company, Savannah, Ga., room piping; Frid Engineering Company, Abbott's Alderney Daries, Salem, N. J., material and apparatus consisting of ammonia condenser, receiver, filter, can dumps, shell and tube brine cooler and atmospheric steam condenser; Phoebus Ice & Coal Company, Phoebus, Va., room piping, etc.; Mollenberg-Betz Machine Company, Buffalo, N. Y., for Henry Bald, 13-ton vertical single-acting belt driven double cylinder enclosed machine and high side; Buffalo, N. Y., for Fred Myers, Buffalo, N. Y., one 2-ton vertical single-acting belt driven enclosed type double cylinder refrigerating machine and high side; Buffalo, N. Y., for John Galster, Buffalo, N. Y., one 3-ton vertical single-acting belt driven double cylinder enclosed type compressor; Old Dutch Market, Washington, D. C., room piping and one 30-ton horizontal double acting Corliss driven compressor and high side; Danville Ice Company, Danville, Va., freezing tank coils; Mollenberg-Betz Machine Company, Buffalo, N. Y., for Crystal Ice Company, Buffalo, N. Y., ammonia condenser, accumulator, receiver, etc.; Frick Ice & Refrigeration Company, Montreal, Canada, for D. D. Drulard, Windsor, Ontario, one 3-ton vertical single-acting belt driven, double cylinder, enclosed machine, etc.; Kinnett Ice & Coal Company, Macon, Ga., one 12-ton horizontal double acting belt driven compressor, room piping, etc.; Alabama Packing Company, Birmingham, Ala., one 16-ton flooded raw water freezing system, etc.; Ottenheimer Bros., Baltimore, Md., for Union Abattoir, Richmond, Va., one 18-ton vertical single-acting belt driven enclosed type refrigerating machine, etc.; Hercules Powder Company, Wilmington, Del., for Lake Junction, N. J., Plant, one 30-ton vertical single-acting Corliss machine and high side; Morris & Company, Union Stock Yards, Chicago, Ill., one 60-ton vertical single-acting refrigerating machine and high side; West End Dairy, Charleston, S. C., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high side; Alabama City, Gadsden & Attalla Railway Company, Gadsden, Ala., one 30-ton flooded raw water freezing system, etc.; Compañía Central de Electricidad & Traccion, Ciego de Avila, Cuba, one 15-ton vertical single-acting Corliss refrigerating machine, etc.; Navasota Ice, Light, Power and Water Company, Navasota, Texas, one 20-ton vertical single-acting belt driven refrigerating machine and high side. Installations made in breweries are reported elsewhere in this trade journal.

THE STRANGE THING is that the owners of breweries are so slow to see the inevitable end of the present trend, or if they see it, it is past understanding how slowly they are going about the necessary work of divorcing their interests from the whiskey interests."—"Hudson Dispatch.")

CONFESSION OF HUMAN WEAKNESS. "Prohibition is based on the notion that the great mass of mankind are so weak-willed that they cannot refrain from acts that are injurious to their health and welfare and must therefore be protected against the possible consequences of their own folly. True temperance is admissible and much to be desired. Prohibition is a confession of human weakness and failure, that needs the policeman's club and the threat of jail to keep men out of temptation."—(N. Y. "Evening Sun.")

LIMITING THE SPIRIT OF AMERICAN LIBERTY. "Prohibition limits the spirit of American liberty. It holds the menace of old slaveries, cast-off prejudices, mental and physical, that we in this country have long outgrown. It is warming back into pestilent life and activity those old snakes—scotched, not killed!—of Hatred, Proscription, Bigotry, Fear! For in the simplest terms, what is prohibition? A giving play to that ineradicable passion for regulating and controlling and tyrannizing over the lives of others which so many men cherish in the name of godliness. It was this spirit and no other!—which framed the dungeons and devised the tortures of the Inquisition. Prohibition has many pious sponsors in the present, and in the past it had a patron no less illustrious than the Duke of Alva. Truly a monstrous changeling to put upon the American people in the name of liberty and progress!"—(Michael Monahan in "The Phoenix.")

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,
AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

Established in 1876 by A. E. J. TOVEY, Honorary Member of the United States Brewers' Association.

Grand Prize, Paris Exposition, 1900.

Medal and Diploma, Antwerp Exposition, 1889.

Honorable Mention, Paris Exposition, 1878.

**Main Offices: IRVING BUILDING, No. 1 HUDSON STREET,
Corner of Chambers Street, New York; Rooms 105, 106, 107, 108.**
Cable Address: "Paraclete, New York."

Western Office: People's Life Building, Randolph and 5th Ave., CHICAGO, ILL.

EUROPEAN OFFICES: } **GREAT BRITAIN AND IRELAND: Dale, Reynolds & Co., 46 Cannon St., LONDON.**
 } **GERMANY: Saarbach's News Exchange, 1 Clara Street, MAYENCE.**

SPECIAL CORRESPONDENTS IN ALL THE BREWING CENTRES THROUGHOUT THE WORLD.

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To suddenly suspend, if not to destroy, the American Brewing Industry under the false pretense that such arbitrary action is "necessary" to prevent the people from obtaining enough bread would be a crime as hideous as the destruction of the thousands of breweries in Belgium and France by shot and shell and spoliation!

Our Friends and All Others,

Who are in the habit of calling at our office for business or for a social chat, will please take notice that we have removed to a suite of more spacious and more convenient rooms in the same building, where we have now been for about twelve years.

Our present location is:

**Rooms 105 to 108, 1 Hudson Street,
New York City.**

THE BREWERS' JOURNAL.

"50,000 BUSHEL OF GRAIN A DAY FOR POWDER. The dry advocates who see in the closing of the breweries and distilleries the solution of the grain problem, will have to guess again. One distillery in Peoria consumes 50,000 bushels of grain a day in the manufacture of alcohol, and this alcohol goes to the munition plants. Without alcohol, Germany would soon put U. S. out of the running, and the dries would have to polish Prussian boots."—"National Herald.")

POLITICAL POWER FOR THE PARSONS AGAIN? "If we accept the philosophy of the prohibitionists, then the chief striving of the church will be to get the political power to compel the observance of its program. Or, still worse, the chief effort of every would-be reformer will be to subdue the pulpit and the Church to his political uses, giving always as the reason for his propaganda that he seeks power to do the people good, to compel those whom he regards as unenlightened to be rational and happy."—(Rev. Wallace M. Short.)

A Statement by the Brewers of the United States.

To the Senate Committee on Agriculture:

The brewers of the United States stand ready to cooperate to the fullest extent possible in any way that the President desires. They do not ask consideration from any other standpoint than that of public policy and fair dealing.

The two questions which are now uppermost are revenue and food conservation.

REVENUE.

The output of beer for the year ending June 30th, 1916, was 58,633,624 barrels. At the present rate of \$1.50 per barrel the Government received a revenue of \$87,994,500.

Allowing for the shrinkage due to States that have gone "dry" the Internal Revenue Department estimates the sales of beer for the next fiscal year at 50,000,000 barrels.

To make 50,000,000 barrels of beer the brewers require approximately 58,000,000 bushels of grain. The by-products (malt sprouts and brewers' grain), which are resold to dairy farmers and are highly prized for milk and butter purposes, represent a salvage of 35 per cent. Ignoring entirely the food value of the beer itself, it will be seen from these figures that the actual amount of grain which will be used up in the brewing process is about 37,700,000 bushels. This is less than three-quarters of one per cent. of the grain produced in the United States. Moreover, barley is not a staple human food either here or abroad. Practically all the barley that is not good enough for malting purposes is sold for fodder. The malting barley commands a high premium, however, and sustains the market for the barley crop as a whole.

AREA.

The area of land under cultivation to barley was in 1915 according to official figures of the Agricultural Department exactly .39 of one per cent. of the total area of agricultural land in the United States. The area which is needed for the brewers' requirements is .068 per cent. or a little less than seven one-hundredths of one per cent. of the total area of our agricultural land.

EXPORTS.

The exports of barley in the last fiscal year were, roundly, 28,000,000 bushels, and in 1915, 27,000,000 bushels, most of which went to Great Britain, Denmark, Belgium and France. (The exports in each of the five preceding years averaged less than 8,000,000 bushels.) Undoubtedly much of the barley exported to Europe was used for brewing purposes. We also exported last year some 3,000,000

bushels of malt, all of which was used for making beer, mostly for the British troops and workers in the munition factories.

CONCLUSIONS.

There are several obvious conclusions which may be drawn from these figures.

First. The brewer mints the raw grain into revenue for the Federal Government at such a ratio that under the present tax it receives about \$1.90 for every bushel of grain consumed in the brewing of beer. This figure will be greatly increased per bushel under the plan of an increased tax with a lesser number of bushels of grain used. Estimating the tax at \$2.00 per barrel, the beer consumption at 50,000,000 barrels, and the number of bushels of grain actually consumed at 37,700,000 bushels, the Government will receive about \$2.65 in revenue for every bushel of grain actually consumed.

Second. The amount of grain used in beer and the land area upon which it is grown is too small to be a factor in the food conservation program of this country. The barley is already sown (and most of it is produced on land that is not suitable for wheat). The whole machinery of the maltsters and the brewers and all the channels of trade—from the farmer to the ultimate consumer—are so set for the next twelve months that any limitation of the beer output would bring widespread disaster.

Third. The food value of barley used in brewing is absorbed by the consumer of beer. If he did not get this food value in beer he would have to replace it with other food.

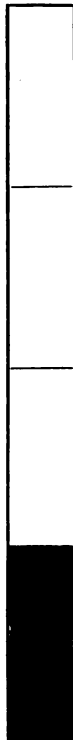
Sorenson, the great Danish physiological chemist, shows that 100 kilograms of barley have an energy value of 371,000 calories. He shows that when barley is fed to cattle for producing beef for human food, there is an ultimate loss of 181,000 calories, or 49 per cent. of the food value. On the other hand, the food value lost from barley used in beer amounts to 144,000 calories or only 39 per cent.—besides which the ingredients in beer are in the most easily digestible form.

We submit this for your consideration, without further comment except to say that in the matter of any regulations that may be imposed by Federal authority for the conduct of the liquor traffic we stand pledged to assist the Government in every possible way.

MAY 7, 1917.

AMOUNT OF CEREALS USED IN BREWING IN THE UNITED STATES

BARLEY production United States, 1916, 180,927,000 bushels



Quantity used in brewing
52,439,973 bushels.

Total number of bushels of grain used..... 70,505,488

Returned to the farm as a dairy food, 35%..... 24,676,920

Net number of bushels of grain used in the manufacture of
beer 45,828,568

Which is less than $\frac{3}{4}$ of one per cent. of the total grain crop
of 1916..... 4,703,429,000
bushels

The grain crop of 1915 was..... 5,762,575,000
bushels

Production of RICE, U. S., 1916, (estimated) 28,000,000 bushels

5,000,000 10,000,000 15,000,000 20,000,000 25,000,000 bushels



Quantity used in brewing
2,354,000 bushels.

The Total Revenue from the Beer tax in 1916 was \$87,950,000, which is
equal to \$1.90 per bushel of the grain used.

Production of CORN, United States, 1916, 2,583,241,000 bushels

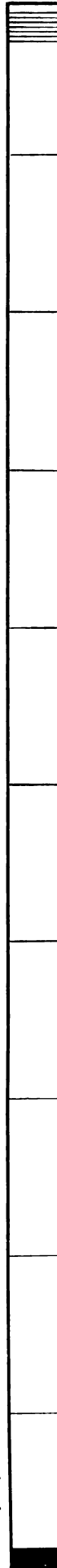
500,000,000 1,000,000,000 1,500,000,000 2,000,000,000 2,500,000,000 bushels



Quantity used in brewing
15,711,515 bushels.

Total CEREAL production, United States, 1916, 4,745,429,000 bushels

500,000,000 1,000,000,000 1,500,000,000 2,000,000,000 2,500,000,000 3,000,000,000 3,500,000,000 4,000,000,000 4,500,000,000 bushels



Quantity used in brewing
70,505,488 bushels.

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

The Saline Constituents of Water.

It is well known that the saline constituents of the water supply employed in brewing beer is one of the important factors which will determine the final characteristics of the product. We are aware, for example, that a hard water, containing gypsum or sulphate of lime, is essential to the production of pale ales; we know also that a soft water, containing a preponderance of alkaline salts, is desirable for the production of black beers. The reason for these differences in the type of water employed for diverse classes of beer may not be immediately apparent, but a knowledge of the characteristics of the salts mentioned and their effect upon the constituents of malt is valuable to all who have an intimate acquaintance with the requirements of practical working.

In some of the older treatises on brewing, the beneficial influence of gypseous waters in brewing pale ales was attributed to the smaller percentage of nitrogenous matters extracted from the malts employed as compared with that in a mash made with a non-gypseous liquor. Later investigations, however, have demonstrated that there is little difference in the amount of albuminoids extracted from a malt by a hard or soft water respectively. While the amount of nitrogenous matters extracted from a malt grist may be the same, whatever the character of the liquor supply, the quality and stability is a point to be reckoned with in considering the ultimate soundness and stability of the finished beer during storage.

The presence of gypsum in a brewing liquor, in amounts varying from 20 grains to 60 grains per gallon is of importance in determining character and quality in ales. The lower proportion, 20-30 grains per gallon, is requisite for a good-class mild ale; the higher proportion, 30-60 grains per gallon or more, is desirable in the production of a pale ale, whether for quick sale or stock brewings. The influence of gypsum is not exerted so much in the mash-tun as in the copper. At this stage the presence of gypsum in the brewing liquor facilitates the "break" of the wort, enhances the purging effect of the boil and the efficiency of the hop-back filtration. This effect will be the more readily understood when it is explained that the reaction between the acid phosphates of the malt and sulphate of lime (gypsum) results in the production of a medium of apparent acidity, favorable to the coagulation and subsequent precipitation of unstable nitrogenous matters, derived from the malt in the mashing process.

When gypsum is a predominating constituent of the mashing liquor, the worts "break" well in the copper, clarification is satisfactory in the hop-back, and bright worts are collected in the fermenting tuns. Each of these points have a bearing upon the soundness of the finished beer. Calcium sulphate (or gypsum), moreover, undoubtedly exerts a restrictive influence upon the degree of final attenuation. In some cases this is considered to be a disadvantage, especially when circumstances make it desirable to attenuate one-third to one-fourth original gravity. In such cases, the beers, if brewed with a proportion of sugar, varying from 15 to 20 per cent. of the total grist

or extract, have the qualities of brightness, early conditioning and soundness.

The presence of sulphate of lime tends to yield a dry beer, clean to the palate. Chlorides, on the other hand, tend to increase the fulness and sweetness of a beer, hence these are desirable in a liquor employed for brewing mild ales. Salt, or sodium chloride, is especially useful, both for mild ales and black beers. Calcium chloride, although commonly used, is a constituent which must be condemned, since it conduces to a harsh, bitter flavor in the finished beer.

The presence of carbonates is undesirable in a brewing liquor employed for mild or pale ales. The carbonates of lime and magnesia are mostly eliminated during the preliminary heating and boiling of the mashing liquor. These constituents have little bearing upon the character of the beers brewed unless the supply is markedly calcareous. Of greater import are the carbonates of soda and potash. These, if present in a supply used for brewing mild or pale ales, should be removed by treatment, *i. e.*, by the addition of the proper salts.

For black beers, the presence of alkaline carbonates up to 10 to 15 grains per gallon is a distinct advantage. Waters of an alkaline type, containing this proportion of alkaline carbonates—*e. g.*, the London deep-well supply, have long been noted for their value in producing a superior type of black beer.—("The Brewers' Gazette.")

Utilization of the Nutrient Value of Barley in Brewing.

By M. BUSEMANN in "Zeitschr. ges. Brauw."

The scarcity of foodstuffs, due to the war, has raised the question whether the production of beer is an economical or wasteful application of barley. The author gives evidence to show that brewing enables the maximum amount of human nutritive substances to be obtained from the grain.

Professor Rubner, of the University of Berlin, has stated that: "In brewing, about 70 per cent. of the nutrient matter of barley is obtained in the form of beer, and the rest is fodder for animals. If the barley is used directly for feeding pigs or for the production of other kinds of meat, only about 10 per cent. of the nutrient substances of the grain are consumed by human beings, the other 90 per cent. being destroyed by metabolic changes within the animals."

The average amounts of by-products obtained in brewing, for every 100 parts of barley used, are 5 parts of barley waste, 4 parts of dried malt combs, 26 parts of dried yeast, and 3 parts of other waste matters in a dried form. Dried grains contain about 22 per cent. of protein, 6 per cent. of fat, 43 per cent. of nitrogen-free extract, and 15 per cent. of fibre; their value for increasing the production of milk from cows is now widely recognized, and this applies to male-combs, which contain about 22-25 per cent. of raw protein (including 6-8 per cent. of albumin), 1-2 per cent. of fat, 12-13 per cent. of fibre, and 12-13 per cent. of invert-sugar and maltose. Within recent years the value of dried yeast for foddering purposes has become

recognized, and there is a great and growing demand for it. The author concludes that, taking into account the various products, beers, grains, malt-combs, and yeast, brewing utilizes to the full the nutritive value of the grain.

Oil in Adjuncts—Effect on Beer.

By PHILIP DREESBACH.

This author, discussing the use of starchy adjuncts, like meal, grits, flakes or rice, in the production of beer, points to the fact that brewers declare that practical experience has taught them that the adjunct with lower oil content will make better beer than adjuncts containing higher proportions of oil, and he agrees with them, saying: "The less oil a beer contains, the greater its foam stability, especially of a pasteurized bottle beer. It has been generally observed by brewers changing to Refined Grits or Mazam, or Brewing Sugars, that the worts made with same show a better cold break in the cellar and require less time for clarification in the storage and chip casks which can be ascribed to their practical freedom from albumen and oil. This means a quicker or more complete aging in the cellars, which also lessens any chance for the development of any accidental infection—by all of which the beer will be improved in quality.

"This oil purity of refined adjuncts is used by brewers to effect money savings, and this in two ways:

"1. A larger percentage of the refined adjunct can be employed without affecting quality, because there is less of the desirable malt and hop aroma covered up or lost by the undesirable flavor imparted by the oil of the adjunct. On account of the accompanying albumen purity, the malt can be ground finer and a better peptonization obtained. In other words, as good or better beer can be made with 60 per cent. malt and 40 per cent. Refined Grits or Mazam than with 65 percent. malt and 35 per cent. common grits or meal or flakes, high in oil. As malt is the more expensive material, a change to such refined adjuncts will effect considerable money saving.

"2. On account of these benefits, viz., that the malt flavor and hop aroma become more pronounced and the peptonization improved when using adjuncts free from albumen and oil, the same malt aroma, hop flavor and palatability can be obtained in refined adjunct beers brewed with a somewhat lower gravity. As there is an increasing tendency towards lighter gravity beers with a moderate amount of alcohol, a heavy beer can thus be made more popular, and considerable money saved besides."

LIVING CELLS IN VERY OLD CULTURES OF BOTTOM-FERMENTATION BEER YEASTS. By H. Will in "Zeitschr. ges. Brauw." The author has previously published observations respecting the longevity of yeast in the dry state, in 10 per cent. sucrose solutions and in gelatin cultures, and the present paper relates to cultures in hopped beer wort of 11–12 per cent. Balling made 17–18 years ago, and kept since then in Pasteur flasks, with as little disturbance as possible, in a cellar at 10–13 C. A number of the cultures still contained living cells. These did not contain spores, but in most cases they were found capable of sporulating after being cultivated for a number of times in sugared wort; the spores formed exhibited the characters of spores of culture yeasts. The author concludes that the longevity of yeast cultures in wort is in general greater than in 10 per cent. sucrose solutions, or gelatin, and that, apart from the actual capacity for resistance of the particular type of yeast under test, it depends on the amount of nutrient matter in the wort.

The Chemical Composition of Commercial Glucose and its Digestibility.

From a Paper by J. A. WESENER and G. L. TELLER.

(Continued from page 234.)

The apparent amount of reducing sugars obtained when calculated as actual starch is less than we should expect from the amount of actual starch present as found by analysis. Whether this is due to the presence of bodies which have not been converted into dextrose or to the destruction of some of the dextrose itself by boiling with hydrochloric acid, or to what extent it may be due to variations incident to the method of analysis, we have not attempted to determine. It is certain, however, that the method of analysis itself is subject to some variations because of the necessity of multiplying any small error introduced in the determination of the dextrose by a large factor, due to the small amount of solution which it is necessary to use for the purpose of reduction: thus the results of the determination are based upon a small fraction of a gram of starch taken. So, too, in the fermentation tests it was possible to use only 200 cc. of the solution, corresponding to 2 g. of the original starch. In determining the amount of starch from dextrose obtained in this way, it is necessary to multiply the dextrose obtained by 0.9 to allow for the water hydration. In the case of the glucose, however, the proper factor to use for this purpose is somewhat uncertain, but may be taken on the average basis of maltose. The factor used was 0.95.

A comparison was made in the fermentation of a number of the starches digested with malt extracts.

Here, as in the case of Mazam, there is a quantity of gas produced in excess of what we should expect to find when we consider the amount of sugars which should normally be produced from the starches by hydrolysis. This is true of all the starches in this comparison except in the case of rice starch where the gas is, for some reason, less.

It would appear from the higher proportion of unfermented solids in the case of the glucose and the complex combinations of enzymes of this character, that there may be in the glucose some form of dextrin which is less readily changed by the enzymes present in this special sample of Taka-Diastase than are those produced in the regular series of changes from the hydrolyzed starch to dextrose. We draw this conclusion from a comparison between the action of the Taka-Diastase and that of malt extract and pancreatin where the hydrolysis is apparently as complete with the glucose as with the starch and from the fact that the different yeasts, which apparently secrete enzymes capable of acting upon starch products less completely hydrolyzed than dextrose, act differently upon the hydrolyzed products of glucose.

Analyses of a large number of malted liquors, including ale, porter, stout, beer, etc., show that in all cases there is a quantity of reducing sugars left in the malted liquor after the fermentation has been completed. This fermentation often extends over a considerable period of time, generally amounting to several weeks. The original wort used for fermentation presumably contains in the neighborhood of 12 to 13 per cent. of extracted matter. After fermentation a greater or less quantity of unfermented matter still remains, which is grouped together under the general name of extractives. The average amount of unfermented reducing sugars calculated as maltose, approximates close to 1.5 per cent. While this is not large when taken upon the liquor itself, it still is sufficient to amount to about 0.5 oz.

per quart of malt liquor, and when calculated upon the total extractive matter it is from 18 to 30 per cent of the amount present.

Summary and Conclusions.—Commercial glucose is a complex body of viscous consistency, running about 42 to 45° Bé. and containing from 80 to 85 per cent. solids and 15 to 20 per cent. water. It is nearly water-white and possesses a mild, sweet taste. The solids are composed almost wholly of sugar and dextrans, a minor portion consisting of a trace of mineral matter. The ash, present to the extent of mere traces, consists of mineral salts, including phosphates, sulfates, chlorides and carbonates, chiefly of sodium and lime. Tests for arsenic and other poisonous metals show these not to be present. Nitrogenous substances are present as a mere trace, chiefly as protein bodies, amounting to about 0.06 per cent.

It has been quite well established in the chemical literature that commercial glucose consists of dextrans and reducing sugars. Some authorities hold that the reducing bodies consist almost entirely of maltose, while others hold that they are a mixture of maltose and dextrose, together with some unknown unfermentable substance which has been called "gallisin" by some and "iso-maltose" by others.

In our work we have determined that the fermentable reducing sugars are a mixture of maltose and dextrose by calculations based upon their quantity as determined by reduction and upon the amount of gas developed by fermentation with yeast. The amount of gas thus produced is too large to allow the fermentable sugars as determined by reduction to be calculated wholly as dextrose and too small to allow their being calculated wholly as maltose. With different lots of glucose the relation of the maltose to the dextrose and the amounts of each will vary to some extent. Determination on two samples show 11.7 and 17.2 per cent. of dextrose and 22.9 and 16.4 per cent. of maltose, respectively.

Further researches lead to the conclusion that at least three reducing bodies are normally present; namely, maltose, dextrose, and a third, which is less readily fermentable by ordinary bakers' yeast, but which may be made fermentable by the action of certain enzymes, especially those present in pancreatin, Taka-Diastase and malt, as well as by the hydrolytic action of dilute hydrochloric acid under the influence of heat. These difficultly fermentable reducing bodies amount to about 14 per cent. of the total glucose when calculated as maltose, or 8 per cent. when calculated as dextrose. The unfermentable carbohydrates residue remaining after removing the maltose and dextrose by fermentation consists of those bodies commonly recognized as dextrans. These, like the unfermentable reducing bodies, when subjected to hydrolytic action by diastase, result in products which will under suitable conditions undergo almost complete alcoholic fermentation. When they are subjected to the hydrolytic action of hot dilute acid, applied either to the unfermented glucose or to the residue left after the glucose has undergone alcoholic fermentation, all of these bodies become wholly fermentable.

A study of the action of hydrolytic agents and yeast on carbohydrates entering into common foodstuffs, such as potatoes, breakfast cereals, bread, and so forth, and upon pure starches, such as are found in these various food products, has been made in comparison with parallel experiments on glucose. In these experiments it was found that the carbohydrates of glucose agree closely in gas production with the carbohydrates of the more readily digestible foodstuffs, such as white bread, breakfast cereals and potatoes. It was also found that these several carbo-

hydrates when acted upon by isolated ferments and yeast, as in the experiments conducted, yield variable but appreciable amounts of unfermentable carbohydrate products, just as the mashing of cooked starch with malt diastase in making of malt liquors results in a liquor which after fermentation contains appreciable quantities of such unfermented and apparently unfermentable carbohydrate products.

The fact that commercial glucose, when it is treated with diastase and then subjected to yeast fermentation, is almost wholly converted into alcohol and carbon dioxide goes to prove that it consists of products that are wholly assimilable and, therefore, it furnishes a food to the body of a sugar nature. In this respect it is a more concentrated and at the same time a more readily assimilable food than are most of the carbohydrates belonging to the ordinary foodstuffs which first have to undergo cooking and then complete hydrolysis by the action of the digestive enzymes before they can be utilized by the body. In this respect glucose, pound for pound of dry weight, will furnish at least as much energy as does cane sugar.

NEW METHOD OF FIREPROOFING WOOD. The air-dry shingles are just impregnated with a solution of borax and dried in the stove until their moisture content does not exceed ten per cent. After this they are impregnated with a solution of zinc chloride and again dried. The zinc chloride forms a deposit of zinc borate in the pores, and zinc borate being insoluble resists exposure to running water and exerts a fireproofing effect by fusing at a high temperature and forming a protective coating on the wood fibres. The treatment requires a somewhat costly plant, which has to include provision for impregnating the wood under high pressure, consequently it would only pay to employ it on a large scale. But it is said to be very successful, for although in a fierce fire the shingles will burn, they do so without flame, thereby avoiding the danger caused by sparks.—(J. S. C. I. 1917.)

FOAMING CAPACITY OF BEER. It is a fairly common complaint that modern low-gravity beer is deficient in head-forming capacity, and we fear that the complaint is not altogether without foundation. But surely there should be no mystery about it, since permanent head-retention depends upon gas and viscosity, and many modern ales happen to lack one or the other necessity. To ensure that a well-fermented beer of moderate gravity shall form and retain a more or less permanent foam or head as drawn for consumption, the brewer needs carefully cured and absolutely dry malt to work with. Such material yields the maximum proportion of intermediate substance, whilst good hops and steady cask-conditioning power of racked produce materially assist in promoting the desired end. Partial or limited decoction and pressure boiling of worts also constitute steps that contain enterprising firms have taken, not only to ensure the necessary head-forming capacity of low-gravity produce, but with the object of securing advantages in a commercial sense. If we consider for a moment we shall realize that in these days of bad trade and delays in connection with transport, malt suffering to some extent from slackness is almost bound to be employed, with the result that limpid and unduly saccharine worts are collected, and, as a direct result, beer of limited gaseous character frequently shipped to the consumer. The retorrefication of malt prior to grinding is one way out of the difficulty, and some of the finest ales from the point of view of condition and foaming capacity are produced in breweries where retorrefication of malt and pressure-boiling of worts happen to be the rule.—(London "Brewers' Journal.")

Ash Process for Treating Beers.

Paper read at a meeting of the San Francisco District, of the Master Brewers' Association of the United States,

By A. DOLENZ, Supt. Oakland Brewing and Malting Co., Oakland, Cal.

Some years ago, as a result of extensive advertising, and favored by the scarcity of good Western bottle beers, large Eastern breweries established out here a good market for their product.

Since then some of these very popular brands disappeared almost entirely. The most successful among the survivors is one known for its exceptional keeping qualities, which retains its brilliant appearance after long storage, and at low temperatures, to which a large percentage of bottled beer is exposed.

From then on, a demand increased rapidly for beers that need not be exchanged after a transcontinental trip in the refrigerator of a dining-car, or turn hazy after an even much shorter exposure to low temperatures.

About that time the Master Brewers' Association of the United States repeatedly offered prizes for the solution of the problem of chill-proofing bottled beers.

That a certain kind of albumenoids were the cause of the trouble was an established fact, but why these mischievous ingredients insisted upon coagulating after pasteurization in an otherwise perfect beer, is perhaps their own secret until today.

Special mashing methods, sugar kräusen, high grade and mostly also high priced malt, attenuators in the chip casks, freezing again before filtering and other carefully attended details, did not reward the experienced, conscientious and hard working Master Brewer with the desired results.

Scientists who made fermentology their life work finally made discoveries which made a chill-proof bottle beer possible, but still the field remained open for perhaps more positive and more unfailing remedy.

At the same time, the wine industry had similar problems; the white wines would, in spite of clear filtration, and otherwise correct treatment, change to a brownish tint, always accompanied by an unfavorable influence in bouquet and taste.

Fruit canners had their trouble to contend with. Tomatoes, berries, as well as green vegetables would lose their original color in storage, and especially after pasteurization, and in the same measure change their flavor, much to the detriment of the value of the product.

The Pure Food Law prohibited artificial coloring, while the flavor destroyed by the decomposition of certain ingredients could never be reclaimed.

These problems were of higher importance in California than in other States, on account of its vast wine and fruit canning industries.

Highly satisfactory results in overcoming these difficulties have of late been obtained along these lines through extensive research work, and scientific experiments, under the leadership of Mr. Charles Ash, Chief Chemist of the California Wine Association, Consulting Chemist of the Fruit Canners Association of California, the Hawaiian Pine Apple Canneries, etc., and Member of the Gould & Ash Laboratories.

I had the good fortune to follow the experiments from the start, and later introducing them on a larger scale, established their practical value for the first time on November 22nd, 1915.

Since it is the aim of every modern and progressive Master Brewer in his own interest, as well as in the interest

of the establishment he is connected with, always to be on the alert for new improvements affecting either the cost of production, or reaching for a higher grade in quality, I felt it my duty to draw the attention of my friends and colleagues to this latest achievement in the science of brewing, and present the Ash Process for your consideration.

Rate of Turbidity of Beverages Containing Maltose, Glucose, or Maltose and Glucose.

By A. W. HOMBERGER and C. S. MARVEL.

These authors point out that most of the types of haze or turbidity in beer have been attributed to the separation of particles of nitrogenous matters. They have made experiments to ascertain the behavior, on storage, of liquids free from nitrogenous substances, but containing alcohol and sugars, as in beers, the amounts ranging from 0—3 per cent. alcohol and 1.25 per cent. sugar, in some only dextrose, in others maltose, and again in others equal amounts of both. The liquids were prepared by dissolving the sugar in boiling distilled water, then adding the alcohol, and at once transferring to bottles like those used for beers, which had previously been heated for about an hour in boiling water. One series of bottles were closed with paraffined corks and sealing wax while still hot; another series were chilled in an ice oven and carbonated, and then stoppered and sealed. All were stored for six weeks. Only those containing maltose alone as sugar constituent remained brilliant. Those containing dextrose, whether alone or with maltose, and irrespective of the amount of alcohol present, exhibited turbidity or sediment, and in a few cases distinct mould growth was visible.

In some cases turbidity began to appear after only a few days' storage. The sediments, when examined under a microscope, showed an organized structure resembling the mycelium of a mould, and, when transferred to nutrient solutions, they rapidly gave rise to growths of the common green mould, "*Penicillium glaucum*." The authors conclude that the precautions taken to ensure sterility did not suffice to destroy completely spores of this mould, and that the turbidity, where it appeared, was due to partial development of the spores.

From the fact that turbidity appeared only in the liquids containing dextrose, it is concluded that this sugar, unlike maltose, acts as a chemical stimulus to spores of "*Penicillium glaucum*," enabling them to develop to some extent even in absence of nitrogenous and mineral substances.—("Journ. Am. Soc. Chem.")

MAGNESIA SALTS AND LACTIC FERMENTATION. Having already found that all metallic salts, and those of magnesium in particular, have a favorable influence on lactic fermentation, Richet extended his experiments with increasing quantities of magnesium chloride, and obtained optimum results with 12.5 grms. of $MgCl_2 \cdot 6H_2O$ per liter.—("Comptes rendus.")

REMOVING RUST FROM IRON PLATES. By F. W. Watson ("Jour. Chem. Met. and Min. Soc., S. Africa). A finely crushed mixture of 2 parts of sodium bisulphate and 1 of common salt is wetted until cohesive, applied to the iron plate, and left on until the plate is clean. The action is much more rapid if the plate is scraped every two or three hours and scrubbed with a wire brush and water, and the treatment repeated. When clean the plate is well washed, finally with an alkaline solution, and dried quickly.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

April 15th to May 15th

The total number of samples received during last month were classified as follows:

Malts	209
Malt Adjuncts	38
Colorants	11
Hops	9
Grains	5
Waters	11
Worts	59
Yeasts	212
Beers and Ales.....	281
Temperance Beverages.....	31
Fuels	18
Miscellaneous	43

927

Malts.

Among the Malt samples are found an increasing number made from California barley, these California Malts, however, show a lower average yield than for any period previously reported. 146 Western Malts showed an average moisture of 4.30 per cent. with an extract of 68.8 per cent.; the average yield on dry substance was 71.9 per cent. The average moisture in 59 samples of California Malt was 4.05 per cent., and the average yield 70.7 per cent., the extract on dry basis averaged 73.6 per cent. Three samples of Caramel Malt and one sample roasted malt were satisfactory in every respect. The three samples of Caramel Malt were made from California barley.

Malt Adjuncts.

Twenty-nine samples of raw and prepared cereals were analyzed; these samples comprise the following:

Corn Grits.....	15
Corn Meal.....	7
Refined Grits.....	5
Rice	1
Cereal Flakes.....	1

With the exception of high moisture in three samples of Grits and two of Meal, these materials were all considered good brewing materials. Nine samples of brewing sugars and syrups were all of satisfactory composition.

Colorants.

Eleven samples of malt and sugar colors were tested as to their solubility in beers under various conditions and all were found to be satisfactory.

Hops.

The majority of these samples were Pacific hops of 1916 crop; with the exception of two samples containing an appreciable amount of mouldy cones. They were all in sound condition and of satisfactory brewing value. One sample of New York State hops was considered a good brewing material.

Grains.

Four samples of wet grains were analyzed. The chemical composition of these showed, that in every case the exhaustion of the grains had been carried out sufficiently. One

sample of dried brewers' grains showed a normal composition and feeding value.

Waters.

Eleven samples of water were examined in the Biological Laboratory in order to determine their fitness for cleaning purposes. A complete chemical analysis was also made of three samples.

Worts.

Forty-nine samples of lager beer worts and seven samples of ale worts were of normal and satisfactory composition. Three samples of wort for Temperance Beers were found well suited for their purposes; the average gravity of these worts was 6.1 deg. B.

Yeasts.

The yeast samples received comprise 91 samples of Ale Yeast and 121 samples of Lager Beer Yeast. Fourteen samples of Ale Yeast contained rather large amounts of lactic acid ferments, while the remaining seventy-seven were in every way satisfactory. Four samples of Lager Yeast were received from one Pure Yeast Department. These were all entirely free from any infection and in superior condition generally. Twenty-one samples of brewing yeasts were infected by Sarcina and Rod Bacteria and were considered unsuited for pitching purposes. Ninety-six samples were in satisfactory condition.

Beers and Ales.

All samples of both Lager beers and Ales were examined in the Biological as well as Chemical Laboratories. The chemical compositions taken as the average of 41 samples of Ale and 62 samples of Lager beer were as follows:

Ales.

Original gravity	13.10 deg.
Alcohol by weight.....	4.22 per cent.

Lager Beers.

Original gravity	11.7 deg. B
Alcohol by weight.....	3.35 per cent.

Temperance Beverages.

The number of samples under this heading have increased quite considerably. Thirty-one samples were analyzed and showed the following average composition:

Original gravity	6.0 deg. B
Alcohol by weight.....	0.38 per cent.
Alcohol by volume.....	0.47 per cent.

Fuels.

Eighteen samples of Coal were analyzed. Ten of these contained excessive amounts of ash, and only eight samples were considered satisfactory fuels.

Miscellaneous.

Under this heading are classified 43 samples comprising mainly filtermass materials, cleaners, pitch, lubricants, isinglass, etc.

COPPER SULPHATE TEST FOR ACTIVE CARBONIC ACID. By H. Winkler, in "Zeitschrift für angewandte Chemie." This author finds that his copper sulphate test is not applicable to waters showing a temporary hardness exceeding 30 degrees, since these waters, even when supersaturated in the undiluted condition, exhibit active carbonic acid after dilution. On the basis of the known observation that two drops of copper sulphate solution give an immediate turbidity in 100 cc. of water with 2-20 degrees of temporary hardness, the author has drawn up a table of the approximate quantities of active carbonic acid in such water, and also in waters with 20-30 degrees of hardness (the last-named being first diluted with an equal volume of distilled water free from carbonic acid). The determinations must be performed in flasks which have been washed clean and rinsed out with hydrochloric acid after each test.

Air Compressors in Breweries.

By MAIKRANZ

An air compressor forms part of the equipment of every large brewery, and usually a second one is kept in reserve. Some are constructed with different forms of slide-valve gear, but among the more recent are many with so-called plate-valves. These are round steel plates about 1 mm. (1-25th inch) thick mounted in various ways by different makers. The compressors with slide-valve gear are slow-running and usually double acting, whilst those with plate-valves are designed for higher speeds and are single acting. Where a higher pressure than four atmospheres is required it is advisable to effect compression in two stages, cooling the air after the first stage; otherwise the heat produced by the single compression would be so great as to reduce the efficiency of the machine considerably.

In these machines the walls of the cylinder must be well lubricated, since the air becomes very hot and the number of revolutions usually exceeds 100 per minute. The lubrication of compressors in breweries is of particular importance, since very often the compressed air afterwards comes into contact with beer, and particles of oil carried by it might affect the head-retaining power of the beer. Many devices have been used to avoid this, and with more or less success. In some breweries glycerin oil is used for lubricating the cylinder. This practice, however, has several drawbacks, which become more serious the lower the boiling-point of the glycerin and the higher the compression. In consequence of the heat produced by compression the glycerin becomes thick and sticky, and in slide valve machines this results in obstruction of the air canals; the resistance to suction increases and the delivery decreases, thus causing an unnecessary expenditure of power, and if not attended to the machines may even cease to operate at all. In the case of compressors with plate-valves a crust forms in the valve casing and the resistance to suction increases; if the compressor is controlled by an automatic regulator which holds the suction valve-plates open in the event of the pressure exceeding a certain maximum, this regulator may cease to work properly. Where glycerin is used for lubrication it is very necessary to clean out the compressor frequently. A slide-valve compressor usually requires cleaning less frequently than one with plate-valves, but the cleaning of the latter is simpler and occupies less time. The apparatus used for introducing the lubricant into the cylinder is an important item. There are different kinds of oil-glasses; some after being filled are closed tightly, and others are kept under the working pressure which obtains within the cylinder. These oilers cannot be employed where there is an automatic pressure regulator which closes the suction pipe if a certain maximal pressure is exceeded, for in such a case a vacuum would be produced in the cylinder and all the oil would be drawn in. An oil press, like those used with steam cylinders, is a convenient apparatus, ensuring a uniform supply when once properly adjusted.

For a complete removal of oil from the compressed air, the latter is passed through a spacious air chamber, in which, owing to its reduced velocity, it deposits some of the particles of oil carried by it. This chamber is fitted with a draw-off cork at its lowest point, for the deposited oil. An oil-remover, like those used for steam, may be installed between the compressor and the air-chamber, but complete elimination of oil cannot be effected by this means. After leaving the air chamber, the air may be passed through a holder filled with filtering charcoal, not too fine, and then through cotton wool and permanganate solution. In many brew-

eries it is finally passed through cotton wool soaked in disinfectant. With such a plant the air may be obtained perfectly free from injurious matters from the compressor, provided the plant is kept in good order, the materials being renewed when necessary.

It is advisable to install a cloth filter in the suction pipe of the compressor to retain particles of dirt, which would otherwise be trapped by the oil on the walls of the cylinder, forming a pasty mixture. The pipe, where such a filter is inserted, should be wide enough to prevent the filter offering much resistance to the air. The size of the filter is, of course, determined by the intake of the compressor, which will differ according as it is single or double acting.

A convenient method of working in breweries is to use a small compressor for racking purposes where the pressure required is only a fraction of an atmosphere, and for this glycerin can be used as lubricant, since the disadvantages mentioned above do not apply to low pressures. A separate compressor, lubricated with air-compressor oil, can be used for all other purposes requiring a high pressure.

Deterioration of Aluminium.

By P. PETIT, in "Brasserie et Malterie.

Since the adoption of high purity for the construction of vats, cases of corrosion have been rare, but it sometimes occurs that one or two vats in a brewery show signs of attack at isolated points, and, in course of time, disintegration becomes more and more serious, and may lead to perforation of the metal. The corroded spots are most frequently observed on the floors of vats or on the walls at the level of the surface of the wort; corrosion starts on the inner surface of the vats.

Such cases may occur even with very pure aluminium, and chemical analysis throws no light on their causes. Microscopical examination of very thin sections of the metal in the neighborhood of the affected points reveals the presence of swellings or minute heaps of scoriæ, and the metal appears covered with a network of fissures.

Le Chatelier has published some experiments made on aluminium, which had been found to disintegrate rapidly in course of use. He found that aluminium subject to this change developed microscopic cellular markings when exposed for a few minutes to very feeble electrolytic action, but that metal not liable to disintegration did not. The markings were due to minute particles of the metal becoming detached under the feeble influence of the electric current. It has been found that disintegration of aluminium without chemical action only takes place when the metal has been worked cold, and not heated afterwards. A subsequent heating to 450 deg. C. (842 deg. F.) is sufficient to remedy this defect. Naturally, all electrolytic action favors the disintegration of cold-wrought aluminium, and, as beer contains substances which are acid and basic at the same time, it may have an undesirable influence in this respect.

The phenomena studied by Le Chatelier are no longer observed in modern breweries, no doubt because manufacturers now take care to heat the sheet aluminium which they use for vats. The cases of local corrosion, are comparatively rare, and the possibility of their occurrence does not constitute a serious obstacle to the use of aluminium in breweries. The inconvenience arising from them might be minimized, if the manufacturers of vats were required to guarantee to repair any vats which showed such local corrosion within the first two years of use. It is a comparatively simple matter to cut out a small piece of defective aluminium and replace it by sound metal by autogenous welding.

Cold Stores in Small Breweries.

By FRED. M. MAYNARD.

Although brewers' engineers naturally favor the "quick" system of chilling in the production of "non-deposit" bottled beers, the consensus of opinion among practical brewers is that the most stable and permanently brilliant article is secured by the "slow" process, which has the further advantage of not robbing the beer of so much of its fulness; wherefore when quality is placed before expediency, and especially where slow chilled beers have to be competed against, there can be no question but that the latter system is the right one to adopt. A factor, however, which in many cases seriously militated at first against the success of the "slow" system, and which in consequence was used as an argument in favor of the "quick" process, was the expense incurred in refrigerating power required to bring the beer down to a sufficiently low temperature when it was contained in casks or wooden vats, and as frequently the beer was never properly chilled owing to the capacity of many cold chambers in those days being quite inadequate, the cold stored beers failed to evidence any superiority, even if they did not prove actually inferior to those produced with a quick chiller. This state of affairs has, however, been totally revolutionized by the introduction of the glass enameled steel tanks, and if in many of the smaller chilling chambers of to-day these were substituted for casks, much cold storage room would be released for other purposes; at the same time considerable waste of beer and labor and wear and tear of the fabric of the cold chamber would be eliminated, the latter being inevitable when casks are being continually rolled in and out. Tanks further make for uniformity, which separate casks most certainly do not, for it is very rare that every cask will "condition" or even chill equally.

An error often made in many installations is not leaving room in the cold room for the filter, which is the only proper place for it as it is most essential that the temperature of the beer shall not rise until it has passed through this apparatus, otherwise the effect of the previous cold storage is to a certain extent nullified, while as soon as the beer becomes warmer, gas is released, which, while causing fobbing at the filling machine, represents a distinct loss of condition which has been obtained at the expense of both time and priming. A very essential though small item in the construction of a cold room of any description, but particularly in the smaller ones, is the "air lock," which is a small lobby formed with an inner door opening into the cold room and an outer one giving access from the bottling store. The object of this is to prevent the egress of cold air from the chamber, which would otherwise occur each time a single door was opened. With an air lock the cold-room door is not opened until the outer one is shut, and both are kept closed. The lobby need, however, be only just large enough for the filter and a man to stand in when the inner door is being opened, while in order that the dimensions of this ante-chamber may be as small as possible an upright drum filter is to be preferred to the long frame type, being also more easily manipulated into and out of the cold room. In cases where, perhaps by reason of its importance not being realized, an "air lock" does not exist, it is usually a very simple matter to construct one, and as its cost is as nothing compared with its practical value, the desirability of its addition may well be urged.

Apart, however, from the quality of the resulting article, there are other very great subsidiary advantages accruing from the possession of a cold chamber, especially in the less important establishments where separate cold stores

for hops and yeast would be out of the question, for the value of a low temperature in which to store the pitching yeast is inestimable, while another valuable method which materially assists in keeping the barm in good fettle through the hot weather is to cool it immediately it is skimmed, for which purpose in some breweries a block of ice is laid in the shoot from the skimming vessel to the barm back over which the yeast flows, whereby the rough heat is at once removed. Further, if buckets of ice are suspended in the yeast they will prove much more effective than attempters as a means of reducing its temperature; in fact, the latter are of practically no value whatever in deep receivers. Now, with a cold store it is so easy to arrange for a small ice-making tank fitted with a few moulds and containing a good volume of brine which also serves the purpose as an excellent storage of cold, and if this tank forms part of the roof of the chamber, which it should do, it will conduce to a very equable temperature being maintained in the room, and should entirely obviate the necessity of running the ice machine at night or over the week-end.

Again, it is fairly generally understood that hops which have been "cold stored" should be used well within a fortnight after being removed from the low temperature, since they deteriorate more rapidly on exposure to normal or summer atmospheric conditions than do those which have not been kept in the cold; but it is not every small brewery where a whole pocket of perhaps the finest hops can be used up in anything like that time, but if room can be found in the cold chamber for them they can be kept in cut for as long as is required without the slightest harm coming to them.

It will therefore be seen that whatever apparent advantages the "quick chilling" process offers, a cold store will always prove the best investment, for the latter need cost no more than the quick chiller, while there will be very little in the relative prices paid for tanks or heavy reinforced and enameled casks, while, as already stated, the gain in reduced labor and waste is a continuous one, more than paying the interest on the slightly larger capital sum represented.—(London "Brewers' Journal.")

FORCING PEOPLE TO BREAK LAWS. "I contend that Prohibition does not prohibit, for here are the facts; but you say to me: 'If Prohibition does not prohibit, why are you fighting Prohibition?' I am opposed to it because it aims to regulate my personal habits and take from me my liberty; would force me to have a contempt and disrespect for law and regulation; foster in me hypocrisy and cowardice; would raise my taxes and would destroy my home and business."—(C. C. Donovan, Santa Rosa [Cal.], Hop Merchant.)

EFFECT OF SMALL AND BRIEF ELEVATIONS OF TEMPERATURE ON THE PROGRESS OF FERMENTATION. By C. Richet and H. Cardot in "Comptes rend. de l'Acad. des Sciences." In experiments on lactic fermentation the authors studied the effect of heating the fermenting liquids for a few minutes at temperatures between 54 deg. and 58 deg. C., and observed a crippling effect on the production of acid which lasted throughout the subsequent fermentation, and which varied according to the temperature and duration of heating. Heating for 7—8 minutes at 54 deg. C. at the commencement of fermentation reduced the production of acid by 34 per cent. A vigorously fermenting liquid, heated for 2½ minutes at 58 deg., produced subsequently only 57 per cent. of the amount formed in a control liquid which had not been heated; and in another case heating for 5 minutes at 58 deg. reduced the subsequent acidification to 5 per cent. of that in the control.

The Storage of Surplus Casks.

As a result of the possible curtailment in beer output the major portion of brewery cask-plant will be placed out of use and as the empties are returned from the trade they should, as far as labor facilities permit, be immediately cleansed, treated where necessary to the usual general remedial measures, and subsequently stored until again required. It is customary in some breweries to unhead all casks that are to be set aside for storage and subject them to a rigorous scrubbing with effective detergents before they are sterilized with steam and finally passed out. Whether this method of prior treatment should be carried out depends upon the possibilities of a brewery in respect to storing in the open air or under cover. The "open air treatment" is as satisfactory in its general effects on timber as the results obtained when oxygen is applied as a preservative and restorative in other directions, and assuming that an open and protected space is available, this system is preferable. The casks are stacked bungs downward with the heads out, to facilitate a free passage of air "from a' the airts the win' can blow," and the entire inner surface of the wood should receive a preliminary spraying with bisulphite of lime. Negligent stacking may result in harboring rain water in the bulge of a cask, rendering at least that portion musty, and when no pains are spared to secure rigid tiers that will withstand a gale and care is exercised in having the casks well and truly laid, the additional supervision and labor involved will be found to have been worthily expended. By storing casks in the open air they receive the beneficial influence resulting from the action of constantly changing atmospheric conditions, which in course of time penetrate to the innermost fibre of the timber. Exigencies of outdoor space may not, however, permit of the adoption of the method described and recourse must be made to the alternative system of storage in cellars or in the various maltings which, like the casks we are dealing with, are also out of use, and the ground floor of these buildings are admirably adapted for storage purposes. Although it is necessary when storing in the open air to have the casks unheaded, the heads need not be removed when surplus casks are placed away indoors. Indeed such a procedure in times like these involves distinct disadvantages. Under normal circumstances unheading absorbs a considerable amount of labor and casks that would have remained efficient carrying vessels for years may be rendered more or less unfit for further active service when placed in the trade after unheading and heading up, which, while necessary in exceptional instances is the surest way of ascertaining the weak portions of a cask. Labor is, we need hardly add, at a premium and the washing machines now installed in the majority of breweries operate in a manner sufficiently effective to obviate the necessity of unheading casks, except those which, through sheer neglect, or as a result of ignorance, require unheading for scrubbing. There are brewers still to be found who believe in the practice of storing surplus casks in the actual condition in which they are returned to the brewery in the belief that the "bottoms" contain preservative properties. Whatever antiseptic value may remain in cask hops, this is certainly more than counterbalanced by the presence of acid forming bacteria, and sedimentary yeasts and moulds which swarm in the deposit or sludge of casks where they find the nutrients necessary for a suitable breeding ground and owing to the porous nature of the wood, the casks may ultimately become hopeless "stinkers." The most satisfactory method of storing surplus casks indoors is to wash, sterilize, and pass them out in the same thoroughly sweet and sound condition which

should, and of course does, obtain when the casks are required for racking purposes. Bisulphite of lime is then added in quantity sufficient to cover the entire inner surface of the casks, which are immediately shived and tap-corked, care being observed that both shives and corks are of good quality. Store them in a cellar or maltings, the ventilation of which can be regulated and where the atmospheric conditions, without being damp, are more of a humid than a dry character. In damp surroundings the hoops of the casks will corrode and the development of fungoid growths will effect the timber, while, if placed where a strong current of air circulates only at intermediate periods, the wood will shrink, allowing air to reach the inside of the casks where it may remain stagnant and produce mould. Oxygen, as already explained, is a natural preserver but it must be present in abundance and be continuously in that state of circulation which can only be obtained by storage in the open air. The ideal inside conditions are met when it is possible to store casks in an environment where there is a steady but low flow of air in which a certain amount of moisture can be regarded as being always present. Stored under these conditions, casks will remain sound and sweet for at least twelve months and can then be replaced direct into the trade after being washed out and steamed in the usual manner. Prior to storage a record should be taken of the date stored and the numbers of each cask should also be registered; particulars which will facilitate the replacement of all surplus empties into the trade at any moment required in their proper order, arranged from the various dates of "internment."—(Brewer & Wine Merchant & Brewers' Guardian.)

Principles of Modern Kilning.

By P. PETIT in "Brasserie et Malterie."

The evolution of the malt kiln is instructive. Originally the kiln comprised a floor, situated above a coke grate, and surmounted by a low brick chamber, covered by a roof with a short chimney; the grain was often loaded to a relatively great depth. Later, the height of the kiln underwent a progressive elevation, so that the draught became more powerful, and the floor was raised to a greater height above the fire. Maltsters were recommended to load the grain in much thinner couches than previously. Then the chimney was lengthened, and the height of the chamber above the floor was reduced; below the floor a chamber was installed, in which the hot gases from the fire could mix with cold air drawn in through adjustable dampers. This transformation was made in response to a demand for pale malt. The use of radiators for heating was introduced shortly afterwards in order to avoid the flavor of the malt being affected by the gases from the coke. After a short time, kilns were constructed with two floors, one above the other, and, while deep couches were avoided, except for dark malts, the height of the kilns was increased more and more, in order that the malt could be dried at a low temperature. Finally, kilns with three superposed floors were built. Though very costly, these presented no advantage over preceding types, but rather the reverse. Their height became excessive, and since, in spite of this, the natural draught proved insufficient, it became necessary to install a ventilating fan above the top floor, but the circulation of air was not thereby rendered satisfactory.

Following other lines, Saladin, 20 years ago, studied a one-floor kiln with couches 18—20 inches deep, adopting artificial draught with recuperation of the waste heat. The first apparatus of this type is still in existence at the Fère-

Champenoise malthouse. Saladin encountered great difficulties in the mechanical turning of such deep couches of malt, the blades of ordinary turners being frequently broken or bent, but, finally, the apparatus worked correctly and economically. Heating was effected by means of radiators, and the height of the kiln was considerably less than that of other types, but the recuperation of waste heat by employing over again a part of the hot air was always troublesome to regulate. Hence the idea of suppressing this mechanism, by adopting two floors, one above the other, with a ventilating fan situated above the top floor or in the chimney; at the same time the use of malt-turners of helical form fixed vertically enabled the depth of the green malt to be increased to 24—27 inches. Kilns of this type have given satisfaction, as regards the quality of the malt produced and the consumption of fuel.

An intermediate system was also employed, in which the ventilator was used only during the first period of kilning, i. e., whilst the malt was being dried at low temperatures, the rest of the process being carried out with a natural draught.

From a study of the working of the types of kilns referred to above, the following facts emerge:

1. The kiln gases are most completely utilized when the malt is spread in thick couches, for then the gases emerge more heavily charged with moisture than when thin couches are employed.
2. The high velocity of the air current necessary with very moist malt is not required with half-dried malt, and, for reasons of economy, it is advantageous to reduce the velocity in the latter case.
3. The drying of malt which is already half-dry can be well carried out, with improvement to the aroma of the product, with a feeble draught, i. e., with a low kiln or a chimney, the draught of which can be regulated by dampers.
4. The turning of malt in thick couches is unnecessary, if there is a vigorous circulation of air until the malt is dry to the couch, and allows air to penetrate the couches freely.

The observation of these principles leads to a new and interesting conception of the malt-kiln. The kiln need only consist of a simple casing with a metallic floor, surmounted by a chamber of brick or masonry provided with a short chimney. The floor need only be a short distance above the ground; this would reduce greatly the cost of construction. A radiator, or even a coke fire, situated at the side of the kiln, and a ventilator for producing an upward current of air through the goods, are all the installation required, and the malt can be loaded to a great depth, up to 2½ feet. During the first stages of kilning the ventilator is kept in operation and the temperature of the air arriving at the floor of the kiln is properly regulated; if this temperature is about 110—120 F. the air will leave the kiln saturated with moisture and almost cold. When the malt is half dried, and the air leaves the kiln in a hot and relatively dry condition, this air can be drawn from the chimney by a second ventilator and, together with a certain amount of fresh air, be again heated by the radiators or sent to the coke fire; it can be utilized for the early stages of kilning in a second kiln. The ventilators employed should, of course, be under control as regards their rate of working. To intensify the aroma of the product, the chimney may be provided with adjustable dampers so that during the later stages of kilning the air current can be reduced to any desired extent. The production of dark malts could be carried out on similar principles.

This mode of working represents a considerable saving in the prime cost of the plant, and where a supply of electricity is available the ventilators can be run all night independently of an engine. The power required is not great, however, and where necessary a small gas or oil engine, requiring little attention, could be run specially to operate the fans. The saving effected by the method of kilning described above becomes still greater when the kiln is heated by direct fire (instead of radiators), or when waste gases from a boiler furnace can be utilized for heating. After the war the use of coke will become much more general than was customary before, owing to an increased demand for coal-tar products, and it may become possible to employ the waste gases from coke-fed boiler furnaces for heating kilns.

Non-Deposit Beers.

Although much has been written on this subject one still frequently hears a considerable difference of opinion expressed as to the superior merits of respectively the quick and slow chilling systems as well as the desirability of ageing the beer prior to treatment.

Naturally, much depends upon the class of trade to be catered for, but generally speaking undoubtedly the best all-round results are obtained by conditioning a new beer in bulk and slowly chilling it, for this method of procedure seems to hit the happy medium, in that it is not so costly as the more lengthy maturing process, nor are the beers so likely to develop a haze in so short a time after bottling, as is the case with those treated in the instantaneous or quick chilling system.

In districts where there is no competition worth speaking of the latter system doubtless yields sufficiently satisfactory results; in fact, it may be noted that at a large brewery in the West, beers brewed, say, on a Monday were sent out in bottle on the next Thursday, i. e., within four days from mashing! Such a result could obviously only be obtained by the use of very large percentages of foreign grain and sugars, but even then the fermentation can scarcely have been of a very thorough or purging character. On the other hand, it is stated that a beer well brewed and matured in wood for a month to six weeks at ordinary temperatures will exhibit a superior flavor, which is only to be expected, while it will also take the gas better; yet if the latter is other than that produced during fermentation it must to a certain extent diminish, if not entirely neutralize, any gain in aroma secured by the lengthy storage.

Again, the extra capital lying idle and the inevitable shrinkage in store, seriously militate against this more lengthy method of treatment.

Therefore, taking all these facts into consideration it would appear that the advocates of the conditioning of a new beer in bulk and slowly chilling it are fully justified in their contention, since it is the nearest approach to the simple and natural treatment of a lager beer, which yields a perfectly clear fluid well saturated with its own natural carbonic acid gas, and in which the desirable alteration in residual extract has to a great extent taken place, while the throwing out of solution of the hop resins (said to be the cause of indigestibility of top fermentation beers with some people) and their precipitation will also have been effected. Further, by the gradual settlement of all suspended matters many undesirable organisms are carried down, which, owing to their minute size would by other methods be carried through the filter and produce unsatisfactory results in the bottle; for it does not need many of

such organisms to spoil the smell, flavor, or brilliancy of a bottled beer in which there are no active yeast cells to keep them in check.—(London "Brewers' Journal.")

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

M. A. Your question, while expressed very intelligently, is too broad in its scope to be answered in this column, even if it could be answered at all—which we doubt. Assuming that the action you describe is entirely complete in the mash tub, and is proven to be so by the chemical and physical composition of the boiled, hopped and cooled wort, you would be confronted by the difficulties of the fermentation. We have always maintained this, as you will find by reference to our publications on the subject. The causes of the effect are, in our opinion, not chemical, but physical, and they will only be removed by experimental observations in brewery practice on the large scale.

H. A. C. We have very frequently stated that the moisture in properly dried brewers' grains should never by any means exceed 10 per cent. As to the amounts of protein and fat, it is difficult to fix any limit for any particular case without knowing the nature and respective quantities of the brewing materials employed. We should say, however, from our own experience, that the fat ought not to be less than 6 per cent. and that the protein should be in the neighborhood of 23 to 24 per cent. We do not know of any Federal law regulating the composition of dried brewers' grains.

J. J. Q. If you have the necessary facilities, it will pay you to use the material marked "No. 2." In the first place, because it is practically pure starch, with only a trace of fat and protein, and because long boiling is obviated; and in the second place, because its yield of extract is very high, and it produces beers of very pale color. The main point for consideration is the saccharification temperature of the mixed mashes. For ordinary draught beers, we have found the best results at 55 degr. R. for 20 minutes. We have never heard of any difficulty in drainage. As to the relative cost of the extract obtained, you must determine it yourself from practical use.

P. H. H. A complete answer to your question could only be given in an exhaustive essay on the entire subject of starch and its transformation bodies. It is true that starch is the most important material in the manufacture of beer. It is also true that it is entirely different from sugar, not only in its macroscopical, but in its microscopical appearance, and in its behaviour towards water, and such chemical reagents as iodine and Fehling Solution. In its natural state, starch is insoluble in cold water, and it has a capacity for forming a paste with warm water, without undergoing any real chemical change. One of its most notable characteristics is its extreme susceptibility to the action of amylolytic enzymes. You must remember, however, that brewing materials such as malt and grits do not consist of pure starch, and that consequently no generally applicable rule can be applied to fit all cases in the mashing operation.

J. Z. Your sample of pitch is of very inferior quality and, in our opinion, is not at all suited to the requirements of coating your packages. Its melting point is entirely too

low, indicating that it contains too much oil and a high percentage of volatile substances. It is also sufficiently soluble in beer to impart to it a disagreeable pitchy, turpentiney odor and taste.

C. M. It would be very difficult to give you in this column all the necessary details that would enable you to form conclusive opinions in locating your brewing losses, but some of them doubtless occur in the brew-house, due to faulty manipulation of your brewing materials. A great part of the loss probably occurs after the beer has reached the fermenting tubs, and while it is on its way through the brewery, from one vessel to another, towards its final destination—the trade packages and the loading platform. You will no doubt find quite satisfactory information regarding such losses in the various authentic books on brewing published in this country.

G. H. In cleaning your rubber hose, you make a fundamental mistake in using the disinfectant before brushing. The proper way is to first brush and rinse the hose; then apply your disinfectant and let it remain for about 24 hours, after which it should be carefully removed by rinsing with a copious amount of clean water. It is very important to remove the least traces of the disinfectant, as some of these are known to produce haziness in beers, even in very minute quantities.

C. D. The sample of malt submitted by you contains an abnormally high amount of moisture and is extremely "slack." It is quite natural that you should have trouble in running off your wort, and as the fault evidently lies with the malt, you will not improve conditions by using a larger portion of it. If you have only a small quantity of this malt on hand, it would be advisable for you to use it up in conjunction with a well-dried malt, preferably in the cooker. It is generally considered a well-paying investment to exercise scientific control over the brewing materials, both when making contracts and at the time of delivery.

C. W. The fundamental principle in keg washing will naturally be to obtain clean packages in the shortest possible time, and in the least costly way. If your shipping packages, as you claim, are out for about two months, it will be necessary for you to subject them to a soaking in warm water before passing them through the washing machine. Regarding the sterilization of the packages, different methods have been proposed; one of which is to rinse the cleaned packages with a weak solution of a disinfectant, the solution being used over several times. Another method which, even if not sterilizing the packages, improves their condition considerably, is rinsing out with warm lime water. Lately, ozone has been proposed for this purpose. It is to be used in the form of ozone water, but in our experience, no satisfactory results have been obtained from this method so far.

E. M. M. It is a rather hazardous task, from the small sample of hops you send us, to decide with absolute certainty their age and origin. The hops are of good quality; are well picked, and show an abundance of lupuline in a gummy condition. They, however, contain a rather large number of mouldy cones. In our estimation, these are Oregon hops, of 1916 crop, and the price you mention must be considered fair.

M. S. Several samples of the material you mention have been analyzed and passed upon by the National Brewers' Academy, and while the majority have been entirely satisfactory, some have contained a very large amount of fat rendering them unfit for brewing materials. It will, therefore, be impossible for us to express an opinion without seeing a sample of the material. It is used in exactly the same manner as ordinary corn grits.

— THE —

National Brewers' Academy

AND

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Unjustified Excitement.

"The breweries and distilleries in the United States must be closed, because we have not grain enough to feed our people."

This is the foolish cry raised by a number of persons, some of whom know not what they are talking about, while others chirp in because they are pursuing ulterior and selfish ends.

The first set of these calamity howlers are simply hysterical, made so by what they have read in the newspapers about conditions in Europe. They have taken up their cry from sheer imitation, thinking because the nations of Europe are wasting their substance in indiscriminate slaughter and destruction, European conditions will be reproduced in America, the country which is large enough and rich enough to feed the whole world, if such becomes necessary.

We are not going to have European conditions on American soil. Our crops are more than sufficient to feed the population of this continent and there will be an immense surplus which we may give, or sell, to our Allies in this war. It is not necessary, and it would be a crime perpetrated upon our own people, if we were to export 90 per cent. of our grain to Europe as has been proposed by some of the neurotics and ignorami who set themselves up as purveyors and distributors of American substance.

There is, for instance, Herbert C. Hoover, an official whom the Administration in Washington proposes to appoint as dictator to say who is to eat and drink, what the American people produce and at what prices food and all other necessities of life are to be sold. Mr. Hoover favors the absurd idea of closing the breweries and distilleries in this country. Why? Because this has been done, partly, in Germany, Austria and England, where not enough grain can be produced to feed people living in countries that are practically in a state of siege, cut off from communication with countries producing a large surplus of food. Mr. Hoover, if he should insist upon his idea borrowed from countries in an extremity, is unfit for the position that is to be created for him.

Another clique of would-be food conservators calls itself the "Committee of Sixty," with headquarters at 505 Fifth Avenue, New York. It is composed of University professors, Bishops, health officers, bankers, editors, lawyers, politicians and merchants who want to pose in the lime-light as saviors of society—notoriety seekers. They are not experts and, therefore, superfluous. There is nothing scientific in their scheme, no matter what John D. Rockefeller and other monopolists who have been exploiting the American people all these years and whose opinions the "Committee of Sixty" are parading in their frantic "literature," may say upon the subject.

The second set of calamity howlers is composed of the parson-led Prohibition outfit. They know what they want and what they are talking about. They have been howling for the destruction of the breweries and distilleries for nearly a century, because they believe that, if they should ever succeed in their pernicious scheme and if they were to capture the Government of the United States, they could force us back into mediaeval conditions, the "church" to dominate the State, and the parsons again ride upon the backs of the laboring masses. Their cry for Prohibition is insincere, hypocritical and unconvincing, and therefore their ulterior object will not be accomplished.

This war will end, some day, may be not very far in the future, and then we shall return to safe and sane conditions. Beer will again be brewed in Germany and England, France and Belgium will reerect their thousands of brew-

eries now in ruins and beer will continue its civilizing mission throughout the world until it may soothe and invigorate all human beings, the intelligent and moderate of whom have ever recognized its eminent value as a liquid food and an insuperable means of comfort and enjoyment.

Opinions on Prohibition.

By PLANCHETTE.

Confucius.—We tried it here in our time, and a man invented opium because of it.

Tennyson.—It'll be the death of poetry; but probably that's the reason it's so popular.

Shakespeare.—Thou canst not shake thy thirsty head at me; thou canst never say I advocated it.

Thomas Jefferson.—Lèse Liberté.

Napoleon.—Prohibition is all right for the dead; but—sub rosa—I got away with Austerlitz on brandy.

Huerta.—It wouldn't bother me now.

Rabelais.—Abandon hope all ye who enter the grape-juicery!

Byron.—I wrote "Don Juan" on a hundred bottles of Burgundy. The water drinkers tried to answer it. But who were they anyway?

Daniel Webster.—A sign of national decadence. A country that is too cowardly to drink is on the toboggan.

Robert Burns.—I should prohibit the use of alcohol in the arts and sciences, but not otherwise.

Swinburne.—After Watts-Dunton took my brandy from me I petered out.

Their Noonday Beer.

By E. A. MOFFETT, Brooklyn, N. Y.

The answer of the brewing industry, that it uses not 12½ per cent. of the total annual production of grain but scarcely 1 per cent., appears to be supported by competent authority.

From my window each day I see large numbers of toilers, engaged in subway construction, take their noonday meal. Up they come, by ladders and steam buckets, chatting like magpies, thankful for a brief respite from hard labor, with those fleetest of foot scurrying in this direction and that for a kettle of beer. Presently all are seated, with dinner kettle and beer kettle joined to a common purpose.

Personal investigation has shown the contents of the average dinner kettle to be one or two thin slices of meat and an onion, a low grade apple or banana, and two or three slices of bread. Not much, it will be said. But when to this slim fare is added a pint or so of beer, it seems sufficient to enable the men to continue toil such as only men of unusual stamina and physical strength may undertake.

The foaming, cool lager has made more palatable, more digestible—and to that degree more nourishing—their noonday repast. Deprive them of their beer by sumptuary laws or otherwise and how shall the deficiency be supplied? Assume, if you will, that it could be supplied in terms of bread and meat, would this not cost more in terms of grain?

Assuredly the greater quantity of bread and meat thus made necessary would by so much make greater demands upon the grain supply or its sources. And might not this additional quantity of grain greatly exceed the one or more per cent. now used in brewing of beer?

MALIGNANT CAMPAIGN. "The campaign against the freedom of the Englishman to drink what he likes and when he likes loses nothing of its malignant unscrupulousness as time goes on."—"The Globe."

Brewers Doing Their Bit.

The brewers of New York and vicinity through their Mutual Indemnity Insurance Company, have made an initial subscription of \$250,000 toward the Liberty Loan of 1917, and reports of similar action by brewers' organizations and individual brewers and maltsters, brewery machine manufacturers and supply dealers are coming in from all parts of the United States.

Other brewers are giving plots for the raising of vegetables and grain to their neighbors and friends.

Again others are contributing money and men for home defence as well as for State militia and regular army.

Brewers in many States have offered to have part of or their entire plants converted for the manufacture of ammunition and arms; they also offered the use of their automobiles and trucks.

The Manufacturers' Association of New Jersey is making a survey of every manufacturing plant in that State as a war measure to enable the Government readily to ascertain what facilities New Jersey offers. Thus, if a large order for any article is to be filled, the association can report exactly how many factories and workmen are available. The association, whose membership exceeds 1,100 plants with a total of 272,292 workers, will give the Government preference over all other contracts on war orders.

Dictionary Enriched By Pennsylvania Judge.

Judge Singleton Bell, of Clearfield county, Pa., in making rulings for the regulation of the sale of liquor by licensed dealers in that county, recently made clear the judicial construction of the terms, "visibly intoxicated" and "a man of known intemperate habits." The judge said:

"Proceedings had in the license court seem to indicate either indifference or forgetfulness on the part of many persons on both sides of the liquor question, as to the legal meaning of terms which it is vital should be correctly understood in the handling of liquors. Thus, one person is of the opinion that any man who takes one drink a day is a man of intemperate habits, while another says that as long as a man is able to walk home without assistance he is not intoxicated.

"It has been justly said that when a man becomes 'visibly affected by liquor,' or of 'known intemperate habits' is largely a matter of personal opinion, and it is also true that where these conditions exist it depends materially upon the view and general standard of each community, and what would be generally regarded in one place as intemperance would not be so regarded in another.

"Yet these terms have been virtually fixed in legal meaning under the rulings of the Supreme Court, and as applied by this court amount substantially to this:

"A person is affected by liquor when, because of drink, he gets or speaks in a manner materially different from that which he would be if sober; he is visibly affected by liquor when this condition is apparent to the ordinary observer.

"A person is intemperate whenever he is so affected by liquor; he is of intemperate habits when this condition is a frequent one, and he is of known intemperate habits when this frequent intoxication becomes generally known among his associates."

POWERFUL BIG TRADE. "In sections of country that went dry it is observed that the corkscrew trade has been wonderfully stimulated."—(Elmira [N. Y.] "Herald.")

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Efficient Service.

War always brings about great changes in the life of nations. While unsuccessful wars generally result in deposing the respective rulers and more liberty for their subjects, successful wars in most cases produce reaction and more oppression for those who sacrificed their blood and their substance upon the "altar of patriotism." But all wars produce changes in the methods of industry and commerce, because it is necessary for those who are engaged in warfare to strain their every nerve to be more efficient than the enemy whom they are determined to subdue.

If the American people are to issue victoriously from the present struggle, they will have to render more efficient service to their government than they have been doing heretofore. Efficiency and economy has become the first duty of every American. Those who are called out, or volunteer to bear arms, must strive to be more efficient than the foes who oppose them. At present we have no efficient army. Therefore we must produce it. To be successful in that effort, everyone of us must help. The wheels of industry must be made to run with increased speed in order to produce all that is necessary to supply the material of war. And the number of those wheels must also be increased. Superfluous industries must be abandoned, or limited, to secure that which in times of peace is not needed. To this we all are agreed.

The question for the brewers of this country now is: Are their plants superfluous or are they needed? We say they are as necessary as the plants where guns, ammunition, uniforms, ships, army rations and all other requirements are being produced, as the soldier, in the field as well as in the barracks, needs the liquid refreshment to which he has been accustomed ever since he outgrew the requirements of infancy. The soldiers in Europe are provided by their governments with beer and light wine to keep them in trim and good humor, and the American soldiers do not differ from the armed men of Europe in that respect.

Consequently, the Government of the United States requires the efficient service of the brewers in this country.

But it is not beer alone that the trade is to provide. Efficient service will also consist in purchasing war bonds, offering traction motors, and doing everything that may be asked of the proprietors of breweries by the military and civic authorities.

There cannot be any doubt that the American brewers, who are to pay nearly 100 per cent. in taxes more than what they have been paying so far, will unhesitatingly take upon their broad shoulders the heavy burden the war is imposing upon them and thus demonstrate that they are among those foremost to render efficient service to their country and their fellow citizens.

Democrats and Republicans alike are joined in National and State Legislatures to cowardly do the bidding of the Prohibitionists. It is about time that we should have a political Liberty Party in this country!

No Cause for Alarm.

The United States Secretary of Agriculture, Houston, declares that there is enough wheat stored in this country and Canada to supply our own needs and export 100,000,000 bushels. While the wheat situation is serious, as indicated in the report of the Bureau of Crop Estimates, it does not justify hysteria, he stated. However, Secretary Houston made it plain that there should be no diminution of effort to secure the largest possible planting of all agricultural crops. He said that, though the country was far from famine, production and conservation measures were essential if the United States was to assist the Allies without suffering bread hunger. There will not be, he added, as much wheat for normal export as there was during the last three years. In 1916 the United States exported 215,532,681 bushels of wheat; in 1915, 243,117,020 bushels, and in 1914, 332,454,975 bushels. With the wheat needs of Europe greater than ever before, it is probable that much more than 100,000,000 bushels will be exported. To make this possible, it is likely that the Department of Agriculture will invoke such measures as whole grain milling and mixed flours, to increase the American surplus. The Administration's agricultural bill, brought up in the House, authorizes the Secretary of Agriculture to do this. Secretary Houston has also pointed out that, while corn was used as a human food to a much larger extent in this country than in Europe, its use could be greatly increased without the slightest disadvantage. It is probable that the Department of Agriculture will soon begin a publicity campaign to popularize corn, oats and rye as breadstuffs.

Secretary Houston knows what he is talking about. He has the facts and figures to lead him in his judgment. According to him it is not necessary to cripple the brewing industry for an alleged lack of the small percentage of barley, corn and rice required to supply the American people with its customary quantity of good, pure and healthy American beer.

The American Prohibitionists are drunk with the aspect of power they seemingly might exert soon. It behooves all liberty-loving Americans to stand shoulder to shoulder to prevent those parson-led fanatics to subject this nation to social, political and economic slavery.

Despite their heaving expenditure of misinformation, the mouthpieces of the Prohibitionists are constantly unearthing new and abundant sources of lying material. They cannot possibly be expected to be brought to the harsh requirements of the truth. They brazenly defend anything and everything they assert, be it ever so brutal and stupid. Their perversions, inversions, suppressions and deliberately false conclusions are the same to-day as were the monstrous lies of their theological forerunners of thousands of years ago. However, they complacently go on in their dreadful work of poisoning the minds of the uninformed. There is but one means to stop them and that is to tell the masses the truth about what science and statistics teach us.

Juggling Crop Estimates?

Early last month the official estimates of the wheat crop, made from figures collected by Government agents, made it appear that "with favorable weather from now on the total winter wheat yield may somewhat, though not materially, exceed the harvest of last year. At this stage of the growth of the spring wheat crop all that can be reasonably said is that the law of chance is for a greater production than last season. If, however, we should not have as much wheat to export as would be necessary, there seems a strong probability that we shall have other available food supplies, such as corn, oats, potatoes and the like—not only in full measure, but running over."

The weather was not unfavorable during the two weeks following the publication of the optimistic estimate, but then came, like a thunder-clap from a fair sky, the ominous report that the wheat crop of 1917 would be a dismal failure, in fact the poorest since 1904, and from that it was argued that the breweries and distilleries in the United States must be closed in order to use the grains consumed in the manufacture of beer and spirits for the baking of bread to save the American people from starving.

What does it all mean? Which of the two estimates was correct? If the last and pessimistic estimate was incorrect, we are tempted to think that its incorrectness was to serve an ulterior purpose.

Such things have been done in other countries during this infernal war. They were done to stimulate the efforts of the respective nations to win the war. But is that necessary in the United States? Are Americans to be made patriotic and as warlike as possible by doctored crop estimates and official prevarication? We hope not! We want the government to tell us the truth, or, if the truth should be injurious to the government's military enterprise, at least say nothing. The American farmers are doing all they can to increase the volume of this year's crops, and millions of others, not farmers, are growing little crops of their own in gardens and vacant city lots, so that there will certainly not be any scarcity of foodstuffs in this country. Nor are the crops in Europe a partial failure. English statesmen even declare that their country will be self-supporting from now on. So, what's the use trying to make conditions appear hopeless when they are not?

It is estimated that about 4,000,000 persons in the United States are addicted to using poisonous and body and mind-killing drugs. Every one of them is doomed to early physical destruction. Prohibition would increase the number of drug-fiends a thousandfold.

The intelligent people of our big cities are opposed to Prohibition, while the uninformed, and therefore credulous inhabitants of rural districts, dominated by self-seeking theologians, are favoring it. Who is going to win? Why, the city men, because they will gradually be the majority, as intelligence and education are spreading—they are contagious.

"While nearly all of the vast sum to be raised will come from direct taxes, not one of the new internal revenue imposts in the bill as drawn taxes the table."—*N. Y. World*.

Well, well, Mr. Pulitzer, do you never have beer or wine on your table? We know your father did. Since when have you abandoned his peremptory demand that those writing for his paper should ever remember his principal rule of successful journalism: "Accuracy, terseness, accuracy, truth!"

Not Particularly Convincing.

The Prohibitionist asserts that science is on his side and at the same time he submits "statistics" which are generally fictitious, or ridiculously exaggerated.

They need be so to serve the political ends of the political schemer and theological adventurer, both of whom only thrive when their audience consists of ignorant, and therefore credulous, persons.

To the informed and intelligent the vaporings of the Prohibition agitator are altogether unscientific. The human mind, if logically trained, craves higher, an immutable authority than that presented by the designing fanatic, whose assertions are mainly a doubtful rill of impertinent and tedious chatter.

For the majority of the American people to blindly believe what is retailed at the counter of the Prohibitionist in regard to the evil influences of alcohol upon the structure of human society would be equal to confess that they cannot think for themselves.

Soldiers Need Alcohol and Tobacco.

The man who proposes to abolish tobacco is an enemy of his country. All military authorities agree that the soldier, if deprived of the soothing influences of the weed, is no longer courageous, reliable and obedient. The manuals at arms of the United States advise all commanders to see to it that their men are well supplied with tobacco. And yet the anti-tobacco agitators keep up their cry against smoking and chewing. They are as stupid, fanatical and reckless as their fellow anti-alcohol agitators who would also deprive soldiers of the invigorating and soothing influence in the field, of beer and light wines. Without tobacco and without the moderate consumption of light alcoholic beverages no army can expect to be successful in war.

Rev. Wasson Refutes a Prohibition Lie.

Among the lies circulated by our Prohibition politicians and parsons last month was also one to the effect that the Rev. E. A. Wasson, of Newark, N. J., had renounced his liberal attitude toward the drink question, whereupon Mr. Wasson publicly declared: "The statement that I had changed my views or my course on the excise question is an arrant lie. I have not changed my views on this question. As far as I can foresee, those views are as fixed and permanent as any that I hold." Mr. Wasson need not worry, as those who know him as their true friend would never believe what professional perverters of the truth are saying about him or about anybody else, or anything else.

The "drys" have been agitating in Wisconsin for ten years and they say that next year they will "succeed" in that State. If they do, will the Milwaukee brewers and the overwhelming majority of German-speaking and, therefore, beer-drinking citizens of Wisconsin, admit that they have permitted themselves to be caught napping? At any rate, it is high time that they should wake up!

When we scan the columns of the German-American newspapers it appears to us that their editors are more concerned with the fate of the Kaiser and his aristocratic appendix, than with the fate of the Germans living in the United States, whose liberty is threatened more seriously by the "internal enemy"—the Prohibitionist—than the privileges of the Kaiser outfit that jeopardize the liberty of the whole world, are threatened by those who are determined to forever replace them by democracy and liberty.

Local Option for New York!

Time-serving politicians, with both of their eyes forever upon graft and booty, have rushed through the New York State Legislature the Hill-Wheeler Local Option bill during the last few minutes before that body adjourned at 2 o'clock in the morning of May 11th.

The shameful deed was done while the Governor of the State, a wily politician of small caliber, who, in his foolishness blinded by ambition and megalomania, still aspires to the Presidency of the United States, was wielding the whip of patronage and boodle over the slinking backs of politicians of a still smaller caliber.

Everyone of these alleged "men," in doing the bidding of the unspeakable Anderson of the Anti-Saloon League and the "5,000 Christian pastors" whom he pretends to be representing the "church in action," was bent upon pursuing a personal and selfish end. They never think of the welfare of the people whose interests they swore to have at heart. They only think of how they may be reelected; of how long they may be able to feed at the public trough. They are too ignorant, too stupid, not to know that the bulldozing threats of the contemptibly small Anti-Saloon and Prohibition crowd are empty vaporings; that there is no political power, no real public sentiment behind them. They represent an insignificant minority, and this very fact they will discover next year when the people will be called upon to say whether the great Metropolis of the world is willing to give up its joys of life, its liberty to arrange its own affairs.

This Local Option law is expected to impose upon New York City, the greatest cosmopolitan community on earth, the conditions of a rural village, where the parson and his beadle are holding sway over a cowering herd of uninformed and, therefore, blindly obeying sheep in human form.

But the instigators of this outrage will be sorry when the masses will go to the polls to ignominiously defeat the truculent attempt upon their personal freedom. The present Governor of New York and his obedient servants have reckoned without their host this time. The intelligent majority of the citizens of the Empire State will relegate to deserved political obscurity the schemers who, to foist themselves upon this great commonwealth indefinitely, during the dead of the night of May 11th, voted for Anderson's Local Option bill.

If the police of our big cities cannot enforce a Sunday closing law, how can they be expected to enforce a law closing saloons every day in the week?

Public libraries located in small towns and dominated over by local "reverends" exclude all liberal literature as carefully as in centuries gone by their predecessors insisted upon excluding the Hebrew Bible, not to mention scientific and progressive books. In many of those rural libraries only Prohibition literature and works of retrogression and obscurity are welcome.

In regard to the brutal proposition of the Prohibs not to compensate capitalists and workers whose business and occupation are taken from them by arbitrary legislation the Chief Justice of the United States Supreme Court has recently declared: "The Government of the United States has been emphatically termed a Government of laws, and not of men. It will certainly cease to deserve this high appellation if the laws furnish no remedy for the violation of a vested legal right."

What Fools These Prohibs Be!

Some very intelligent and keen students of current and past events are of the opinion, and we are inclined to indorse their view, that the Russian revolution was precipitated by Prohibition, because, the masses having been kept from vodka, had commenced to think for themselves. And then they knocked out the Czar and enthroned themselves in his former place and palaces in one of which the official organ of the Russian Socialists is now being edited and published.

There is no doubt of the fact that the Proletarian masses of Russia are now dominating its government.

The question now is: Will Prohibition lead to the Social Revolution everywhere?

It may. It probably will.

But what of Prohibition then? In Russia the late Czar's Prohibition decree has already been repealed in regard to beer and light wines and the whole country is studded with moonshine vodka distilleries which the new Russian government does not disturb. Drinking vodka is on the increase at an alarming extent.

The Prohibitionists being partly fanatics, partly peanut politicians, appear to be unable to learn from the teachings of history, but to the parsons who principally lead the mad Prohibition dance, because they thereby hope to conquer the powers of government and thus improve their pitiable economic condition, we will say this: If the Socialists rise to the top everywhere, the parsons may exclaim with the meek and mild, "Billy" Sunday: "good night nurse!" For, the Socialists are practically all of them agnostics, if not atheists, who will make short work of the parsons and their obsolete teachings of a divinely directed universe. The Socialists will wipe the parsons out—here and everywhere!

Should the Prohibs insist upon "prohibiting while this war is going on, the best means to employ upon them will be a straightjacket and a padded cell.

PROBABLY WAS. A North of Ireland orator in a Scottish county constituency sought to ingratiate himself with his audience at the outset thus: "Gentlemen, I am an Irishman. I am proud to be an Irishman, but I am not ashamed to admit that I have a drop of Scotch in me." And for fully a minute he could not understand what the uproar was about.

BACK TO SLAVERY? "Man is a social animal. He should demean himself in conformity with social relations for the benefit of the whole, and he must therefore surrender unbridled, unlicensed individualism. However, he should never yield a single inalienable right. For man to give up his inherent rights, his freedom of person, would turn society away from a free civilization and back to slavery. Society is strongest when the individual rights of men are most respected and preserved."—(W. B. Rubin.)

"WOE BE TO THOSE LEADERS of frenzied fanatics, whether in religion, politics or society, who will attempt to mar the cornerstone of our rights which, excepting the principles of liberty itself, is the most valued of all our constitutional blessings. Abraham Lincoln once said, touching the danger of abridging the liberties of the people: 'Nothing but the very sternest necessity can ever justify it. A government had better go to the very extreme of toleration than to do aught that could be construed into an interference with, or to jeopardize in any degree, the common rights of its citizens.'"—(Harry R. Probasco, Cincinnati Lawyer.)

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

Washington, D. C. The past month has been one of rather active effort in Congress to do one of three things—either shut off the use of all grains necessary to manufacture liquor, pass war prohibition legislation and put all the breweries and distilleries of the country out of business for the period of the war, or to pile on such a tremendously increased tax that the liquor industry would not be able to pay it. Between these extremes there have been a multitude of bills introduced, to both restrict the production and sale of liquor and to bring about certain conditions of Prohibition. But little success has followed these efforts. And any man who can foretell what Congress will do in the matter is a man who can see a good way into the future. Nearly every member of Congress with Prohibition proclivities has taken a crack at the subject. The interesting part of the whole matter is that of those who want to do something to or with the liquor traffic about half are in favor of adding some hundreds of millions of dollars of taxes, which make it absolutely necessary that the industry shall live and thrive to pay, while the other half want—or think they want—to legislate against the liquor industry using any grain or other materials for the production of liquors. Now, a blind man can easily see the glaring inconsistency of it all.

On May 7th, headed by Colonel Gustave Pabst, a delegation representing the organized brewers of the United States was heard by the Senate Committee on Agriculture on Senator Gronna's bill to forbid the manufacture of grain into alcoholic liquors during the war. The delegation told the committee that the brewing interests were ready to cooperate with the Government in any way and to the fullest extent, and did not ask consideration from any standpoint other than that of fair dealing and public policy. The actual amount of grain used in brewing, principally barley, they told the committee, represents less than three-quarters of one per cent. of all the grain produced in the United States, and, in addition to that, the barley used, they said, is not a staple human food either here or abroad.

Col. Pabst said the output of beer for the year ending June 30th, 1916, was 58,633,624 barrels. At the present tax rate of \$1.50 per barrel the Government receives a revenue of \$87,994,500. He said that he estimated the beer output for the next fiscal year to be about 50,000,000 barrels. To make this quantity of beer would require approximately 58,000,000 bushels of grain. The by-products, he said, represented a salvage of 35 per cent. "Ignoring entirely the food value of the beer itself, it will be seen from these figures," said Col. Pabst, "that the actual amount of grain which will be used in the brewing process is about 37,700,000 bushels. This is less than three-quarters of one per cent. of the country's grain production."

Next came the war tax bill, which puts a tax on all beverages, and touches everything from beer and whiskey to grape juice. The whiskey tax is raised from \$1.10 a gallon to \$2.20 a gallon. The tax on beer is increased from \$1.50 to \$2.75 per barrel. Upon still and sparkling wines the present tax is doubled. Upon wines containing not less than 14 per cent. absolute alcohol the new tax is an increase of one-half of the old. The tax is also doubled on grape

brandy or wine spirits withdrawn from any fruit distillery or bonded warehouse. A tax of ten cents per proof gallon upon all sweet wines held for sale on the day the bill is passed, the tax to be levied against the wine spirits used in fortification, with an additional tax of ten per cent. upon all grape brandy or wine spirits withdrawn by a producer for fortifying such wines and not used prior to passage of the bill. Mineral waters, soda fountain syrups, grape juice, soft drinks, fermented liquors containing less than one-half of one per cent. alcohol, are variously taxed from one to ten cents per gallon, the latter amount being levied on the fountain fruit extracts and syrups.

In the war draft bill have been retained the various "dry" features originally proposed. The amendments to the bill made in the Senate prohibiting the sale of liquor at army camps and otherwise "safe-guarding" the morals of the troops, were in the main retained. The bills makes it unlawful to sell any intoxicating liquor, including beer, ale, or wine, to any officer or member of the military forces "while in uniform." The bill provides prohibition at all army posts.

On May 14th, the Senate, by a vote of 38 to 32, accepted Senator Cummins' amendment to the Espionage Bill prohibiting the use of grains, sugar, cereals or syrup in the manufacture of alcoholic beverages. The amendment was accepted after a bitter, half-day fight to modify it. But the very next day, reversing its action of the 13th, the Senate took a clearer view of the subject and struck from the bill the Cummins amendment, prohibiting the use of grain and grain products in the manufacture of liquor during the war. The Senate vote to reverse itself was 47 to 37. This action is conceded, even by the Prohibition element, to have sounded the death-knell of attempts to conserve grain by prohibiting as a war measure its use in the manufacture of beer and whiskey. Although attempts may, and doubtless will, be made to revive the subject, it is realized that the Senate has put itself on record as against national prohibition in any guise.

The most convincing and telling argument submitted by several Senators against the Cummins amendment was, that if no grain were to be permitted to manufacture alcoholic beverages, this nation would be driven back to guzzling whiskey, of which there is enough in store to last 3 or 4 years, brewers not being able to produce beer while the war Prohibition continued in effect.

Representative Webb, Chairman of the House Committee on the Judiciary, has introduced one of the most sweeping and drastic national Prohibition measures ever sent to Congress. His bill is entitled "A bill to provide for the support of the army by the prevention of the waste of the food products of the United States during the period of the war, and to prohibit their manufacture into alcoholic liquors, except to provide for the distillation of liquors in bond or heretofore manufactured, and for other purposes."

It is not unlikely that other attempts will be made to secure anti-liquor legislation, and almost anything is possible, in the present state of affairs, except the consideration of a national Prohibition amendment to the constitution.

The Post Office Department has distributed the prelim-

inary bulletin showing the states in whole or in part to which it is unlawful, on and after July 1, next, to address mail matter containing either advertisements or solicitations for orders for intoxicating liquors. The issuance of the bulletin was decided upon in view of the very large number of requests by newspapers and publishers throughout the country for information as to the territory from which the prohibited advertisements and solicitations will be barred.

On May 21st, Senator Thompson, of Kansas, introduced in the Senate a bill similar to that introduced in the House by Representative Webb, noted above, which would prevent the use of grain for making alcoholic beverages, and also would seek to prevent the sale and manufacture of alcoholic beverages during the war. There is much doubt, however, on constitutional grounds, that a law prohibiting the sale and manufacture of liquors as proposed in this bill would stand the test of the courts. Prediction was made that a measure of some sort will pass, but those who do not believe that such a law would be effective without a constitutional amendment will vote against this part of the bill.

In addition to this it is possible that an attempt will be made to authorize the President to commandeer all the whiskey and other alcoholic beverages now in the country for war purposes, if necessary. An enormous quantity of alcohol, it is pointed out, is required in the manufacture of munitions, and a large quantity could be obtained from the liquor already distilled.

When the Senate met on May 21st and took up the administration Food Bill, Senator Cummins offered an amendment to the bill which would prevent the use of grains for the manufacture of alcoholic beverages during the war. Senator Jones offered two amendments, one designed to prevent the manufacture of alcoholic beverages and the other to give the President the power to commandeer those liquors already manufactured. Senator Kenyon, of Iowa, also offered a prohibition amendment, and Senator Thompson introduced his bill, which he said he would urge as an amendment to the food control bill. It is almost certain that the latter bill will not be passed before July 1st.

Secretary Daniels, also on May 21st, in a letter to Speaker Clark, urged that legislation prohibiting the sale of intoxicating beverages to soldiers, incorporated in the Army Bill, be extended to cover the Navy. "With 40,000 recruits under training in the Navy," Mr. Daniels said, "the same safeguards are as urgently necessary for them as for young soldiers." A draft of a bill submitted by the Secretary would authorize the President to make such regulations as he deems necessary or prohibiting the sale of liquor near places under the jurisdiction of the navy or to naval officers or men, and would prohibit absolutely the sale or giving away of beverage liquors within the bounds of any station or place used for naval purposes.

General Organizer Kugler, of the International Brewery Workers' Union, is in Washington making a stubborn fight against Prohibition to be passed by Congress, and he is ably assisted by delegates from other labor unions affiliated with the American Federation of Labor. Among the steps to be taken if Congress should foolishly fall into the trap set by the Prohibitionists, may be a general refusal of working people throughout the country to pay rent. Such a step has been considered by the New York local Brewery Workers' Union, who were about to send to President Wilson the that a measure of some sort will pass, but those who alcohol, it is pointed out, is required in the manufacture of subjoined telegram, which, however, was withheld when news reached New York that the Senate had defeated the Cummins Amendment:

Woodrow Wilson, President,
Washington, D. C.

Sir:—One hundred thousand Union brewery workers are threatened with loss of their employment throughout the eventual adoption of the Cummins amendment to the Espionage Bill. We would be defenseless if we were not rent-payers. This is to notify you that from the day the breweries in this country are closed we shall stop paying rent. This movement thus inaugurated will spread through the country like wild-fire. Labor pays four thousand million dollars per year to landlords; and these are the tax-payers. Wherefrom is the Government to obtain money to pay for the cost of the war if not rent is paid by the twenty million of American wage workers? It depends upon you to prevent that disaster.

THE UNION BREWERY WORKERS OF NEW YORK AND VICINITY.

Another valiant defender of the brewing industry is Arthur Brisbane, editor of the Hearst papers, who not only daily denounces the attempt to force whiskey down the throats of Americans, but he also appeared before the Senate Agriculture Committee to press his point, that prohibition in the use of grain for beer-making would surely drive workers to whiskey, as the supply of beer in the United States will last for only a few months if production is stopped, while the supply of whiskey is sufficient for a number of years.

Hartford, Conn. Arguments were submitted May 8th before the Excise Committee of the Connecticut House on the resolutions to give authority to the governor to close the saloons or limit hours of opening, and to furnish the governor with power to forbid the sale of liquor in the state, and also the provision that the board of control refund a part of the annual license fee proportionate to the period between the time when saloons were closed and the end of the year for which they were issued. Harrison B. Freeman of Hartford said he appeared only as a citizen to present a petition of which he was one of the signers. Mr. Freeman dealt largely with the war situation, calling attention to fact that other nations have found it necessary to curtail hours of selling liquor and some warring nations had even prohibited the sale of certain liquors absolutely. Representatives C. J. Martin of Orange, and Aergur E. Bowers of Manchester favored the legislation, as did Colonel Pope, representing the Manufacturers' Association of Hartford County and Professor Irving Fisher of Yale. Fred W. Orr of New Haven, representing the State Liquor Dealers' Association, opened the debate for the saloon men. He questioned the motives which prompted the introduction of such legislation. Mr. Orr said he could name several members of the Manufacturers' Association who had not been consulted, and who did not favor the proposition. N. W. Kendall of New Haven, president of the Yale Brewing Company, also spoke at length in opposition.

By a vote of 143 to 82, the House has adopted a resolution proposing a bone-dry amendment to the State Constitution effective in 1922. The resolution is now continued in the next General Assembly, which must pass it by a two-thirds vote in each House if it is to be submitted to the people on a referendum in the fall of 1919 for final ratification. The liquor and the prohibitionist lobbies have joined forces to drive alcoholic patent medicines out of Connecticut, and the two issues will probably be combined in the next two years' agitation.

Springfield, Ill. By a vote of 80 to 53 the Bruce Bill has been defeated by the Illinois House of Representatives of the Illinois Legislature. The bill to create 5-mile dry zones around military training camps "owned or occupied" by the government was also defeated as were seventeen other "liquor" bills, after charges had been made that hotel keepers in Chicago had spent money to eliminate the loop hotels from the Barbour dance hall bill, and that cash had caused the death of the bill for State-wide referendum on

local option, defeated several weeks ago. As a spectacular incident of the debate, Representative Igoe, the Democratic leader of the House, attacked Mayor Thompson, of Chicago, in terms rarely equalled on the floor of the House.

Des Moines, Iowa. The temperance fanatics who infest the Iowa Senate who would have taken advantage of the war situation to make the entire country dry, have been virtually drummed out. Senator Thomas E. Taylor, of Buchanan County, introduced a concurrent resolution calling upon the Iowa Legislature to ask Congress to enforce nation-wide prohibition during the war. The resolution was voted down by an overwhelming majority on a viva voce vote.

Topeka, Kan. Petitions signed by thousands of Kansans have been presented to Governor Capper asking him for the repeal of the Kansas bone-dry prohibition law, the petitioners stating that they had been used to wine and beer in their homes since childhood and they looked upon them as a sort of diet. Petitions are also being circulated in other sections of the state and are signed rapidly. Indignation meetings are held in town halls, in churches and other public places and are addressed by local parties who claim that the state had no right to trample on Personal Liberty.

Frankfort, Ky. Large delegations of brewers recently appeared before the Senate Committee on Revenue and Taxation of the Kentucky Legislature to protest against the Spurrier Bill, placing a tax of 20 cents a barrel on malt liquors. The committee decided to report the bill which already had passed the House with a recommendation that the Senate cut the amount of the tax from 20 to 10 cents. The brewers argued that the high cost of raw materials made it impossible for them to stand such a burdensome tax. They also said it would make them unable to meet the competition of brewers in other states.

Boston, Mass. A bill providing that cities and towns may grant licenses to express companies for the transportation of liquor, but not making it mandatory that such licenses shall be granted, as does the present law, has passed in the House of the Massachusetts Legislature by a vote of 95 to 54.

Lansing, Mich. Both houses of the Michigan Legislature are still wrangling over bills by which to make Prohibition in this state "effective," a thing that "can't be did," as a Brooklyn alderman elegantly said some years ago when that burg still was an autonomous city.

St. Paul, Minn. Two additional "dry" bills have been killed in the Minnesota Legislature, one of them was to have prohibited the circulation in the State of magazines and newspapers carrying liquor advertisements, besides advertising of liquors on billboards or by circulars or letters. The other bill was aimed at the suppression of "blind pigs."

Helena, Mont. The Assembly of Montana has passed two bills making it unlawful for two or more persons to shake dice or to play an ordinary game of cards to determine who shall buy the drinks or cigars, or at a game of billiards for the loser to pay the regular price charged for the use of the table for the game.

Lincoln, Neb. The "bone-dry" bill has been amended by the Senate of the Nebraska Legislature to the effect of permitting the manufacture of "near beer." Another amendment removes the limit on the amount of liquor that a person could have if the liquors are bought prior to May 1st. During discussion of the bill several Senators said that the advocates of prohibition would not submit to the people a "bone dry" amendment, but had pledged themselves not to interfere with the personal rights of the citizens of the State to receive and use liquors.

Albany, N. Y. The Hill-Wheeler Local Option bill was

passed in the New York Assembly after midnight, May 10th, by a vote of 89 to 42, and at 2 A. M. the Legislature adjourned "sine die," the vote having been put through under the lash wielded by Governor Whitman who had told the Legislators that their "district leaders" had demanded a favorable vote. Among those who denounced the shameful diatribe in the Senate was Senator Mills who said: "There has been more wilfulness than water in this fight, and more pride of opinion than prohibition on the other side. The Executive and the Assembly were to blame if local option had failed. I am shocked at the political methods used to pass this legislation. If this kind of pressure—the pressure of the political boss—can be asserted on a moral issue it can be asserted on any other kind of an issue." And Senator Wagner exclaimed: "I feel sorry for the members of the majority. I thought they were men of conviction until I saw the big men of the Senate give way to the little bosslets throughout the State on this so-called moral question, which has deteriorated into a petty political fight. You must pardon me if I voice the conviction that the bosslets and their lackeys here are less concerned in the morals than they are in the politics of this fight. I will not be dictated to either by the Governor or the little bosslets."

As the bill now stands all cities in the State, excepting New York City, are to vote "wet" or "dry" on the third of April 1919, when in April, 1919, the metropolis is to vote upon the question whether or not it wants Local Option. If it declares for local option, on petition of 25 per cent. of the voters a referendum will be taken the next year on the final issue of closing the saloons.

Other bills passed just before adjournment were the Brown Excise bill with an amendment which provides that in cities with more than 1,000,000 inhabitants a place where liquor is sold in order to qualify as a hotel must have at least 150 rooms. The requirement in cities of less than 1,000,000 inhabitants, but more than 400,000 is 100 rooms; in second-class cities hotels must have 50 rooms, and in third-class cities at least 20 rooms, and also the Newton bill, authorizing the State Excise Commissioner to suspend liquor licenses in the vicinity of soldier's camps and munition plants.

On May 22nd, Governor Whitman signed both the Local Option and Excise bills, making a present of one of the pens with which he appended his signature to the Women's Christian Temperance Union!

Harrisburg, Pa. The House Law and Order Committee of the Pennsylvania Legislature has killed the bill to permit saloons to remain open on Sundays, while it favored the Smith bill prohibiting cabaret shows in places where "liquor" is being sold. Other bills reported favorably are: To make it a misdemeanor for any person under 21 years of age to procure or attempt to procure intoxicating liquors; providing the retail and wholesale licenses, good-will and leaseholds, shall be considered assets of a deceased licensee, to be sold in payment of debt; prohibiting saloons from opening between 1 A. M. and 5 A. M.. This bill would operate to allow saloons to remain open until 1 A. M.; prohibiting the offer or gift of premiums or presents as an inducement for the purchase of liquor.

Other bills killed were: To restrict the soliciting or taking orders for liquors or beer; prohibiting the commingling of different sexes in wine rooms; requiring saloons to close between the hours of 11 P. M. and 9 A. M.; making a saloon keeper and his property liable for damages caused by any person who may become intoxicated in his saloon; prohibiting the sale of misbranded or adulterated liquor; empowering the courts in counties of more than 200,000

population to appoint saloon inspectors; Prohibiting treating in saloons or selling liquor on credit. The bill prohibiting free lunches was passed.

The Snyder bill, prohibiting brewers from having office, or agents soliciting business in counties unless by authority of an agency license, was recommitted to the judicial special committee of the Senate.

On May 13th a bill was introduced in the Senate to prohibit the use of grain, during the war, for the manufacture of beer and spirits. It was defeated by a vote of 100 to 54.

The Mitchell "bone-dry" Prohibition bill has been killed in committee.

Austin, Tex. Governor Ferguson has vetoed the bill passed by the Texas Legislature to prevent the shipment of "liquor" into "dry" territory of this State.

Madison, Wis. The bill by which it was intended to prohibit saloons being owned by brewers has been indefinitely postponed in the House of the Wisconsin Legislature.

In the Senate the Evjue referendum bill was passed May 10th, by a vote of 21 to 11.

The Senate committee on State Affairs has introduced a bill providing that companies and individuals operating breweries may, if their breweries are in "dry" territory, continue to make and sell beer if it is consigned to purchasers where the sale of beer is licensed.

Governor Philip, on May 22nd, vetoed the State-wide Prohibition referendum bill.

In a special message the Governor has requested the Legislature to pass a war bill prohibiting, after July 1st, 1917, the sale of alcoholic beverages, excepting beer of not more than 3 per cent. alcoholic content and of wine not containing more than 10 per cent. alcohol.

**Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc.,
Action by Civic Bodies and Others For or Against Prohibition.**

California. San Bernardino, for seventy years a license city, has voted out saloons and liquor stores.

The Santa Monica Liberty League has been disbanded.

Colorado. Since April 24th, Colorado has joined the "bone-dry" column, but whiskey still flows in this State from innumerable illicit sources.

In Denver the Rev. Charles Huffman, a strenuous Anti-Saloonist, has been arrested under the Mann White Slavery law for seducing a girl with whom he eloped, after having abandoned his wife.

Delaware. A fine of \$100 and costs was imposed in Wilmington, on one Frank Brocinowski for having forced an 8-year-old boy to drink a glass of home-made whiskey.

Georgia. Some 150 moonshiners were recently tried in the Federal District Court at Macon, and in Savannah 13 persons were arrested for drunkenness several weeks ago on one single day.

Illinois. The Illinois Supreme Court has ruled the Sunday closing law of this State to be constitutional, and the consequence has been that the "dry" mayors of many cities are now enforcing this law.

Mayor Sauvage, of Alton, addressing the local Liquor Dealers' Association, has laid down the following rules: No drinking in hallways; no singing in saloons; no special privileges; midnight closing on week days; all-day closing Sundays; no drinks to intoxicated persons; no drinks to minors. He declared he would revoke the licenses of any saloon man who violated the laws or city ordinances.

In Fulton the number of saloons has been reduced to five and the annual license fee was raised to \$3000.

Thompson, the new mayor of Quincy, when assuming

office, has said: "I have been elected on a platform of law enforcement; the law says that saloons must be closed between midnight and 5 o'clock in the morning on week days and from midnight of Saturday until 5 o'clock Monday morning; during my administration there will be no saloons open after 12 o'clock midnight of week days and there will be no open saloons on Sunday. There will be no favoritism shown; the law regulating saloons will be enforced impartially and everybody engaged in the business will be given a square deal."

Indiana. The Indiana Politicians are still trying to "get square" with the brewers for failing to contribute to their election funds. Among others they have pounced down upon the officers of the Terre Haute Brewing Co., Terre Haute, whom they are prosecuting under the so-called "corrupt practice" law of Indiana, alleging that the officers "used money" at the recent Local Option election.

Iowa. Although Iowa has now been "bone-dry" for nearly one year, its courts are clogged with trials of alleged bootleggers. In Gate City alone 47 persons are under indictment for selling whiskey, commenting upon which fact the Waterloo "Courier" says: "The bootlegger will never be eradicated until public sentiment against him has been aroused to a sufficient pitch. Where the prevailing opinion of a community is opposed to prohibition, there is bound to be a tendency to overlook the bootlegger and to wink at his activities."

Kansas. According to latest reports Kansas, alleged to be now "bone-dry", has 75 more prisoners in the penitentiary than it had when it was "drizz'ing wet."

Near the Topeka cemetery the home of John Kilian, an aged farmer, was recently raided by deputy sheriffs and saloon men who found on the premises a complete little distillery and "home brewery." In Kansas City an ordinance has been passed forbidding the sale, barter or gift of alcoholic drinks in less than gallon quantities and the drinking at the place of sale. A second ordinance declares any saloon equipment a public nuisance.

Kentucky. Circuit Judge W. H. Field, of Louisville, has decided that a license to conduct a saloon is a privilege granted on the personal responsibility of the licensee and is an asset that becomes part of his estate in the event of his death or bankruptcy. He holds, therefore, that the assignment by the holder of a license of his license as security for a loan is void.

Pembroke, a town in Christian county, near Hopkinsville, has voted "wet" by a majority of sixteen. Pembroke has been "dry" for six years.

The Kentucky Distillers' and Wholesale Dealers' Association announces that it "has determined to take an active hand in assisting the authorities in enforcing the Sunday closing law, and will employ all legitimate means within its power to detect and have punished those who violate this law, in letter or in spirit."

Maine. Deputy Marshall Albert G. Collamore and Constable Ernest E. Knight, of Portland, were recently arrested for having at their homes large quantities of confiscated "liquor" which they were clandestinely selling to bootleggers, an allegation which they stoutly denied.

Maryland. Free lunch has been abolished by saloonists in Baltimore.

Massachusetts. For licenses to 1080 applicants the licensing board of Boston has received this fiscal year the sum of \$1,349,440.

The overland expressmen who carry liquor from Providence and Pawtucket to North Attleboro are now making their trips through Valley Falls into North Attleboro by the

way of Adamsdale, to avoid passing through the city of Attleboro, where the police officials are interpreting the Webb-Kenyon law as applying to the transportation of liquor from a wet city to a dry city.

Michigan. In spite of the fact that the brewers of Detroit are to operate their plants but 10 months during the present fiscal year, their local taxes have been enormously increased and they therefore went to court to have the assessment reduced.

Iron County, tired of Prohibition, has returned to the "wet" column.

Minnesota. A dry zone two and one-half miles around Fort Snelling, near St. Paul, was established on May 1, under the second mandatory order of the Minnesota State Public Safety Commission. Under the order four saloons in the vicinity of the reservation had to go out of business.

Missouri. The breweries of Kansas City have entered into a gentlemen's agreement that no attempt is to be made to put bar fixtures into soft-drink places on the Kansas side, and the Kansas authorities, therefore, dropped their plan of adopting drastic measures against the sale of "near beer."

New rules for the conduct of saloons have been promulgated by Excise Commissioner Lewis, of St. Louis, providing that proprietors will be held responsible for the acts of their employes; habitual drunkards must not be admitted, after notice from wife or other authorized person, and one notice shall serve for all time; no card games, pool, billiards, gambling in any form, sparring, wrestling or boxing shall be permitted on the premises; saloons must close twenty-four hours on Sundays and election days, and between 1 and 5 a. m. on week days; no music, except by mechanical instruments, will be permitted in saloons.

The convention of the Liquor Dealers' Benevolent Association of Missouri has adopted a resolution commending the Reed "bone-dry" amendment, the president of the association, John H. Pensa, having pointed out that this amendment will prohibit individuals in "dry" States from stocking their homes with liquors, the ultimate effect of which will be to cause resentment against the State prohibition laws and bring about their repeal.

Nebraska. Since May 1st Nebraska is under State-wide Prohibition. During the day and night of April 30th, liquor valued over \$1,000,000 was sold throughout the State and what remained unsold was shipped to St. Joseph, Mo., where Nebraska wholesalers are continuing to do business. The number of saloons closed is 829, and 17 breweries had to stop operating.

New Jersey. The New Jersey State Board of Agriculture has issued a circular in which the opinion is expressed that, to prevent a food shortage in this State, the output of breweries and distilleries ought to be curtailed.

In many New Jersey cities the authorities are refusing to issue the usual number of licenses, notably in Atlantic City, Hoboken, Jersey City, New Brunswick, Union Hill, Tom's River, Paterson, Passaic, Newark.

In Bergen County 50 hotelmen and saloonists are under charges of having violated the Sunday closing law.

In granting licenses to hotel keepers in May's Landing, Judge Shinn warned the applicants against permitting unpatriotic "war talk" in their bar-rooms, and said that if any complaints were made and sustained by investigation the proprietors would be liable to lose their licenses.

Excise Commissioners James A. Mullen and Adolph C. Koyen, of Perth Amboy, have been acquitted in the Middlesex County Court of a charge of malfeasance in office.

New York. An important discussion took place, May 14th, in New York City when the Committee of Sixty met

a number of leading brewers at the Yale Club to exchange ideas upon the question of conserving the grain supply during the war. Professor Irving Fisher, of Yale University, favored the restriction, if not prohibition of brewing and distilling, the owners of the plants to receive compensation; and Adolph G. Hupfel, Jr., who is a graduate of Yale University, said: "My grandfather and my father established and built up our large business. Would it be just under any pretense to take away my invested rights, to confiscate my property, for that is what it would mean if compensation is not made at the time of taking it for Government purposes?"

Julius Liebmman, President of the S. Liebmman's Sons Brewing Co., Brooklyn, said the property interests represented in the trade based their position on a court ruling that in the event of unjust confiscation of breweries and similar plants immediate compensation should be made. Other members of the brewing interests at the conference said the British Government had settled this matter of compensation by reaching the decision to "buy up the entire drink trade." "If you are going to give us British or Canadian prohibition I am with you," announced Mr. Liebmman. "There the soldiers and workers are permitted to have their beer, but in reduced percentage of alcohol. Here we propose to go further than any of the warring countries, and yet permit the nations abroad to import our grain for brewing purposes as well as for food." No definite plans were agreed upon, but the representatives of the trade will continue their determined agitation against drastic and unjust treatment of the brewers in this country.

Another interesting discussion was held at the Academy of Medicine, 17 West 43rd Street, under the auspices of the National Institute of Social Science, when Health Commissioner Haven Emerson advocated Prohibition as a war measure, while Rev. Jacob E. Meeker, member of the House of Representatives from Missouri, urged government supervision of the distribution of drinks to soldiers, but spoke against Prohibition. "Does it not seem to be practical sense that the Government should as carefully supervise the distribution of drink as the distribution of food?" he asked. "There is no such thing as prohibition in Europe. True it is that the Czar prohibited vodka, and we know what happened to the Czar. I do not mean to say that that occurred because he prohibited vodka, but this action was in perfect accord with the Czar's spirit. France, England, Germany, Italy and Belgium all have beer and wine rations for their soldiers in the field. We exported about 5,000,000 bushels of malt to keep the English breweries running. This is not the time for us to seek excuses to put through pet measures."

The Rev. Wallace M. Short contended that it would be most inadvisable to settle so vital a question of public policy "under the pressure of the excitements of war." "Germany as yet easily distances all the civilized nations in efficiency," he said, "though she never has so much as thought of Prohibition. Is it not more likely that war prohibition for us, with its vast disarrangements of business and of the habits of the people, together with the antagonisms engendered and the problems of enforcement, would weaken rather than strengthen our arm for united aggression or defence? If we are to argue for Prohibition on the ground of a certain type of efficiency, Germany can on the same ground argue for Prussianism."

Hotel and restaurant proprietors and saloon-keepers of New York, and in general all persons having to do with the liquor trade, are in uncertainty at present because of the following clause in the Army Bill: "It shall be unlawful to

sell any intoxicating liquor, including beer, ale, or wine, to any officer or member of the military force while in uniform." It was pointed out that this clause is so vague and so loosely drawn that its enforcement, difficult enough at best, is likely to be beset with endless confusion.

Ohio. The Anti-Saloon League has issued another pronunciamento declaring that no matter what Congress may do to the trade while the war is going on, Ohio shall be made "dry" forever—as soon as the agitators can make it so. Thereupon the organizations of the trade and the Ohio Liberal League have answered that they are as ready to continue the fight as they have always been. They are also fighting against Congress making the country "dry" upon the ridiculous pretense that otherwise the American people would not have enough bread to eat.

Recent local option results were as follows: Wet—Lebanon, Warren County; Malvern, Carroll County; Pomeroy, Meigs County. Dry—Fairport, Lake County; Gratis, Preble County; Malinta, Henry County; Mantua, Portage County; Tippecanoe City, Miami County; Woodsfield, Monroe County.

Oklahoma. John Tucker, former Deputy U. S. Marshal, has been sent to the penitentiary in Chickasha for two years, because he sold large quantities of liquor from an underground tank on his farm.

Pennsylvania. The result of the political persecution of brewery corporations and organizations in this State has been that the defendants entered a plea of "nolo contendere" and fines aggregating \$52,000 were imposed.

Virginia. The Supreme Court of Appeals of Virginia, in refusing to grant an appeal from the sentence imposed by the Corporation Court of Lynchburg, has upheld Virginia's law making it unlawful to bring more than one quart of whiskey into this State.

West Virginia. The Prohibition Law, which permits the bringing into the State by any resident of only one quart a month of intoxicating liquors, and that for his personal use only, went into effect in West Virginia May 2nd. During the last few weeks residents had been stocking up and great quantities of booze have been brought into the State.

Attorney George I. Neal, representing the Ohio Valley Electric Railway connecting Huntington, W. Va., with Catlettsburg and Ashland, Ky., has told the Board of Public Works of Charleston, during a hearing on the valuation of public utilities, that the revenues of interurban line were \$2,000 lower during the first week of May than during the same week of May, 1916, due to operation of new law against importation of intoxicants.

Wisconsin. Russell, Lincoln County, has voted out its saloons.

The Attorney General of Wisconsin is prosecuting the Phoenix Brewing Co., Rice Lake, for alleged selling beer without a license.

Canada. Prohibition became operative in the Province of New Brunswick, May 1st.

Peru. The Congress of Peru has passed a law providing for a prize of £100 to be awarded for the best text from which to teach temperance in the public schools of Peru. Intemperance, especially in the mining regions, is said to be a serious problem in Peru.

NOTE FOR GLIB TALKERS. "Those individuals who talk glibly about drink filling the asylums should note that 10 per cent. of the men admitted and in only 4 per cent. of the women and 7.7 per cent. of the total admissions had alcohol been the exciting cause of insanity."—"National Guardian."

Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....
November	4,386,268	4,474,950	88,682	.....
December	4,299,591	4,487,910	188,319	.....
	1916.	1917.	Increase.	Decrease.
January	3,591,781	4,009,066	417,285	.....
February	3,730,615	3,675,243	.....	55,372
March	4,368,682	4,581,782	213,100	.....
April	4,513,512	4,627,221	113,709	.....
Total	46,915,346	50,185,143	3,474,998	205,201

Net increase for the first ten months of the fiscal year 1916-1917 3,169,797

WORKMEN WILL DECIDE IT. "It is in the industrial city and State that the last big battle on the liquor question will be fought out. And it is here that the opposing forces are arraying themselves. In the last analysis the workingmen of this country will say whether the nation shall go 'dry.' " —(Burlington [Vt.] "Democrat.")

THE 1916 YEAR BOOK OF THE UNITED STATES BREWERS' ASSOCIATION, just out, contains the principal reports delivered at the fifty-sixth Annual Convention, held in Cleveland, Ohio, November 21st to 24th, 1916, and added chapters on European Developments, Canada's Brand of Prohibition, Local Option in the United States, Curiosities of Anti-Saloon Statistics, Home Distillation Abroad, The View of Science as to Alcohol, an appendix giving tables of revenue and other data, and a postscript containing the text of the Webb-Kenyon Law Decision. The Introduction is written by Secretary Hugh F. Fox, under whose careful supervision the able staff of the Association's literary bureau has collected and compiled the contents of the volume, which is too valuable for the information of all members of the trade and all liberal-minded citizens of the United States not to be in their possession. We recommend the Year Book's attentive perusal to all readers of these lines.

"SLOW UP THE HYSTERIA. Misdirected zeal and indiscriminate economy utilized in the interest of individual fads must be avoided these times as harmful to the general prosperity. The hysteria which is epidemic, has, among other things, virulently attacked the liquor trade. The 'Evening Telegram' holds no brief for the brewers but is not favoring fanaticism or encouraging misstatement, and believes that the effort now being made in Congress to discontinue during the progress of the war the brewing of malt liquors, on calm reflection may be found unnecessary. Of the 4,703,429,000 bushels of grain produced in the United States in 1916 the brewers used 65,000,000 bushels, 1.382 per cent., and of this thirty-five per cent. is salvaged and used for cattle feed, and thus returned to the farms. Invested capital, employment of thousands of men, and expenditure of immense sums of money yearly for labor, material, maintenance and operation, call for some consideration. It would be far better if a tithe of the energy so noticeable in pushing fads and isms was devoted to stimulating recruiting."—(New York "Evening Telegram.")

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building
Randolph and 5th Avenue.

CHICAGO, May 28th, 1917.

The output of the Chicago breweries in April amounted to 378,676 barrels, a decrease of 6,578 barrels as compared with the output in March. The stamp tax paid by the brewers in April was \$568,016.

It seems hardly possible that a public official like the Mayor of Chicago could make a fool of himself in almost everything he does. Discredited and despised as he has made himself by breaking his ante-election pledges, and defeated at the polls when he tried to have some of his abject tools elected, he now flies in the face of the entire nation by attempting to throw obstacles upon the path our armies are to march for the liberty of the world! He had refused to receive and hospitably entertain the French and British missions to the United States Government, but the people of Chicago and its officials, aside from the Mayor, honored and feasted the Marshal of France in spite of Mr. Thompson's idiotic opposition, as they also condemned his seditious utterances when he applauded the recalcitrants in Congress who did all they could to prevent the Government from accelerating the work that must be done to make the Army and Navy efficient and victorious. By the skin of his teeth, Thompson has escaped being prosecuted for attempted treason. Chicago hides its head in shame for ever having elected such an incompetent and treacherous person to occupy the highest office the people have to bestow. Several clubs to which Thompson belongs have expelled him.

The Chicago Brewers' Association has "done its bit" in enlightening the masses upon the facts regarding the food question by publishing the following statement, signed by William Legner, the Associations' president:

"In the general approximation of grain used by brewers much conjecture has been dealt in; some of the less informed authorities have alleged that as much as 640,000,000 bushels of grain is used annually.

"The facts are during the year 1916 there was employed in the manufacture of beer 65,000,000 bushels of grain, inclusive of all kinds, such as barley, corn and rice. This amount represents less than 1 per cent of the total crop.

"After the brewing process has taken place the wet grains are dried and returned to the farmer for cattle feeding purposes. More than 25 per cent. of all brewers' grains are returned to the farmer.

"After two and one-half years of war Great Britain rates brewing as one of the necessary industries free from conscription, and it still permits the importation of barley for brewing purposes.

"In Canada light beers are being brewed in all prohibition provinces without hindrance. Even Russia has modified its prohibition laws to permit the brewing of light beers."

The Manufacturers' and Dealers' Association has published a letter written by J. E. Parkin, of Roberts, Ill., saying: "In regard to this 'Raise Bigger Crops, Plant More,' and all such talk by different ones I think it would be better if some way was provided to move our 1916 crop of corn

and oats before we raise another crop. It does not look like a shortage of grain when we can not move what we have now. There are thousands of bushels of corn and oats around here less than 100 miles from Chicago, one of the best grain markets in the world, that is waiting for transportation and no cars to move any of it. I wish some one would figure out what we will do with our next crop if we do not move our last one. As manager of the Roberts Farmers Grain Company elevator, I know the above to be true." To this the Association's business manager, A. P. Daniels, adds: "If this condition exists in and about Roberts, Ill., the same condition must exist in all other parts of the United States. The letter explains the supposed shortage of cereals, and should be given wide publicity. It must be gotten to the public so they will understand and appreciate that the brewers and distillers are not using all of the cereals as claimed by the mercenary prohibitionists. It is very vital at this time that we educate the public in regard to the facts, so don't fail to do your share, and do it NOW."

President Griffen, of the Chicago Board of Trade, has declared: "There is plenty of grain in the country to carry through. If it wasn't for this hysteria, this wild frenzy that has seized America and the Allied Governments, the whole world, there'd be no such prices paid for wheat. There's been too much wild advice by amateurs, who know nothing about grain or production. Because a fellow teaches school somewhere doesn't give him ability to solve the nation's grain problems. Get me? I'm not trying to criticise the Government, and I want that understood, but I'm speaking of these thousands of food experts that have bobbed up on every side with bad advice, many of them."

The City Council's Committee on License proposes adding about \$100,000 to the annual municipal revenue by taxing bottle beer wagons and autos \$50 per year. A proposition to prohibit the sale of beer in cans or pitchers has not been concurred in by the Council.

The Sunday saloon closing question has been taken to the United States Supreme Court by counsel for organizations of the trade.

It was reported from this city on May 20th that members of the First Presbyterian Church of Chicago had received from President Wilson a letter congratulating them upon the stand they had taken for the suppression of the trade by prohibiting the manufacture of beer and spirits from grain. The letter is a forgery, as the President has denied ever having written it.

AWAY WITH THE TRIMMERS! "There is less intemperance than ever before in the history of this country, but more clamor for prohibition. How much longer will the sane and temperate people who are in the great majority put up with the impertinence of the selfish and money-collecting reformers? When will the voters elect a sufficient number of Representatives in State Legislatures and in Congress who will refuse to trim and who will stand up for personal liberty and property rights which are sought to be violated?"—(William A. Allen, New York.)

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, May 22nd, 1917.

To-day an agreement was signed between the Brewers' Protective Association of San Francisco and the local branches of the International Union of the United Brewery Workers of America which automatically raised the wages of the workmen employed by the local breweries. The agreement terminates May 15th, 1921. The agreement reads like a testimony that the brewery workers are not only the best-paid workers but are treated with the greatest consideration of all workers. Among other considerations the agreement provides that a workman's place be held open for him in case of sickness for three months and that he be allowed time off to attend to union matters. The brewery workmen and maltsters were raised from \$25.50 a week to \$28.00. A week meaning six eight-hour days and all work performed before 7 A. M. or after 6 P. M., to be considered overtime and to be paid for at the rate of 85 cents an hour. Sunday work to be paid at the same rate. Bottle house employes were raised from \$22.50 a week to \$24.00, they too to have an eight-hour day. The drivers and stable men work nine hours a day. They were raised all along the line. The keg beer route drivers were raised from \$28.00 to \$30.00, the shipping drivers that use more than two horses from \$26.00 to \$28.00, for the two-horse driver there is now \$26.00 instead of \$24.00 a week. Watch wagon drivers were raised from \$24.00 to \$26.00 and auto truck drivers from \$25 to \$27 a week. Stable men were raised from \$24.00 to \$26.00, and the helpers from \$22.00 to \$24.00. The bottle-beer wagon drivers were raised to \$25.00 a week, but hereafter get no commissions. In the former agreement they get \$23.00 and commissions, which gave the driver for a popular bottle beer a good sum in commissions each summer while the man who drove for a little used bottled beer made nothing extra, so that in a sense this is a reduction in wages to the drivers in some cases. They also work a nine-hour day. In Alameda County, across the Bay, the drivers are to have \$27.00 a week, but they must finish their routes no matter how much time it takes. In San Francisco the bottle-beer wagon drivers are to have 75 cents an hour overtime and the same amount for Sunday and holiday work. The bottle house workers are to have time and a half for overtime and double time for Sunday work except where Sundays precede or follow holidays. Good beer is to be furnished workmen whenever they want it during work hours. Certain provisions limit the work each workman may do and provide for the laying off of men in the dull season in rotation. The agreement carries a prohibition clause.

The Brewers' Protective Association elected directors last Friday, and this Friday the directors will elect from their number the officers of the association. J. P. Rettenmayer, the popular president of the association, declined reelection on the ground that he is too busy perfecting the organization of the California Brewing Association, of which he is president, to hold office. The directors are: Thomas Alton, R. Sammet, Chas. Hyer, W. A. Frederick and H. A. Luns-mann.

The Brewers' Protective Association was the first to subscribe to the local fund to raise money for experimental farms at Golden Gate Park. The plan being to prove by a number of small tracts of land just what can be raised on vacant lots and to interest the public in planting vegetables—and the public's children. No money was available from the park fund for this purpose, so it was raised by popular subscription.

Business conditions are unsettled here as elsewhere and the news from Washington is carefully followed by the local brewers. The work of the committee at Washington has received much deserved praise, but no brewer is confident enough of business life to go ahead and make any improvements. The price of bottled beer has been raised.

The Prohibitionists never sleep. Here in San Francisco, where the vote proved that people were satisfied with local conditions, they are trying to have a law passed compelling the grocery stores to close at two o'clock on Sundays—because most of the stores handle bottled beer and many San Franciscans who don't keep beer in the house use it for their Sunday night beverage. An effort is being made to defeat the law.

Repeated efforts to organize the hop growers into a strong organization have failed. Most of the hop growers are planning on getting rich this fall from their potato crop, as they claim that hop land will grow fine potatoes. Every hop man has planted some potatoes.

The election at Imperial on the wet and dry question was so flagrantly unfair that it is being contested in the Superior Court. In the southern part of the State the Drys are showing their true colors. In Imperial not only were the election boards selected by the Dry Federation but the city officials openly did their bidding. The Maier Brewing Co. is the leading spirit in the contest, as they have, or had, large interests in Imperial, which was a fine market for beer, as it is very warm there.

The Legislature adjourned without enacting any sort of liquor legislation although much was feared from it.

W. R. Hearst was very peevish over the defeat of the Romminger bill and has been advocating Prohibition ever since. The wine men, too, who believe that the saloon is doomed and the only way to save the State is to do away with the saloon, took the defeat of their pet measure hard. They will hold a meeting on May 26th, and it is hoped by some of their members that the Rominger bill will be referred to the people through the initiative at the election in 1918.

The attitude of the wine men is that they intend to save the beer men in spite of themselves. Any measure that will help the wine men will of course include the beer men. The winemen are making their fight against whiskey and highly alcoholic liquors on the grounds that if they were eliminated it would stop Prohibition agitation.

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., May 11th, 1917.

Although the output of the brewing industry in the United Kingdom has been officially restricted to 10,000,000 standard barrels per year, the amount of beer charged with duty for home consumption in 1916-1917 was 26,625,000 standard barrels, a decrease of 9,433,000 barrels, as compared with the output before the war, in 1913-1914. During the same period the home consumption of spirits decreased from 32,599,000 gallons to 23,981,000, or 8,598,000 gallons. This is not so bad after all, considering the fact that in most of the countries on the continent the output of their breweries has been reduced to hardly more than is doled out with a measly hand to the armies in the field. In those districts where ammunition and other war material is being produced, as also in the mining regions of the United Kingdom, the consumption of beer has not decreased at all, it has even increased in a good many parts, wages being higher than ever and the British workmen thus demonstrating that, war or no war, they insist upon

having their customary quantity of nourishing "liquid bread," a fact that ought to be remembered by the American "statesmen" who, as we see by the cable, are falling over one another to do the bidding of the Prohibition fiends who would deprive your entire nation of 100,000,000 souls of their daily potation of the brewers' product. However, in other parts of this insular realm, beer is exceedingly rare, so that in some of our big cities, particularly in London, many owners of restaurants, hotels and public houses are limiting their guests to one pint or even less when serving meals to them.

Home brewing has been stopped by the Food Controller by issuing another malt restriction order which provides that malt shall be delivered only to brewers producing for sale.

State purchase of breweries has been decided upon as the newspapers were informed. The Prime Minister is said to be determined to insist upon buying up the whole liquor trade in the United Kingdom, with a view, although strenuously denied by his intimates, to thereby gradually bringing about what you are calling "bone-dryness." The question remains whether or not he will succeed in that scheme without provoking a revolution, the great bugbear which is now threatening every monarchy in Europe!

The Brewers' Society, thoroughly aroused, appears to be willing to surrender to Lloyd George, as at its general meeting it has adopted the following resolution, which was supported by Waters Butler, of the firm of Mitchells & Butler, who is also a member of the Liquor Control Board: "That the brewing trade would not oppose complete State control of the industry, provided that during the time of control a guaranteed periodical payment were made to those engaged in it. Such payment to be equal to pre-war profit or to the amount as calculated for the pre-war standard of profits for the purpose of excess profits duty, and that any loss or mutilation of assets or goodwill taking place during the control period be fully compensated for in the event of State purchase (upon a basis now to be agreed upon) not taking place at the termination of the control period. Dispossessed licensees, directors, and other persons suffering loss of position or remuneration to be adequately compensated."

In a newspaper interview Mr. Butler has declared: "We have to take into account the probability of not being allowed to brew or sell any beer at all after November next, because it is anticipated that by that date all stocks of malt now in the country will have been used up; and if the food difficulty is not relieved one cannot see how the Government will allow a resumption of malting, especially in view of the offer of the Food Controller. Malting preparations must begin in September to be ready for December, and that means bringing us nearer the danger zone."

As conditions now are, some of the brewers have decided to pool their business and temporarily close a certain number of their licensed houses, a provision in the new Finance Bill facilitating such a project, it being intended to give license holders or owners the right to resume business as soon as circumstances may permit.

The wholesale price of mild ale and porter in London is now 100s. With slight variations, the gross prices of the other beers are: Stout 144s., imperial stout 168s., pale ale 120s., stock ale 144s., light bitter 105s. At Burton these prices have been officially announced: Bitter 130s. and 110s., stouts 140s. and 120s., mild ale 120s. These prices include war tax and are gross. In Yorkshire mild ale is 78s. net to tied and free customers alike, XX is 84s., XXX 90s., and old ale 96s. Bottled ale, formerly 3s. 6d. per dozen

pints, is now 5s. 6d., and half-pints, formerly 2s. 2d., are 3s. 6d. Retail beer prices in London have been officially announced at 3½d. per half-pint for mild and porter, 6d. per half-pint for bitter, Burton and stout, and 5d. per half-pint for "mixtures"—mild and bitter, mild and Burton, and mild and stout. Indoor and outdoor prices are the same: the pints and quarts at proportionate prices. In the environs of the Metropolis mild ale and porter prices are similar, and bitter, Burton, and stout and "mixtures" are 1d. cheaper at 5d. per half-pint.

In the Isle of Man the brewers have voluntarily decided to limit production to one-third, as compared with pre-war days. They also will not supply beer to licensed houses in the island controlled by British brewing firms. Owing to the lower duties prevalent in the island, Manx beer prices are nearly 40 per cent. less than British prices.

At a prohibitionist meeting held in Egham, General Sir Edward Hutton said he favored rum rations for our soldiers, at which statement there was much booing. The general, however, declared that the objectors did not understand what it meant to go through six campaigns, as he had done, and to march all night on an empty stomach, and Lieutenant-Colonel Gordon Leith, of the Army Canteens Committee, told the Newcastle-on-Tyne Farmers' Club that the soldier liked his beer, and it was the opinion of high army authorities that soldiers should get beer, and were entitled to it. He was astonished at the absence of drunkenness from the army. In a report based upon an exhaustive study of one thousand soldiers returned as sick during training or on active service from defects the relation between drinking and return to duty is summed up in the comment that "abstainers and those who are temperate do considerably worse than those who drink more heavily."

London, May 15. By Cable.—In commons today Chancellor Bonar Law said the announcement published this morning that the Government had taken a definite step in the direction of State control of the liquor traffic by deciding to assume charge of the breweries was an unauthorized and inaccurate account of one of the several private interviews with Premier Lloyd George.

May 21st.—By an order in council, the acreage to be devoted to the growing of hops in 1917 is to be reduced to half the acreage of 1914.

In England in 1914 27,000 acres were devoted to the growing of hops. The order in council, therefore, will permit only 18,500 acres to be used for this purpose during the present year.

Kennedy Jones, Director of Food Economy, has said: "A strong body of scientific opinion holds that beer has its food value. Apart from that it is a fact that only a small percentage of malt—not more than five per cent.—can be mixed with flour in bread making or it produces a sticky and unpalatable loaf. Whether the brewing of beer shall be stopped at once and the barley already malted used for mixing with flour is a question of policy and hinges on the point whether the malt in bread or in beer will secure the most efficient prosecution of the war. Unlike America, beer has been, for centuries, a part of the daily diet of our working classes. The first duty and the first effort of those responsible for the ordering of public affairs are to secure a maximum output of work for the prosecution of the war from all workers. A great number of men engaged in very heavy manual labor—as for example men working at blast furnaces—must drink considerable malty liquid. This is not only a practical fact; it is a scientific fact. The bulk of these men are in the habit of taking that liquid

in the form of beer. The question is not whether cold tea would be better for them, but what would be the effect on the output of work by suddenly cutting off their supply of beer. If it be found advisable to stop beer altogether—upon which point there is a considerable difference of opinion—it would be simple common sense to allow the workers time to adopt themselves to the change gradually, by a gradual reduction of the supply rather than by checking or stopping the brewing of beer at once. Also it is well to bear in mind that if the worker is not depriving part of his energy, as has been his habit, from beer he may require more bread, so that practically no actual saving of bread could be effected. Moreover, we may well take a leaf out of Germany's book in this matter. That country—which again is unlike the United States, in that beer is part of its normal diet—is in the matter of food now scientifically organized with a view to supplying its workers with a maximum of energy for the prosecution of the war. South Germany is still brewing thirty-five per cent. of its pre-war quantity of beer, against our twenty-seven and a half per cent., yet no one would suggest that the food situation in Germany has not been serious for the last twelve months. Of course there may arrive the point at which it is considered necessary, on review of all the circumstances, to stop all brewing, but until this point is reached, and in view of the drastic restrictions already imposed, it is scarcely fair to let the impression get abroad that we are blind to the considerations involved or determined to continue beer drinking regardless of its effect upon the war. It should be clearly understood that, because of its relation to daily life and the output of munitions, beer occupies a very different status in this country as compared with its relation to the life of the American people."

Brewing News from the European Continent.

Despite the efforts of the German censor, news regarding food conditions in that unfortunate country are leaking out almost every day and, summing them up, all signs appear to point toward impending famine. One correspondent declares that the supply of labor is shrinking continually, that fertilizer is lacking and fodder is extremely scarce and exorbitantly dear. Seed and planting material, he says, is insufficient, and, owing to the lack of male laborers, agricultural operations are much too late and inadequately performed, while no proper draft animals are obtainable, even at outrageously high prices. It is a mournful sight, he says, to see so many fields lying fallow. Owing to the severe winter, rye, barley and oats have suffered much and are five weeks behind former years. The new crop, the correspondent concludes, consequently will be less than in previous years, the very unfavorable spring having also caused delay. It is hardly necessary to say that in these circumstances the prospects of the German brewing industry have not materially improved during the last four weeks.

From Austria one hears little or nothing, but a report has come from Bohemia saying that nearly 300 breweries there went into bankruptcy during the last nine months and that those still solvent are not being operated, as brewing materials cannot be obtained at any cost. From the time Austria declared war until brewing operations stopped in Bohemia, the price of beer per hectoliter increased from 16 kroners to 63 kroners.

The production of beer is continuing to rise quite steadily so that it now has almost attained the normal level of ante-war times. During the first quarter of 1917 the French breweries' state taxes amounted to 3,130,000 francs, an in-

crease of 1,163,000 francs as compared with the taxes paid during the corresponding quarter of the preceding year.

The Brewers' Association of the invaded regions, with headquarters at 15 Boulevard Saint-Denis, Paris, has sent an appeal to the brewers of the United States asking them for aid in an effort to rebuild and equip the breweries destroyed by the German invaders. The petitioners say that the brewers in France, Belgium, Holland, England, and other European countries cannot help them in their extremity and that, therefore, they hope for immediate relief from their brethren in America. They need about 3,000 brew kettles of 60 to 150 hectoliters capacity each, 1,500 copper or aluminum coolers, 2,000,000 kegs of 50 to 100 liters capacity each, mash tubs, malt mills and all other brewery equipment. The 3,500 breweries in Belgium, also destroyed by the Germans, will require double the equipment asked for by the French. The appeal closes with requesting American manufacturers of brewing machinery and dealers in brewery supplies to address their offers to the Association's secretariat, 9 Rue Belzunce, 9, Paris (Xe), France.

From a Belgian brewery engineer, now a refugee in Paris, we have received a letter, saying: "In my poor country, Belgium, and in the north of France occupied by the Germans there are about 5,700 breweries, of which nearly 4,000 have been sacked, or destroyed by fire and shelling and from all of them the copper work has been stolen. As you may imagine there will be an enormous trade and work to be done in rebuilding and re-equipping these breweries after the war has been ended, and it is now time for American manufacturers and dealers to prepare for a campaign to furnish copper work, fermenting tanks, brew kettles, refrigerators, machinery and all other equipment, as well as malt, maize, rice, corn sugar and corn syrup."

Manufacturers and dealers in Germany need not try to get this trade in France as the French and Belgian brewers and maltsters are determined not to purchase anything from them as long as they live. They declare: "We shall not have anything in our plants bearing the mark 'Made in Germany.'"

The name of Joseph Maes, a son of Henri Maes, partner in the brewery formerly operated by Maes frères at Lille, has been added to the pages of the Golden Book of the French Brewing Industry, the young man having been seriously wounded in a splendidly courageous attack upon the enemy's trenches, for which the government of France made him a chevalier of the Legion of Honor and decorated him with the Cross of War crowned by a palm leaf.

The annual meeting of the Nederlandsche Brouwers Bond was held on May 10th at Eindhoven, Holland. The officers were reelected and important changes were made in the constitution of the organization, more firmly centralizing the work of the various local branches.

From Sweden comes the report that, owing to the lack of cork a substitute for that important material is now being successfully used by Swedish bottlers. The substitute is as good as the real article, but far more expensive. It is also cabled that "Sweden has taken a further step in the restriction of the sale of alcoholic beverages. Under a law adopted by the Riksdag effective January 1, 1919, the present system of selling distilled liquors is extended to cover wine and beer. Private saloons will also be abolished and all private trade in beer and wine and the importation of wine by individuals are forbidden."

Consul General E. D. Winslow has reported from Copenhagen that "the Danish receipts from customs duties

and taxes of different kinds during the fiscal year ended March 31st, 1917, amounted to over \$17,000,000, as follows: Customs, \$11,000,000; sugar tax, \$1,600,000; whiskey tax, \$1,800,000; beer tax, \$2,400,000."

Petrograd, May 2. (Correspondence of the Associated Press.)—Prohibition of traffic in vodka, which went into effect at the beginning of the war, while reducing to a minimum the percentage of drunkenness in cities throughout the empire, has met with less flattering results in the villages, according to reports recently received. In these rural communities secret distilleries have sprung up and a "new scourge" has taken the place of the vodka of other days. This is especially true of Siberian villages, says "Ryetch." A Siberian deputy is quoted to the effect that the peasants, instead of bringing corn to the towns to sell, are engaged in buying the small stocks remaining in such towns for sale to secret distilleries of vodka at fancy prices, sometimes paying as high as fourteen cents a pound. "This communication," continues "Ryetch," "is confirmed by the Siberian press. Nearly every village now has its own distillery. Consumption of this home-made product is increasing the number of hooligans in the villages and the latter are suffering in consequence. And this evil is not confined to Siberia. In the middle provinces the same conditions exist." The "Tambovsky Zemsky Vestnik" says of these provinces: "Home-made vodka is consumed in enormous quantities, in spite of its high cost. The peasants have plenty of money, and, with few distractions in the villages, drinking is on the increase." The latter article concludes with the significant observation: "Perhaps those who are afraid of an educated peasant are secretly condoning this drunkenness."

FIRE. The plant of the Louisville Malting Co., Louisville, Ky., was partly destroyed by fire May 16th; loss, \$20,000.

IMPOSSIBLE TO ENFORCE. "There is State-wide prohibition in Maine, and the Webb-Kenyon law prevents the overriding of that law by other States, and yet there are cities in Maine that have more shops per capita for the public sale of liquor than my home city, which is the greatest distilling city in the world."—(Claude U. Stone, M.C., Illinois.)

"WE CANNOT DECENTLY DESTROY THE PROPERTY or the rights of those whose business Congress has sanctioned since the beginning and from whom perhaps a third of our Nation's revenue has been derived. It would result in poverty, lawlessness, taxation, and distress. Where would we lay this new taxation? Would it be upon the churches and charitable institutions, which are now exempt, or would we lay it upon the backs of the people whom we have already taxed to the very limit of endurance?"—(J. Hampton Moore, M.C., Pennsylvania.)

"THE PUBLIC HAS BEEN MISINFORMED and led by the nose, as it were, with the titillation of gross, exaggerated statement. If public opinion is to veer round, so that it will organize and protest against the invasion of its personal liberty, it must be told the truth. For every argument in favor of total prohibition there are two sounder and more convincing arguments in favor of temperance. Let those whose legitimate business interests are attacked by the lying propaganda of the fanatics reply with the truth."—(Charles E. Gehring.)

LAMENTABLE. "When the pulpits of our land become rostrums for political speakers advocating any certain propaganda for civil government, they become perverted from the purpose for which they were established and for which they enjoy special privileges from the civil government. Unfortunately this condition now prevails to a lamentable degree."—(Frankfort "Courier.")

CANNOT LAST. "The 'hypocrisy of civilization' has had its day in the old Bay State. For fifteen years—from 1855 to 1870—Massachusetts tried prohibition, but after that experience our people found the law vain and injurious."—(James A. Gallivan, M.C., Massachusetts.)

"PROHIBITION BOOZE." "Men don't get drunk to get away from pleasure; men get drunk, and children get drunk and women get drunk, to get away from misery; and it is the misery which is in the mills that is driving those children to morphine and cocaine, and Jamaica ginger, your Prohibition booze! That is what they are doing; they are going to cocaine, they are going to morphine, just as our poor stevedores are doing in Washington—just as those men are going to the while-you-wait tablets. There is something worse than beer and wine; there is something worse than whiskey; and gentlemen, it is the Prohibition booze that has developed in this country; it is the morphine and cocaine, that is coming in here at is never came in here before."—(Harry Ryan, member Trade Union Liberty League, California.)

TEST OF A SOUND CONSTITUTION. "It would make no appreciate difference in social conditions whether a nation was dry or moderately wet. There would be a change of type in social evils, but our poverty, crime, insanity, nervousness and mental defectiveness would be about the same. This was at least what the data obtainable showed. Thus, in a dry State like Kansas the percentage of alcoholic insanity is 1.7, that of dementia præcox 37. In New York the percentage of alcoholic insanity is 7.4, that of dementia præcox 16.9, while the total percentage of insanity is about the same. It should be remembered that a great deal of alcoholism so-called is not alcoholism, but mental weakness and defect and disease, of which immoderate drinking is the expression. The capacity to drink ethyl alcohol without feeling a disagreeable reaction and to take it very moderately is in a sense a test of a sound constitution. Drunkards and habitual hard drinkers are nearly always weak-minded or mentally unstable. It has been shown in recent years that the outbreaks of dipsomania or periodical drunkenness are often only the expression of a serious recurrent mental disorder."—("National Herald.")

"LET NO MAN IMAGINE that this mania for prohibition begins or ends with liquor. The very fact that your prohibitionist bursts into sardonic laughter over the argument for personal liberty should convince any one that he has his own peculiar ideas of where your personal liberty begins and where it ends. If you doubt what is coming, I bid you read the letter columns of the press in prohibition territory and see the constant evidences of moral movements against tobacco, chewing gum, short skirts, the theater, dancing, card-playing and the whole category of human acts and habits about which tastes and ideas may differ. 'Let us sow the gentle prohibition breeze and we shall surely reap the whirlwind! 'Let the reformer come down from his stand and cease his bawling,' said Walt Whitman. I do not say that, but let him quit reforming as a profession. There are lots of unjust things said about the paid agitator and the evangelist who evangelizes for a thousand dollars a night, but it is incontrovertibly true that when they agitate for laws instead of souls, they become a greater menace to the State than are the evils they fight. Can any man think of temperance when he listens to the intemperance of the paid reformer? If I had to make my choice between being a drunkard and a bigot, I would be a drunkard. I think my chances of heaven would be better. More souls have been sent to hell by intemperate thinking than by intemperate drinking."—(O. F. Hershey.)

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Becker Brewing & Malting Co., Ogden City, Utah, will erect a complete brewery and bottling plant at Evanston, Wyoming.

—Valentine Blatz Brewing Co., Milwaukee, are about to equip their plant with a department for the production of non-alcoholic beverages for their trade in "dry" territory.

—M. Burkhardt Brewing Co., Akron, O., have installed direct expansion piping for storage rooms, etc., furnished by the Frick Co., Waynesboro, Pa.

—California Brewing Co., San Francisco, are equipping their Acme plant with a new 250-barrel bottling outfit, to serve for the entire combination.

—Donora Brewing Co., Donora, Pa., recently installed apparatus for changing present tank to flooded system, ordered from the Frick Co., Waynesboro, Pa.

—Christian Feigenspan, Inc., Newark, N. J., are establishing a distribution depot at Stamford, Conn.

—Fergus Brewing Co., Fergus Falls, Minn., have installed one 30-ton vertical single-acting, belt-driven, refrigerating machine and high side, etc., made by the Frick Co., Waynesboro, Pa.

—Franz Brothers Brewing Co., Freeport, Ill., are considering a proposition to have their plant converted for the manufacture of dairy products.

—Fremont Brewing Co., Fremont, Neb., are about to convert their brewery into a cold storage and ice-making plant.

—Gate City Malt Co., Omaha, Neb., are remodeling their elevator into a flour mill of 1,200 bushels daily capacity. The company's name has been changed into Omaha Mills Co.

—The plant of the Kalamazoo Brewing Co., Kalamazoo, Mich., not operated since 1913, has been sold to the Kalamazoo Creamery Co.

—The Leisen & Henes and the Menominee River Brewing companies, Menominee, Mich., have combined their storage depots at Crystal Falls, Mich.

—Sebastian Niedermair, Neosho, Wis., announces his inability to meet the claims of his creditors—to whom he owes \$13,198.20, his assets being given as \$16,991.30.

—It has been announced by the A. Fisher Brewing Co., Salt Lake City, Utah, that they will stop brewing August 1st, when in Utah Prohibition will become operative.

—The plant of the Walter-Raupfer Brewing Co., Columbia City, Ind., closed since February 20th, 1917, has been purchased by Jacob Portman, who is converting it into an ice and cold storage structure.

—The breweries of Columbus, O., are suing the Wasserstrom Bottle & Glass Co., and the Columbus Bottle Supply Co., to restrain them from using the breweries' bottles. The damages are laid at \$1,000.

—Every one of the breweries in Detroit, Mich., had its assessments raised this year by the local tax assessors, although the latter knows very well that next year these breweries are to be closed by Prohibition!

—There was an ammonia explosion in the plant of the Joseph Stoeckle Brewing Co., Wilmington, Del., May 6th, causing damage to the refrigerating machinery and building, and seriously injuring Grover Cramp, the engineer.

—Gottfried Brewing Co., Chicago, recently installed a new 140-ton high speed refrigerating machine direct connected to electric motor, furnished by the De La Vergne Machine Co., New York.

—Hagemeister Brewing Co., Green Bay, Wis., are figuring on a plan to remove their plant to Door County, Wis., with a view to there manufacturing "cherry juice," in case Wisconsin should be made "dry."

—Charles Hamm Brewing Co., Inc., Random Lake, Wis., are rebuilding their distributing depot at Boltonville, Wis., which had been destroyed by fire some time ago.

—Houston Ice & Brewing Association, Houston, Tex., are erecting new skylights, brick smokehouse and cooling room.

—T. M. Norton Brewing Co., Anderson, Ind., are installing new machinery in their "near beer" plant, which has recently been enlarged.

—Stegmaier Brewing Co., Wilkesbarre, Pa., are erecting a new storage warehouse, building to be 61x100 feet, four stories high and cost about \$25,000, exclusive of equipment.

—Storz Brewing Co., Omaha, Neb., are equipping their plant for the continuance in operation after May 1st, when Prohibition goes in, to manufacture a non-alcoholic beverage and also ice. The daily capacity of their refrigerating machinery is 565 tons, and they have a 150-ton ice-making system.

—Weisbrod & Hess Brewing Co., Inc., Philadelphia, are making alterations, to cost \$500.

—The Brewery Workers' Unions of Missouri have prohibited their members from residing in Kansas.

—The site of the closed brewery of H. Clausen & Son, 2nd Avenue and 47th Street, New York, has been purchased by the Lee Lash Studio, who will thereupon erect a plant for the manufacture of moving-picture films.

—To the Eddystone Relief Fund, established for the benefit of the orphans and widows of the 127 persons killed in the explosion of the munition factory at Eddystone, Pa., the Chester Brewing Co., Chester, Pa., have contributed \$500.

—Brown labels on brown bottles may be used by the Houston Ice & Brewing Association, Houston, Tex., the Federal Court of Appeals at New Orleans having refused an injunction asked for by the Jos. Schlitz Brewing Co., Milwaukee.

—The F. & M. Schaefer Brewing Co., New York, have given an option to a syndicate upon part of the plot of their New York plant on Park Avenue, between 51st and 52nd Streets, from where it was removed to its present location in Brooklyn, the site to be used for the erection of a twenty-story apartment house.

—The price of beer has recently been raised in Lebanon, Pa.; Columbus, Ohio; Belleville, Ill.; Neenah, Wis.; Philadelphia and vicinity, Pa.; Gloucester City, N. J.; Mahanoy City, Pa.; Allentown, Pa.; Tokio, Japan; Wilkes-Barre, Pa.; New York City; Albany, N. Y.; Troy, N. Y.; Syracuse, N. Y.; Rochester, N. Y., and many other cities throughout the country.

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW CORPORATIONS. The Garden City Brewery, Chicago, have amended their charter, increasing their capital stock from \$150,000 to \$400,000.

Storz Brewing Co., Omaha, Neb., have amended their charter changing the corporation's name to Storz Beverage & Ice Co.

Officers have been elected by brewery companies as follows:

Acme Malting Co., Chicago: President and treasurer, Robert H. Lanyon; vice-president, William M. Lanyon; secretary and general manager, William P. Rice.

Bartels Brewing Co., Syracuse, N. Y.: President, John S. Conway; treasurer, Charles E. Crouse; secretary, Charles E. Shinaman; assistant treasurer, Andrew Hemmer; additional directors, H. White, J. L. Cheney, Charles Listman, George A. Wood. The brewmaster is George Laurer.

Berlin Brewing Co., Berlin, Green Lake County, Wis.: President, C. C. Wellingsgard; vice-president, M. R. Campbell; secretary, F. W. Sacket; superintendent and brewmaster, Frank Feiner.

Birk Brothers Brewing Co., Chicago: President, William A. Birk; vice-president, Jacob Birk; secretary and treasurer, Edward J. Birk. The brewmaster is Andrew Fuchs.

Black Hills Brewing Co., Central City, S. D.: President, S. T. Wiedenbeck; vice-president and brewmaster, A. Neubert; secretary-treasurer and general manager, H. B. Schlichting; superintendent and brewmaster, A. Neubert; additional directors, Mrs. H. Schlichting and Mrs. M. L. Heinrich.

Cerveceria "La Perla," S. A., Guadalajara, Jalisco, Mex.: President, José M. Schnaider; vice-president and general manager, José A. Schnaider; treasurer, William J. Schnaider; secretary, Lic. José Perez Verdía; additional director, Manuel Ancira Vereá; brewmaster, Christian Muller.

Commercial Brewing Co., Boston, Mass.: President, John D. Sullivan; treasurer and general manager, John Lyons; Secretary, Frank T. Ford; additional directors, Joseph E. Doherty, Thomas Gately and Thomas F. Graham. The brewmaster is William Heine.

Cosgrave Brewery Co. of Toronto, Ltd., Toronto, Ont.: President, L. J. Cosgrave; secretary-treasurer, James Cosgrave; general manager, James F. Cosgrave. The brewmaster is Charles Hodgson.

Cream City Brewing Co., Milwaukee: President, Adolf H. Meyer; vice-president, Martin J. Fischbach; secretary and treasurer, R. Wittmann. The brewmaster is Julius Kerber.

Charles H. Daniels Brewery, Manistee, Mich.: General manager, Fred Daniels; brewmaster, Jacob Augst; additional directors: Louis Daniels, William Daniels and Philip Arkin.

Decatur Brewing Co., Decatur, Ill.: President, treasurer and general manager, Frank Schlaudeman; vice-president, Anton Spaeth; secretary, John M. Scherer; additional directors: Henry Schlaudeman and Lillie McGorray. The brewmaster is William E. Weissenbuehler.

Eagle Brewing Co., Inc., Waterbury, Conn.: President,

Mrs. Ellen E. Hayes; vice-president, Thomas Finnegan; treasurer, Thomas E. Guest; assistant treasurer, Daniel J. Leary; secretary, Michael T. Hayes; additional director, T. Frank Hayes.

Edmonton Brewing & Malting Co., Ltd., Edmonston, Alberta, Canada: President, D. R. Ker; vice-president, T. W. Lines; secretary, J. G. Walford; Joint managing directors, W. H. Sheppard and W. E. Lines.

Esquimalt Brewing Co., Ltd., Victoria, British Columbia, Canada: President, G. E. Wilkinson; treasurer, managing director and brewmaster, James Fanall.

Falls City Brewing Co., Louisville, Ky.: President, Theo. Evers; vice-president, A. J. Dressel; treasurer, Herman Roehr; secretary, B. H. Schrader; brewmaster, Otto Doerr.

M. K. Goetz Brewing Co., St. Joseph, Mo.: President and general manager, William L. Goetz; vice-president, Frank L. Goetz; secretary and treasurer, A. R. Goetz; assistant secretary, H. E. Goetz; additional directors, T. J. Benkendorf and E. A. Sunderlin. The brewmaster is Adolph Biewend.

Gottlieb-Bauernschmidt-Straus Brewing Co., Baltimore, Md.: President, Albert H. Wehr; vice-president, M. L. Fesenmeier; secretary and treasurer, James Barkley; general manager, Charles Schlaffer; additional directors, M. Ernest Jenkins, H. Elmer Singewald, John P. Baer, J. H. Kummer, Omer F. Hershey and Peter Hauck, Jr. The brewmasters are Theodore Weinert, John Fitzgerald and Carl Wanke.

John Gund Brewing Co., La Crosse, Wis.: President, Henry Gund; vice-president and treasurer, Henry Gund, Jr.; secretary, Carl Kurtenacker; brewmaster, Louis Silberschmidt.

Hagerstown Brewing Co., Inc., Hagerstown, Md.: President, Walter D. Willson; vice-president, George S. Stevenson; treasurer and general manager, Charles E. Ochs; secretary, John C. O'Connell. The brewmaster is Thomas Schneider.

James Hanley Brewing Co., Providence, R. I.: Additional directors, Michael F. Dooley, James T. Egan, Frank McKenna and Patrick H. Morris.

Hellmann Brewing Co., Waterbury, Conn.: President, Mrs. Martin Hellmann; secretary, treasurer and general manager, Charles M. Hellmann; additional director, Emilie B. Richardson. The brewmaster is Edward Neschke.

Iroquois Brewing Co., Buffalo, N. Y.: President, Leonhard Burgweger; vice-president and treasurer, Philip Bartholomay; secretary, Henry Burgweger; brewmaster, Carl Lehman.

Koch Brewing Co., Williamsport, Pa.: President, Edmund G. Koch; vice-president and treasurer, Ed. V. Koch; secretary, I. H. Hartman; brewmaster, Adolph L. Molitor.

Lexington Brewing Co., Lexington, Ky.: President and treasurer, John Gund; secretary, K. E. Gund; brewmaster, Theodore Lassig.

Lion Brewing Co., Wilkes-Barre, Pa.: President and general manager, William Stoffel; vice-president, John B. Yaeger; secretary and treasurer, M. Petz; brewmaster, Oscar Gebler.

Lyon & Sons Brewing Co., Newark, N. J.: President, Gottfried C. Krueger; vice-president, William C. Krueger;

secretary and treasurer, William Schmauder; additional director, William T. Plum. The brewmaster is William A. Godron.

Maier Brewing Co., Los Angeles, Cal.: President and treasurer, Edward R. Maier; secretary, G. A. Thurner; superintendent, Jacob Steinemann; brewmaster, William A. Steinemann.

Marshfield Brewing Co., Marshfield, Wis.: President and general manager, Louis Hartl; vice-president, Louis Bauman; secretary and treasurer, H. Kalsched. The brewmaster in Henry Wismeth.

Mascoutah Brewing Co., Mascoutah, Ill.: President, George W. Lischer; vice-president, E. R. Hogist; treasurer, Gustave J. Scheve; secretary, manager and brewmaster, Paul H. Schroeder.

Minneapolis Brewing Co., Minneapolis, Minn.: President, F. D. Moerenberg; vice-presidents, Titus Mareck and Jacob Kunz, the latter also being treasurer, while the former is the secretary; superintendent and brewmaster, Fritz W. Just.

Obermeyer & Liebmann (Corp.), New York: President, Theodore Obermeyer; vice-president, Henry L. Liebmann; treasurer, Joseph Obermeyer; secretary, Ernest Obermeyer. The brewmaster is Fred Glatz.

O'Keefe Brewery Co. of Toronto, Ltd., Toronto, Can.: President, Charles Millar; managing director, W. T. Kernahan; secretary and treasurer, Fred T. Walsh; superintendent, John Fox; brewmaster, E. Wallesen.

Park Brewing Co., Hancock, Mich.: General manager, Michael Holland.

E. Porter Brewing Co., Joliet, Ill.: President, H. E. Porter; vice-president, Ed. Donahoe; secretary-treasurer, Julius Braun; additional directors, Patrick McFarland and Dr. H. G. Schuessler. The brewmaster is Ernst Rupprecht.

Premier Brewing Co., Philadelphia: President, Joseph C. Trainer; vice-president, manager and brewmaster, August C. Gruenewald; secretary and treasurer, A. Julius Miller; additional directors, John H. Trainer and Carl Hess.

Reisch Brewing Co., Springfield, Ill.: President, George Reisch; vice-presidents, Joseph Reisch and Annie Reisch; secretary-treasurer, Frank Reisch; additional director, George F. Reisch. The brewmaster is Conrad Griesser.

Washington Brewing Co., Columbus, Ohio: President, John Wahl; vice-president, John Bauermeister, Sr.; treasurer, T. E. Landers; secretary, W. H. Eichenlaub; general manager, George T. Drake. The brewmaster is Peter Wittmann.

British-American Breweries. The directors of the New England Breweries Co., Ltd., have announced a further dividend of $3\frac{1}{2}$ per cent. on the ordinary shares, making 5 per cent. for 1916.

"WOULD THERE BE ANY OBJECTION to the consumption of beer, wine and whiskey except for the insatiate appetites of a few out of a great many, which causes occasionally consequence of an objectionable or regrettable character? To deny that would be futile and untrue, but is such excess not customary in all other domains of human action and tendencies?"—"The Beacon.")

SYMBOL OR FARCE? "Does that Statue of Liberty in New York's harbor mean anything to you people? Is it a symbol of America or a farce? Liberty does not mean exemption from tyranny without, but also protection from tyranny within—it means personal liberty! And prohibition will mean the death of this cherished symbol of the United States of America."—(Detroit "Press.")

Personal Mention.

Robert Hilliard, one of the directors of the James Everard Breweries, New York, and his wife, were very active last month in making a success of the Actors' Fund Fair held in New York City.

Dietrich Knabe, president of the Consumer's Brewing Co., of New York, Ltd., New York City, celebrated his seventy-fifth birthday on May 11th, receiving congratulations and appropriate gifts from the members of his family, the brewery's staff, the many social and charitable organizations to which he belongs, and from the innumerable friends and business associates he has in the metropolis and its surrounding territory. Mr. Knabe is one of the most respected citizens of the big city, in which he has now been living for sixty-two years, and to whose prosperity and welfare he has materially contributed through ceaseless work and private, as well as public service.

William Ebling, president of the Ebling Brewing Co., New York, who was recently suffering from a severe illness that affected his hearing, has safely recovered.

John Eibl, Jr., who spent the past six months at a brewers' academy, to add to his store of technical knowledge in the brewing industry, has returned to his post as assistant brewmaster for the Milwaukee-Waukesha Brewing Co., Waukesha, Wis.

George W. B. Fletcher, secretary-treasurer of the Bergner & Engel Brewing Co., Philadelphia, has been elected a member of the board of directors of the Penn-Wyoming Oil Company, of which former Governor O. B. Colquitt, of Texas, is chairman.

Hensler-Ungrich. There was a pretty wedding May 9th in the Hensler family, owners of the plant of the Joseph Hensler Brewing Co., Newark, N. J., Gilbert A. Hensler, son of Mr. and Mrs. Joseph Hensler, and Miss Henrietta Ungrich, a daughter of Mrs. Henrietta Ungrich, New York, celebrating their union for life, the important event taking place in the east ballroom of the Hotel Astor; the Rev. Frederick H. Knubel of the Evangelical Lutheran Church in 140th street, New York, officiating. The solemn ceremony was followed by a dinner in the north ballroom of the Astor. The bride, whose uncle, L. K. Ungrich, gave her in marriage, wore a white satin gown embroidered in pearls, with a silver cloth court train, and a duchess lace veil held with orange blossoms. She carried lilies and orchids. She was attended by Miss Margaret Hensler as maid of honor and by Mrs. Edward Hensler as matron of honor. Little Miss Margaret Gregory was the flower girl. Mr. Hensler's best man was his brother, Edward Hensler, and the six ushers were James Hensler, Robert Hensler, Louis K. Ungrich, Frederick Ungrich, Dr. Henry Koenig, and Dr. W. S. Gregory. The honeymoon is being spent in Honolulu, and on their return Mr. and Mrs. Hensler will live at Forest Hills, L. I.

Frank B. Lafferty, registrar of vital statistics in Utica, N. Y., has resigned from his office to accept the position as manager of the bottling department of the Eagle Brewing Co., Utica.

George J. Meyer, president of the George J. Meyer Malt-ing Co., Buffalo, N. Y., has decided to give his \$6,000 salary as postmaster of Buffalo, to be applied to the defense of the United States against the enemies it is now fighting with the Entente Allies in Europe.

Edward Rothaug, assistant superintendent of the Ziegele Brewing Co., Buffalo, N. Y., spent part of last month in Atlantic City, N. J., enjoying the balmy breezes on the famous "board walk" of that fashionable seaside resort.

Rudolph J. Schaefer, president of the F. & M. Schaefer

Brewing Co., New York, contributes the following to the "Grain Saving" question controversy: "The Prohibitionists are making an effort to bring about the suspension of the manufacture and sale of alcoholic liquors as a 'war measure.' If it were a necessary or an advantageous expedient at this time, patriotic citizens would not interpose any objections. Those for whom I speak deny either the necessity or the advantage of any act which would absolutely prevent the manufacture and sale of alcoholic liquors, or even seriously interfere with the brewing and dispensing of malt liquors. Those who have hundreds of millions of dollars and the work and inheritance of two and three and even four generations invested, anxiously and sincerely seek to avoid unnecessary and unprofitable cessation of the manufacture and sale of alcoholic liquors. They wish to protect their rights and their fortunes, but also they are fearful of and opposed to giving the Prohibitionists the unfair advantage of what is now represented as a temporary expedient, but which would undoubtedly be used to make it a permanent policy."

Louis B. Schram, president of the India Wharf Brewing Co., Brooklyn, N. Y., who is also chairman of the Labor Committee of the United States Brewers' Association, has been appointed a member of Labor Committee of the Council of National Defense, which is to supervise the continuous operation of measures to safeguard workers and adjust all questions involving working standards while the United States is in the war against the Imperial government of Germany.

Col. John P. Sullivan, president and attorney of the Brewers' Exchange of New Orleans, La., says that conservation of the grain supply for war purposes will not affect the breweries of New Orleans, nor will it cripple the brewing industry of the United States.

Charles Zoller, president of the Charles Zoller Co., dealers in brewing machinery and supplies, New York, celebrated his sixty-fifth birthday May 27th.

American Society of Brewing Technology.

Chicago Section.



The annual banquet of the American Society of Brewing Technology and meeting of the Chicago Section was held at the Bismarck Hotel, Blue Bird Room, Thursday, April 26th.

The attendance was very large, there being practically 160 present, including many guests from out of town.

The official speakers of the evening were Prof. Geo. B. Foster, of the University of Chicago, who addressed the Society on "Psychology of Reform and Prohibition," and Chas. Windle, the subject of whose address was the "Efficient Weapons Against Prohibition." Both addresses were highly entertaining and very instructive. The toastmaster of the evening was Mr. M. Von Valtier.

The election of officers resulted as follows: President, F. P. Siebel; Vice-President, A. J. Thaler; Second Vice-President, Theo. Sedlmayr; Treasurer, John L. Hoerber, Jr.; Secretary, E. T. Henius; Papers and Publication Committee, M. Von Valtier and E. Gerstenberg; Finance Committee, Oscar Ruh and F. Wittenmeier; Membership Committee, M. Gabler and Geo. J. Noth; Councillors, B. Hesse, Wm. Breuer, Ad. Dirian, Otto Luhr, M. C. Maegerlein, G. J. Patitz and C. Sipel. Arthur Ernst, Chairman Papers and Publication Committee; Frank Birk, Chairman Finance Committee; Fred Knepper, Chairman Membership Committee.

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. The National Officers of the Master Brewers' Association of the United States announce that owing to present conditions, it appears advisable to publish their official communications in English only, until further notice. They also say: "Our Country has entered the world-wide conflict. After due consideration our Government, supported by the people of the United States, in order to uphold the honor and dignity of this Country has deemed it expedient and necessary to join with the Allies in the struggle with the Central Powers. The die has been cast. Like all good American citizens, we shall support our Government in any policy it may deem advisable to follow, and to adjust ourselves, as far as possible, to the new conditions which will arise." The Special Meeting of the Board of Trustees, which had been called to discuss "matters of timely importance," has been postponed indefinitely.

District Meetings.

ALBANY. The members of the Albany District have resolved to advise their colleagues throughout the country to "abandon the spending of money in the fight against prohibition, and have a committee appointed to explain to the United States Brewers' Association that one of the purposes of our Association is a real cooperation with the brewery proprietors in the fight against those interests which are opposed to personal liberty. That our members will individually and collectively take up the fight as directed by the proprietors, and that we feel, the only way to succeed in insuring the continuity of our industry is by a well organized cooperative effort of all brewery proprietors and Master Brewers, and that the organizing of these efforts should be done by the U. S. Brewers' Association."

BUFFALO. Colleague Frank P. van de Westelaken has been made an active member in the Buffalo District. The District favors cooperation with the recognized authorities, such as the Local Brewers' Exchange, in the educational campaign. Colleague C. H. Hirzel has interestingly answered questions regarding the "Foam-Keeping Quality of Beer," and he is now engaged in writing an original paper upon the same subject. R. Witteman has read an interesting paper on "The Advantages and Savings Obtained by Instantly Removing the Spent Hops from the Wort."

CHICAGO. The Chicago District has decided not to grant a withdrawal card to any member while out of employment. The last card so granted was to colleague Charles Bosshart, March 31st, the plant with which he was connected having been closed.

CLEVELAND. It is the opinion of the members of the Cleveland District that "so far prohibition is a local matter and all our members can do is to go out and make votes, secure favorable articles in the local newspapers and by all means work hand in hand with the liberal organization in your city, and if a well-organized 'Home' organization cannot convince your voters that the manufacture and to drink a glass of beer and wine is no crime, they'll vote you out of business in spite of your imported speakers."

DAYTON. Colleague A. Senf, now with the Hollenkamp Brewing Co., has deposited his transfer card with the Dayton District. Colleagues A. Haas and R. Loewenthal have submitted their experiences in regard to the employment of chips, arriving at the conclusion that chips may be used to advantage, particularly in breweries which do not carbonate but are using "Kräusen," and where the filters are of less capacity than to take care of the total output.

MILWAUKEE. The Milwaukee District is in favor of

continuing "district funds to be used in such manner as the Association gathered in Convention may see fit. This guarantees to the Association the annual dues of \$12 for each of the members to be paid by the District into the Association Treasury. Surplus funds remaining from entertainments, conventions, etc., are to remain the property of the District, which reserves the right to dispose of them as it may deem best."

NEW YORK. In the absence of the president, Vice-President Max Papai presided at the regular monthly meeting of the New York District, held Saturday evening, May 12th. For the election of officers to be held at the annual meeting in June, the chair appointed a nomination committee composed of the Colleagues Michel, Kayan and Werrlein. At the next meeting Mr. Chas. Neeson will deliver a lecture on "High Speed Ammonia Compressors" and for the July meeting Mr. Rudolph Wittemann has promised to read a paper.

John Koenig, Jr., Secretary.

PHILADELPHIA. The members of the Philadelphia District are of the opinion "that the Nat. Ass'n and Districts should take an active part in the fight against prohibition. We recommend that the Nat. Ass'n morally and financially assist our members in this fight. A specific fund to be created for this purpose that our members take a more active part in primary, State and National elections. That the district and national funds be used as prescribed by our charter. District funds to be held to this clause only after receiving their sub-charter. Funds being in the local Association treasuries prior to this to be left to the discretion of the respective Districts or local Association. Every District to have the option of fixing monthly or yearly dues to the Nat. Ass'n, but same not to be less than \$12 annually."

PITTSBURGH. The Pittsburgh District has passed resolutions honoring the memory of their late colleague Arnold Schoenegg, who died March 30th. Colleague John Geisler, with the Hill Top Brewery, Mt. Oliver, Pa., has been admitted to membership. The members advise postponing the annual convention—on account of the war. They also believe that the policy of certain brewers to make the possibly largest sales is far more detrimental to the trade "than a low-alcoholic beer can benefit it."

ST. LOUIS. Colleague Albert Hofmeister, with the Royal Brewing Co., Weston, Mo., has been admitted to membership in the St. Louis District.

ST. PAUL-MINNEAPOLIS. The St. Paul-Minneapolis District has passed resolutions declaring that its members are "opposed to placing the District treasury at the disposal of the Association and that this question should be decided by the next convention."

OSBORN'S ANNUAL GUIDE TO AGENCIES, HAND BOOK OF USEFUL INFORMATION AND CLUB LIST, 1917, for wholesale and liquor dealers, clubs, hotels, etc., has just been published. As usual, this little volume is a complete encyclopedia for a large branch of the trade and should be in the hands of many thousands of our friends. Write for it to the publisher, Alfred F. Osborn, 45 Beaver Street, New York City. Price, \$1.00.

THE DISAGREEING DOCTORS. "The Prohibitionists always claim that the medical profession condemns the use of liquor as deleterious to the human body, although nearly every doctor uses alcohol in his prescriptions. I admit that some members of the medical profession condemn the use of any and all alcoholic beverages. Most do not. Some doctors pronounce a man to be a crank, if not a lunatic, who is regarded by other doctors as a remarkably bright and able man."—(Congressman W. J. Cary.)

Obituary.

Herman Birnbrauer, the esteemed treasurer of the Consumers' Brewing Co., Philadelphia, died suddenly at his home in Melrose, Pa., on Thursday, May 3rd, his fellow officers and colleagues announcing the sad event to the trade with their sincerest sorrow and deepest regret.

Francis Daeufer, one of the founders of the Daeufer brewery, Allentown, Pa., died in that city, April 5th, aged eighty-four years. He was a native of Bavaria and came to Allentown in 1855. During the Civil War he served in the 47th Pennsylvania Volunteers. One daughter survives him.

Walter Daubenspeck, brewmaster of the Buffalo Brewing Co., Sacramento, Cal., has died from the effects of injuries sustained by him in an automobile accident. He was born in Germany forty-two years ago, and he came to this country to act as brewmaster for a large brewery in Ithaca, N. Y. He came to Sacramento about eight years ago to become brewmaster of the Buffalo brewery. Daubenspeck was a giant in stature, some six feet five or six inches in height and heavily built proportionately. His strength was marvelous, various feats being told of his prowess in lifting heavy weights. Though of German birth he had taken out his citizenship papers many years ago and was devotedly attached to this country, and he intended offering his services in the war against the Imperial Government of Germany.

John E. Dick, aged 44, son of John Dick, one of the founders of the Dick & Bros. Quincy Brewery Co., Quincy, Ill., died there May 14th.

Joseph F. Gehringer, vice-president and general manager of the Daeufer-Lieberman Brewing Co., Allentown, Pa., died suddenly from an apoplectic stroke, at his home in Allentown, April 2nd. He had attained the age of forty-nine years.

Fritz Goetz, head of the Goetz Company, manufacturers of brewery machines and supplies, Chicago, died in that city May 3rd, at the age of the sixty-seven years. Mr. Goetz, who was known to brewers throughout the world, was born in Milwaukee, August 20th, 1849, from where he went to Chicago in 1869, to engage in the coppersmith business. In 1874 he began manufacturing copper kettles, etc., and four years after that he founded his present great business, which was originally carried on under the firm name of Goetz, Busche & Blum and operated a shop on Dearborn and Michigan streets from 1878 to 1880. This partnership was then dissolved and a new partnership was formed between Mr. Goetz and Mr. Brada and they continued the coppersmith business in a shop on Michigan and Orleans streets from 1880 to 1900. After that he formed a new company under the name of the "Goetz & Flodin Mfg. Co.," and did business at a modern factory on Chicago avenue and Sangamon street from 1900 to 1909. The property was purchased by the Chicago & Northwestern Railway and the company constructed a fireproof and modern factory on Clybourn avenue and Willow street, which they occupied from 1909 to 1917 as a coppersmith, tank and general brewing and bottling machinery business. Mr. Flodin retired from the business and the new company was formed under the name of the "Goetz Company." The new factory was sold in 1916 and the company moved to downtown offices at 30 N. La Salle street, Rooms 1327-28 and has their shop connections at 2734 High street, where all orders of the Goetz Company are carried out after the Goetz Company designs, patterns and details. The Goetz Company was reincorporated on January 1st with the incorporators, Fritz Goetz, Fred Goetz and Max

von Valtier, and will continue to do business under this name. The Goetz Company's fame, established by its founders, has extended to all countries of the globe, so that there is now hardly any brewery or malt house where Goetz apparatus are not used. The deceased's ambition was *quality* first, regardless of cost or profit. He made no enemy, if he could help it and did everything in his power to satisfy his customers. That gave him the reputation of a name of an *honest* man. Mr. Fritz Goetz was a well-known figure in all public affairs and was liked by all he came in contact with, for his cheerfulness and good nature and honesty in all his dealings. He was an active member of the Chicago Turngemeinde since 1867 and a member of the Germania Club, being the treasurer of that Society in 1916. He was appointed as a member of the Board of Education of Chicago in 1892 and served two terms. He was married to Miss Emma Bruchlacher in Chicago on August 24th, 1876, who survives him, with their children—Fred, Eda, Arthur, Hugo and Elsa.

George Klinkert, 32, son of the President of the Ernst Klinkert Brewing Co., Racine, Wis., was killed May 24th when his auto was struck on a crossing by a railroad train.

August C. Scharmann, vice-president and treasurer of H. B. Scharmann & Sons, Brooklyn, N. Y., died at his home in that city, 743 Greene Avenue, May 7th, succumbing to heart trouble from which he was a sufferer for many years. He was born in Brooklyn in 1865 and, after graduating from the Public Schools of his native city, Mr. Scharmann went to Germany to complete his education. In 1881 he entered the firm, founded by his father, Herman B. Scharmann, the pioneer brewer and one of the first presidents of the United States Brewers' Association. He was also a vice-president of the German Savings Bank of Brooklyn, a member of the German Hospital Society, an enthusiastic member of the Turner Bund, and an active member of the Democratic Party. His widow, two daughters, his father, one brother and five daughters survive him.

Christian Schmidt, president and general manager of the Home Brewing Co., Shenandoah, Pa., died at his residence in that city, April 13th, after a long illness, aged fifty-eight years. His widow and seven children survive him.

Arnold Schoenegg, president of the Arnold Schoenegg Harmony Brewing Co., Ambridge, Pa., out of business since 1916, died suddenly, March 30th, aged forty-one years. He was born in Pressburg, Hungary, the son of a prominent brewer and came to the United States when quite young, to work as a brewmaster. About six years ago he bought the Ambridge brewery. His survivors are his widow and his brother, Charles Schoenegg.

Julius Sonnenschein, head of J. Sonnenschein, dealers in choice Bohemian Hops, Prague, Bohemia, with branches in Saaz and Nuremberg, died at his home in Prague, May 7th, at the age of sixty-two years. Mr. Sonnenschein, known to the trade throughout the world, was highly esteemed by the governments of his own and other European countries, emperors and kings having honored him for his industrial and social activities by conferring high titles and valued decorations upon him. During the war Mr. Sonnenschein rendered effective service to the Austrian government as a member of its State Food Distributing Commission. He leaves his widow, one daughter and his son Paul, who is a lieutenant in the aviation corps of the Austrian army.

John Stanton, founder of the John Stanton Brewing & Malting Co., Troy, N. Y., died at his home in that city April 23rd in the eighty-sixth year of his age. He was born in Ireland in 1832 and had lived in Troy seventy-four

years. He had been in the brewery business fifty-three years, having bought the old Nash property and developed it. Mr. Stanton served as alderman from the first ward, Albany, for several years and was a life-long attendant of St. Mary's church. He is survived by his widow, Margaret McKeever Stanton, two sons, Edward F. and John Stanton, Jr., and six daughters Mrs. John P. Curley, Mrs. Fred Mahony, Mrs. Michael J. Fitzgerald and the Misses Frances, Grace and Euna Stanton.

Deaths in Foreign Countries.

George Littel Blackhall, former joint managing director of Ind, Coope & Co., Ltd., Burton-on-Trent, aged 72.

Albert Dumont, Maltster, at Arras, France.

Frederick Hardy, director of Hardy's Kimberley Brewery, Ltd., near Nottingham, England.

Edward Kean, secretary of the Northampton Brewery Co., Ltd., Northampton, England.

B. W. P. Peckett, head brewer to Charles Bunting, Ltd., Uttoxeter, England.

Captain John de Luze Simonds, son of Louis de L. Simonds, of H. & G. Simonds, Ltd., Reading, England, killed in action.

Lieutenant Francis G. Trustcott, son of Sir George W. Trustcott, chairman of the City of London Brewery Co., Ltd., London, England; killed in action while in the British flying corps.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

NEW BREWERIES.

CALIFORNIA—San Francisco... Carl A. Tornberg.

WASHINGTON—Vancouver Interstate Products Company.

BREWERY RESUMED.

MAINE—Portland P. F. Booden (after closing).

FIRM CHANGES.

ALASKA—Valdez Otto Haering, as Receiver of Valdez Brewing & Bottling Co., succeeds Valdez Brewing & Bottling Co.

NEW YORK—Brooklyn..... Louis Karasik, Christopher L. Meyerdirks, and Thomas W. Maires, Trustees of the Franklin Brewing Co., succeed Louis Karasik and Christopher L. Meyerdirks, assignees of the Franklin Brewing Co.

OHIO—Ironton The Ironton Brewing Co. (a corporation) succeeds Ironton Brewing Co. (Otto Ebert and John W. Truby).

BREWRIES CLOSED.

CALIFORNIA—San Francisco.... Jos. Schwarz Brewing Co. (Geo. F. Schwarz).

INDIANA—Columbia City..... Walter-Raupfer Brewing Co.

MISSOURI—St. Louis..... Edward Wagner, Jr., Receiver for Forest Park Brewing Co.

NEW YORK—Brooklyn..... Congress Brewing Co.

" —Oswego L. Wiegand & Son.

PENNSYLVANIA—Fair Oaks.... Economy Brewing Society.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1917 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, also in all other American countries where breweries exist, alphabetically arranged, with postal addresses, corrected to January 15, 1917.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries, firm changes and breweries closed recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

24340. A firm in England desires to buy or secure an agency for the sale of corn grits or hominy and corn meal. Quotations should be made c. i. f. destination, London or Glasgow. Goods may be shipped in bulk or put up in bags. References.

24378. A merchant in Denmark is in the market for maize and rice, 10 tons of which is desired for immediate delivery. Quotations should be made c. i. f. destination or f. o. b. New York. Correspondence may be in English. References.

24,474—A firm in Spain is desirous of being placed in communication with American manufacturers and exporters who wish to be represented in that country. Correspondence may be in English. References.

24,478—A firm in England is in the market for corn or maize flakes. Quotations should be made f. o. b. New York. Payment will be made by cash against sight draft. Goods should be packed in 500-pound bags. References.

24,537—Immediate quotations are desired by a firm in France from American manufacturers and exporters of malts.

Reported by U. S. Consuls. Dominican Republic: Beer is sold by importers in the Dominican Republic to retailers at \$15 to \$19 per barrel of 10 dozen 12-ounce bottles (12.5 cents to 15.8 cents per bottle). A private family buying from an importer would probably pay about \$2.40 per dozen bottles. Under the Dominican tariff beer pays \$6 per hectoliter (22.71 cents per gallon); in bottles the rate is \$8 per hectoliter (30.28 cents per gallon). At present \$6 to \$7.35 is the range of prices being paid f. o. b. New York for a barrel containing 10 dozen 12-ounce bottles (5 to 6.12 cents per bottle).

British Honduras: The present selling price of American beer to retailers in British Honduras is \$1.65 per dozen 12-ounce bottles. Beer used by persons or families may be obtained from jobbers for \$1.75 or \$1.80 per dozen, or 15 cents per single bottle. In bottles it is classified by customs officials as "reputed pints or quarts," the present duty being 50 cents and \$1, respectively, per dozen. The rates for ocean freight are from New Orleans on beer, bottled in barrels, estimated at 250 pounds, is \$1 per barrel, or 40 cents per 100 pounds. The New York rate is \$1.35 per barrel, about 55 cents per 100.

French West Indies: The people of Martinique, as a rule, are not beer drinkers. The natives do not care for malt liquor as a beverage, but the foreign residents do. Whatever demand there was for beer was practically all met by French products prior to the war. Although a small quantity was imported from the United States, the trade was insignificant. Traveling salesmen for American brewers visit Martinique regularly and have built up considerable trade in malt liquors. No beer saloons are maintained in Martinique. A list of the dealers who handle beer and other beverages in quantities for the general trade is forwarded. It is preferable that correspondence should be French.

Canada: On account of the prohibition law now in force throughout Ontario all beers imported into or manufactured

in the Province for commercial purposes must contain less than 2½ per cent. of alcohol. Inquiries have been made as to whether the demand would justify the production of a beer specially brewed to meet the existing requirements. This is still problematical, as very little beer is consumed here during the winter season, and there is doubt as to the extent to which beer of less than 2½ per cent. alcohol will be in demand during the summer season. During the 9 months ending December, 1916, Canada imported beer valued at \$119,341, of which \$52,825 was from the United States and \$64,858 from England. The total beer imports in 1916 were valued at \$162,536, a decrease of \$91,536, as compared with the imports in 1915.

(A list of possible importers of beer—liquor containing less than 2½ per cent. of alcohol—in Hamilton, may be obtained from the Bureau of Foreign and Domestic Commerce, its district or cooperative offices. Refer to file No. 85013.)

Argentine Republic: The total imports of bottled beer into Argentina during the five-year period from 1910 to 1914, inclusive, were 391,217 dozen bottles, of which Great Britain supplied 217,348 dozen bottles, the United States, 102,125 dozen bottles, Germany, 53,756 dozen bottles. The total imports during 1915 amounted to 25,455 dozen bottles, and during the first nine months of 1916 to 20,617 dozen bottles. The imports of bottled beer into Argentina comprise largely such special brews as malt extracts, stouts, ales, etc. Very little of the ordinary beer is imported. (A list of firms in Buenos Aires that might be interested in handling foreign beers may be obtained from the Bureau of Foreign and Domestic Commerce or its district or cooperative offices.)

Our Patent Bureau.

Selected List of Patents relating to Brewing, Making, etc., issued by the United States Patent Office, Washington, D. C.

1,224,264. Method of preparing natural cork for industrial use. Samuel C. Bond, Hollyoak, Del., assignor to Bond Bottle Sealing Co., Wilmington, Del.

1,224,768. Machine for coating bottle-caps. Francis Meisel, Boston, Mass., assignor to Meisel Press & Mfg. Co., Boston.

1,225,349. Apparatus for filling and capping bottles. John C. Miller, Canton, Ohio, assignor to The Miller Pasteurizing Machine Co., Canton, Ohio.

1,225,865. Electrical Advertising Device. Frank Schneible, New York, assignor to C. A. Schneible, Inc., New York.

1,225,889. Apparatus for cooling water and other liquids. Carl C. Thomas, Baltimore, Md.

1,225,982. Barrel washing and renovating machine. Max Lupinski and George J. Meyer, Milwaukee, Wis.

1,225,983. Barrel calking and renovating machine. Max Lupinski and George J. Meyer, Milwaukee, Wis.

1,226,052. Method of drying hops. George Hillard Benjamin, New York.

1,226,090. Bushing for bungs. Albert C. Ludlum, New York, assignor to National Bush Company, New York.

1,226,186. Refrigerating apparatus. Thomas Carrigan, New York, and Andrew J. Sweeney, Bayonne, N. J.

1,226,347. Yeast substitute. John Oddy Lumsden, Seattle, Wash.

1,226,391. Refrigerating or ice-making apparatus. Thomas Shipley, York, Pa.

1,226,439. Beverage and process of making same. John Ashus, Roxbury, Mass.

Prepared specially for the BREWERS' JOURNAL by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C., London, England, and 10 Gray's Inn Place, W. C., London, England.

Specifications Published

1916.

104,285. C. A. Gould. Stoppers for bottles and other receptacles.
102,143. O. Anderson. Control switches for electrically controlled apparatus for measuring liquids.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons claiming that they would be damaged by such registration may oppose the same on payment of the fee required by law.



Ser. No. 100,864. Suffolk Brewing Company, Boston, Mass. Filed Jan. 23, 1917.

The words and figures "Registered, Non-Intoxicating Beverage, Nutritious, Healthful, Cereal Beverage, Trade-Mark, Contents 12 Fluid Ozs., Suffolk Brewing Co., Boston, Mass.," are disclaimed.

Particular description of goods.—A Non-Alcoholic Cereal Beverage Sold as a Soft Drink.

Claims use since Oct. 30, 1916.



Ser. No. 101,948. The Geo. Wiedemann Brewing Company, Newport, Ky. Filed Mar. 6, 1917.

Particular description of goods.—Non-Alcoholic Effervescent Beverages Sold and Used as Soft Drinks.

Claims use since about the 1st day of February, 1917.

BRILLIANTO



Ser. No. 102,050. G. Rottenkolber, Scranton, Pa. Filed Mar. 10, 1917.

The signature shown is a facsimile of the applicant's.

Particular description of goods.—A Preparation for Clarifying Beer.

Claims use since Feb. 23, 1917.



Ser. No. 101,396. Hemrich Bros. Brewing Co., Seattle, Wash. Filed Feb. 15, 1917.

Particular description of goods.—Non-Alcoholic Beverages to be Sold as a Soft Drink.

Claims use since Apr. 1, 1916.



Ser. No. 101,512. A. Schreiber Brewing Co., Buffalo, N. Y. Filed Feb. 19, 1917.

No claim being made to the use of the word "Beer."

Particular description of goods.—Beer.

Claims use since Apr. 10, 1883.



Ser. No. 102,801. Fitger Brewing Co., Duluth, Minn. Filed Apr. 7, 1917.

Particular description of goods.—A Non-Alcoholic Carbonated Beverage Sold as a Soft Drink.

Claims use since Dec. 1, 1915.

NO-AL-KO

Ser. No. 102,802. Fitger Brewing Co., Duluth, Minn. Filed Apr. 7, 1917.

Particular description of goods.—A Non-Alcoholic Carbonated Beverage Sold as a Soft Drink.

Claims use since Dec. 1, 1915.

The following Trade Marks have been definitely Registered:

116,298. Cereal beverage. East St. Louis-New Athens Brewing Co., New Athens, Ill. Filed January 22, 1917. Serial No. 100,798. Published February 20, 1917. Registration granted April 24th, 1917.

116,500. Non-intoxicating brewed soft drink. Val. Blatz Brewing Co., Milwaukee, Wis. Filed January 26, 1917. Serial No. 100,979. Published March 6, 1917. Registration granted May 8th, 1917.

116,544. Beverage made from a compound of malt and hops and cereals. Münch Brewery Bottling Dept., Inc., New York and Brooklyn, N. Y. Filed October 26, 1916. Serial No. 98,906. Published January 16, 1917. Registration granted May 8th, 1917.

116,685. Non-alcoholic beverage sold as a soft drink. Jos. Schlitz Brewing Co., Milwaukee, Wis. Filed February 1, 1917. Serial No. 101,104. Published March 13, 1917. Registration granted May 15th, 1917.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, May 29th, 1917.

Barley. The Barley market is a little bit softer in sympathy with wheat. Very little coming in, only a few cars each day. Not very choice Malting Barley at that. The favorable situation in regard to the outlook in Congress is such that the brewers are coming into the market for Malt. Malt prices: Standard, \$1.78, New York; Bottle Beer Malt, \$1.86, New York.

CHICAGO, May 27th: "Offerings of Barley for the past month have continued to be very light. Trading on some days was only three or four cars. There was a sufficient Malting demand to absorb the small offerings, at steady prices, and, in fact, the range to-day showed a slight advance over our last quotation. The quantity of Barley still coming to market promises to be very small, because some Barley sections seem to be entirely shipped out. We quote Low Grade Malting, \$1.35@1.39; Fair to Good, \$1.40@1.46; Good to Choice, \$1.47@1.57, with one or two cents premium for Fancy,—in fact, \$1.60 could probably be obtained for something really fancy."

Malt. The Malt market is easier. Small supplies are reported at all centres, however. Quotations: Standard Malt, \$1.76@1.78, f. o. b. New York.

CHICAGO, May 27th: "Business is very quiet for the local Malt market. We quote: Standard Malt, \$1.70@1.72; Bottle Beer Malt, \$1.75@1.77; Fancy, \$1.82@1.85.

Corn Goods. Grits are quoted here to-day at \$4.40; Meal, \$4.39; Corn Syrup, \$5.14; Corn Sugar, in barrels, \$5.21; in bags, \$5.28.

CHICAGO, May 27th: "To-day's quotations for Grits are \$4.20@ \$4.22; Meal, \$4.19@ \$4.21.

Hops. The hop market was in a very unsatisfactory condition during the entire month, caused by the uncertainty of Washington legislation, unseasonable weather, and that the brewers are fairly well supplied for the time being. On account of this lethargy in the trade it is expected that a larger quantity of hops may be wanted during the summer months, especially since the stock of desirable goods remaining unsold is not large. There has been wholesale plowing-up on the Pacific coast, which will probably amount to the equivalent of about 80,000 bales. This ought to have some effect on market conditions, although we do not look for high prices the coming season on account of curtailed beer consumption. The hop roots in N. Y. State have wintered well, but the quantity under cultivation is very small indeed, probably not to exceed 10,000 bales. In California crop prospects are good, but in Oregon, where the weather has been cold and wet, the same as in the East, the growth is backward. We quote: 1916 Pacific coast hops, 10@12c.; 1916 N. Y. State hops, nominal, 36@41c.; 1915 N. Y. States and Pacifics 7½@9c.; 1914 States and Pacifics, 6@7c.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

The Liberty Loan of 1917

Philip Lynch, 2 Wall Street, New York City, announces in this issue of THE BREWERS' JOURNAL that he accepts subscriptions to the United States Government 3½ per cent. Liberty War Loan, without charge for his services. He also sends data and subscription blanks at the reader's request.

Chas. S. Jacobowitz Sells Breweries and All that is Used in Them.

Charles S. Jacobowitz, 1208 West Avenue, Buffalo, N. Y., is one of the most extensive dealers in brewery, bottling and ice-making machinery in this country. He also sells kegs and bottles, brewery equipment and entire breweries, as may be seen from a trade announcement Mr. Jacobowitz makes on another page of THE BREWERS' JOURNAL.

Notices of Removal.

Gifford Wood Company. The Rochester sales office of the Gifford-Wood Co. has been transferred to Buffalo, with offices in the Electric Building. Mr. J. E. Moul, formerly Rochester manager, will have charge of the Buffalo branch.

McKenna Bros. Brass Co. The McKenna Bros. Brass Co., Pittsburgh, have changed their firm name to the McKenna Brass and Manufacturing Co., Inc., and their address is P. O. Drawer 1249, Pittsburgh, Pa.

The 20th Century Machinery Co., Milwaukee, have removed their offices in that city from the Merchants' and Manufacturers' Bank Building to Suite 1228 in the First National Bank Building.

Barry-Wehmiller Machinery Co. Complimented.

The Barry-Wehmiller Machinery Company, St. Louis, recently received the subjoined letters which speak for themselves:

Newark, N. J., March 27th, 1917.

BARRY-WEHMILLER MACHINERY CO.,
St. Louis, Mo.

Gentlemen:—Inasmuch as we have heard some misinformation circulated around the trade in regard to your Washer, we feel that we should give the following facts of the true situation of this matter.

Your Washer was installed about a year ago, and since then has been running every day, a greater part of it more than 8 hours per day. We are pleased to state that during this time we have been entirely satisfied with it. It has proven to us to be a very reliable, economical, efficient and fully automatic Washer in all its details. The proof of all of this is that we have given you another order for a second Washer to replace one of the so-called Automatic Brush types, which we only had in operation for two years.

Trusting this will help you to convince the trade of your machine's true merit, we remain

Yours very truly,

GOTTFRIED KRUEGER BREWING CO.,

F. Fink, Supt. of P. B. & M.

St. Louis, March 24th, 1917.

BARRY-WEHMILLER MACHINERY CO.,
St. Louis, Mo.

Gentlemen:—We have been running our complete 150 barrel unit consisting of your Soaker, automatic connected Washers, bottle feeders, Pasteurizer and automatic Labeller since January 15th.

We were well pleased from the beginning and better satisfied every day since, particularly with the B-W Washers and B-W Labeller.

We are proud of the outfit and will be glad to show it to any other interested brewers that call.

Yours very truly,

SCHORR-KOLKSCHNEIDER BREWING CO.,

John J. Schorr, President.

Polack Tyres.

The Polack Tyre & Rubber Company, with headquarters at 1876 Broadway, New York City, and branches and service stations in all principal cities, declare that Polack Tyres are "the longest lived and the lowest in cost per mile," while they are also claimed to be "the highest priced tires in America." These tires are vulcanized under 1,000 tons' pressure, made of pure rubber and are of the correct size and shape for every need. Brewers who are using them praise and appreciate them highly.

Joseph Dixon Crucible Co.

The annual meeting of the stockholders of the Joseph Dixon Crucible Co., Jersey City, N. J., was held at the company's office in Jersey City, on Monday, April 16th, 1916. There was present a large attendance of stockholders who expressed their satisfaction with the present management and re-elected the former Board of Directors for the ensuing year. The vote recorded was the largest ever represented at an annual election—19,738 shares out of a possible 20,000. The directors and officers are: Directors—George T. Smith, William G. Bumsted, J. H. Schermerhorn, George E. Long, Edward L. Young, Harry Dailey, Robt. E. Jennings; Officers—George T. Smith, President; George E. Long and J. H. Schermerhorn, Vice-Presidents; Harry Dailey, Secretary; William Koester, Treasurer, Albert Norris, Assistant Secretary-Treasurer.

York Manufacturing Company.

Since their last report to this trade journal, the York Mfg. Co., York, Pa., have made 84 installations of their refrigerating machinery, among them for the following concerns: Randa Bros. (Meat Market), Tipton, Iowa., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Oak Harbor Co-operative Creamery Co., Oak Harbor, Wash., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Arverne Hygeia Ice & Supply Co., Arverne, L. I., N. Y., one 187½-ton vertical single-acting high speed enclosed type refrigerating machine, direct connected to a uniflow, poppet valve engine, and condensing side, including 12 "Shipley" Flooded double pipe ammonia condensers, also a 100-ton flooded freezing system and boiler system, including two 150 H. P. boilers; Wegner Machine Co., Buffalo, N. Y., two 60-ton vertical single-acting high speed enclosed type refrigerating machines, direct connected to motors, and condensing side complete (this installation was made for Wheats Ice Cream Co., of Buffalo, N. Y.); a 150-ton vertical single-acting high speed enclosed type machine, direct connected to motor, and condensing side, also a 30-ton flooded freezing system and double pipe brine cooler, and 16,075 feet of 1¼-in. direct expansion piping for bunker rooms (this installation was made for the Arctic Ice Cream Co., of Detroit, Mich.); Beatrice Creamery Co., Chicago, Ill., one 92-ton and one 62-ton horizontal double-acting belt driven refrigerating machines and condensing side complete, also six double pipe brine coolers and a 24-in. x 8 ft. vertical ammonia drier-cooler-purifier (this installation was made in Los Angeles, Cal.); New Kensington Ice Co., New Kensington, Pa.; one 45-ton vertical single-acting belt driven refrigerating machine and high pressure side complete, including three "Shipley" Flooded atmospheric ammonia condensers, also a 25-ton raw water flooded freezing system; R. Hope Brison & Co., Gastonia, N. C., one 50-ton horizontal double-acting refrigerating machine, direct connected to a Corliss valve engine, and condensing side, also a 30-ton flooded freezing system, 30-ton distilling system and 400 feet of 1¼-in. brine piping for ice storage; Chelton Ice Manufacturing Co., Philadelphia, Pa.; one 146-ton vertical single-acting high speed enclosed type refrigerating machine, direct connected to Purchaser's Rathbun-Jones Gas engine; Nissley Creamery Co., Fort Worth, Tex., two 20-ton vertical single-acting belt driven enclosed type refrigerating machines and condensing side, including four "Shipley" Flooded double pipe ammonia

condensers, also a brine storage tank containing 3,200 feet of 1¼-in. direct expansion piping; Reading Merchants Ice Co., Reading, Pa., remodeling their 185-ton ice plant to the York improved raw water system, including the necessary new framework, air tubes, laterals and headers, dehumidifiers and other apparatus; Masonic Home, Elizabethtown, Pa., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side, also a 2-ton freezing system and refrigerating system; Glendale Consumers Ice Co., Glendale, L. I., N. Y.; one 100-ton vertical single-acting high-speed belt driven enclosed type machine, one 6-ton vertical single-acting belt driven enclosed type machine and condensing side complete, including 4 "Shipley" flooded atmospheric ammonia condensers, also a 60-ton raw water flooded freezing system and 2,900 feet of 2-inch direct expansion piping for ante and ice storage rooms; H. L. Neuman (Ice Cream Manufacturer), York, Pa., two 25-ton vertical single-acting belt driven enclosed type refrigerating machines and condensing side, including 3 "Shipley" flooded atmospheric ammonia condensers, also refrigerating system, including two double pipe brine coolers and 2,500 feet of 1¼-in. direct expansion piping for ice cream hardening room and ice storage; Reform Ice & Light Co., Reform, Ala., overhauling their plant, including the necessary material for changing the freezing system to the flooded type; Atchison, Topeka & Santa Fe Hospital Association, Ottawa, Kan., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Ravisloe Country Club, Homewood, Ill., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Central Produce Co., Wilmar, Minn., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Wyman & Truxes (Meat Market), Yankton, S. D., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Buck Valley Creamery Co., Kimballton, Iowa, one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; The Dutch Mill Co. (Restaurant), Denver, Col., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; M. F. Juruick, Allentown, Pa., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. This installation was made in the Dairy of the Broders Pure Farm Products Co., of Rosebank, S. I., N. Y.; John Queirolo (Confectioner), Rome, N. Y., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Equity Creamery & Mercantile Co., Limon, Col., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Glenwood Ice & Coal Co., Glenwood, Col., one 20-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine and high pressure side complete; Co-operative Provision Co., Montevideo, Minn., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Loose-Wiles Biscuit Co. (Bakery), Minneapolis, Minn., one 20-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and a 2-ton vertical single-acting belt driven enclosed type refrigerating machine, together with high pressure side complete, also a 30-ton shell and tube brine cooler; Indiana Condensed Milk Co., Albany, Wis., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete.

What Ammonia Users Should Remember.

The carelessness of Ammonia users not troubling to return cylinders as soon as emptied is the cause of a great deal of inconvenience and expense to Ammonia manufacturers and can become the cause of loss to Ammonia users. The factory operations of Ammonia manufacturers are necessarily regulated by the measure of return of empty cylinders to them, and if they don't get back empties sufficiently they cannot ship full ones promptly. Don't let empty cylinders kick about your plant; ship them for return to the manufacturer as rapidly as you empty them! Co-operation in this matter will help Ammonia users as well as the Ammonia manufacturers. Incidentally it may be mentioned and will be recognized that Ammonia cylinders are costing Ammonia manufacturers infinitely more now than earlier, while at the higher cost they cannot be made for earlier delivery than a year. Under such conditions Ammonia manufacturers are apt to limit cylinder equipments to present proportions in the expectation that Ammonia users will aid in making rotation of such equipment rapid enough to meet all demands promptly.

Body Syrup.

The manager of the Brewing Materials Department of the Corn Products Refining Co., New York, Philip Dreesbach, has sent out a circular in which he says: "During the past year our sales to brewers of Corn Syrup for the production of maltless beverages, or low-alcohol 'Near Beers,' have had a most phenomenal increase. Almost every order received specially specified the kind with the highest amount of unfermentable extract. Even this did not satisfy the demand of some of our users of Corn Syrup, who further requested us to make up an extra batch for them containing still more unfermentable extract. Responding to this demand, we have just put on the market a special Corn Syrup—called Body Syrup—which contains the largest amount of unfermentable extract that can be commercially produced."

Mr. Dreesbach then gives the analysis of the new syrup showing that it exceeds in dextrine, etc., the content of regular corn syrups, as well as in remaining extract when fermented, continuing: "The maltose it contains is of the same composition and has the same properties as the maltose obtained from malt; in other words, this Body Syrup contains maltose not made from malt. The average of several analyses made by different Brewing Stations showed the amount of maltose contained in Body Syrup to run two-thirds of the total amount of 'reducing' or fermentable sugars. Every pound of alcohol that a beer contains more than necessary, means 2 pounds of extract fermented or about 3 pounds of malt wasted. This fact has given brewers the idea of saving materials in their keg beers by reducing the extract or gravity of the wort, and then increasing the extract or "body" of the beer to the amount it formerly contained when made from a heavier gravity wort—with materials high in unfermentable extract. For this purpose Body Syrup is the ideal material. It can be used in three ways, viz., by adding it in the kettle to the wort of every brew; (2) by adding it to the kraeusens brews only, and (3) by adding Body Syrup solution (after being sterilized by boiling and cooling) directly in the chip cask. Where beers are carbonated, such diluted Body Syrup solution (hopped or unhopped) can be added as the brewer finds best suited in his particular process."

Frick Company, Waynesboro, Ind.

The following list of Refrigerating and Ice Making Plants or parts of Plants recently installed by the Frick Company, Waynesboro, Pa., has been received by us: W. R. Bailey, Inc., New York City, for Heurich Brewing Company, Washington, D. C., Apparatus for changing present freezing system to flooded type; Mollenberg-Betz Machine Co., Buffalo, N. Y., for C. Klinck Packing Company, 1 125-ton vertical, single-acting, Corliss refrigerating machine—for J. H. Kamman Company, Buffalo, N. Y., 1 2-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side; James Harrison, Montezuma, Ga., for Ashburn plant, 1 15-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine, multipass brine cooler, accumulator and connections, hoist for present tank, etc.; Consumers Ice Company of Hicksville, L. I., 1 Corliss Engine for present refrigerating machine; Dempster Machinery Company, Kansas City, Mo., for Stevenson Packing Company, Sedalia, Mo., Apparatus for changing present freezing tanks to flooded system; Monsanto Chemical Works, St. Louis, Mo., 1 15-ton vertical, single-acting, belt-driven enclosed type refrigerating machine and high side, and double pipe brine cooler; G. A. Wegner Constructing & Engineering Co., Rochester, N. Y., for Putman & Whitacker, Inc., Barker, N. Y., 1 2-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side; Alabama City, Gadsden and Attalla Railway Company, Gadsden, Ala., Apparatus for changing present freezing tank to "NuFrick" System; Koellner Refrigerator and Ice Machine Company, Chicago, Ill., 1 20-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine; Cataract Ice Company, Niagara Falls, N. Y., 1 50-ton Raw Water flooded freezing system; Scott Brothers, Lovelock, Nevada, 1 5-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side, 1-ton flooded freezing system, and direct expansion piping for storage rooms; Charles P. Mechato, Indianola, Miss., 1 15-ton vertical, single-acting, belt-driven refrigerating machine and high side, flooded freezing and distilling system, and direct expansion piping for storage rooms; Frid Engineering Company, Philadelphia, Pa., for W. F. Ogden, Mt. Ephraim, N. J., 1 5-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side; Buena Vista Ice & Coal Company, Inc., Buena Vista, Va., 1 15-ton vertical, single-acting, Corliss refrigerating machine and high side, and pipe for storage rooms; F. W. Hallam, Brooklyn, N. Y., for Van Iderstines & Company, Blissville, N. Y., 1 30-ton ammonia condenser with headers, complete; Newport News Distilled Ice Company, Newport News, Va., Piping

for storage rooms; Wishart-Fetzer Company, Springfield, Ill., for John Jianakoplas, Alton, Ill., 1 3-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side; Elizabethtown Ice & Ice Cream Company, Elizabethtown, Ky., Apparatus for changing present condenser to flooded type, and headers for four coils; F. W. Hallam, Brooklyn, N. Y., for All Package Grocery Stores Company, Brooklyn, N. Y., 1 5-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side, etc.; West India Ice Company, Ltd., Barbados, W. I., 1 30-ton vertical, single-acting, belt-driven refrigerating machine and high side and freezing system, oil engine, sand filter, storage tank, direct expansion piping, etc.; A. E. Edwards, Seattle, Wash., for Daub & Ager, Seattle, Wash., 1 15-ton vertical, single-acting, Corliss refrigerating machine, etc.; A. E. Edwards, Seattle, Wash., for Great Northern Packing Company, Seattle, Wash., 2 15-ton vertical, single-acting, belt-driven, enclosed type refrigerating machines; Eagle Ice & Coal Company, Philadelphia, Pa., 1 60-ton horizontal double-acting, belt-driven refrigerating machine and high side, and raw water freezing system, etc.; Denison Crystal Ice Company, Denison, Texas, 225-ton ammonia condenser, complete, with headers, etc.; National Glue Company, Indianapolis, Ind., 5-ton ammonia condenser, pipe valves, fittings, etc.; Paul O. Reymann Company, Wheeling, W. Va., Apparatus for changing two tanks to flooded system; Citizens Ice & Cold Storage Company, St. Petersburg, Fla., 1 20-ton vertical, single-acting, belt-driven refrigerating machine with high side and flooded freezing system, and room piping, etc.; Holliday Creamery Company, Wichita Falls, Texas, 1 12-ton vertical single-acting, belt-driven enclosed type refrigerating machine and high side, room piping, etc.; C. V. Creamery & Dairy Company, Chambersburg, Pa., direct expansion room piping, and piston valve engine for present machine; Buffalo Refrigerating Machine Company, New York City, N. Y., 1 15-ton vertical, single-acting, belt-driven, enclosed type refrigerating machine and high side, etc.; Southern Ice and Utilities Company, Dallas, Texas, for Sapulpa Ice Company, Sapulpa, Okla., 265-ton ammonia condenser, complete, with headers, etc.; Imperial Ice Cream Company, Parkersburg, W. Va., 20-ton ammonia condenser, complete, with headers, etc.; R. B. Red, Lamesa, Texas, 1 10-ton vertical, single-acting, belt-driven refrigerating machine with high side and flooded freezing system, direct expansion room piping, etc.; Griesediech Bros. Brewing Company, St. Louis, Mo., 1 130-ton vertical, single-acting, Corliss refrigerating machine; Mutual Ice Company, Alexandria, Va., 50-ton raw water freezing system, complete, 180-ton ammonia condenser, with headers and connections, etc. Installations made in breweries are mentioned elsewhere in this trade paper.

"No PROHIBITIONIST BELIEVES in referring the matter of doing away with liquor to the voter. Where he affects to favor such a referendum, in professing support for local option, he does so because, having convinced himself that the whole loaf may not be had, it seemed the part of wisdom to take half a loaf rather than no bread at all."—(Philadelphia "Sunday Dispatch.")

VARIETY OF "JAGS." "The recent mode of economic production breeds intemperance in a hundred different directions, hence nearly all of us have some kind of a 'jag on.' Some have a beer 'jag,' others have a tea or coffee 'jag.' Then there is the business 'jag' and some get a 'jag' from lack of business. And then there is the pious 'jag,' manifesting itself in the holy rollers and other forms of religious dementia. Finally, there is a large element who have the 'dry jag.' The prohibitionists have the 'dry jag' and want to force everybody else to take the same kind of a 'jag' they have."—(L. Cooney.)

MULTIPLYING EVILS. "The Prohibitionists are striving to establish a wrong principle, which, if applied to the evils of life generally, would multiply those evils a thousand-fold—abolishing many things that are good and introducing many things that are evil—among them free love. For if they can see no remedy for drunkenness except by prohibiting the lawful and proper use of wine, then, logically, they will discover no sufficient means to prevent adultery except by abolishing and prohibiting marriage. The result would be in the one case, as in the other, promiscuity and free love—blind-pigs and a new order of moonshiners,"—(J. A. M. R., in the "Western Catholic.")

CHANNELS MERELY CHANGED. "Prohibition will not cure drunkenness or drunkards. Prohibition merely changes the channels of distribution, destroys revenue and makes impossible proper regulation and control. The individual who drinks too much should be taken under observation. Too much liquor is bad. But overabundance of anything is unhealthy."—(Herman F. Ziervogel.)

HOP POOL IN AUSTRALIA. The Commonwealth Government of Australia has decided to create a hop "pool," to be operated by representatives of the farmers, brewers, and the Federal Government. All hops, either locally produced or imported, will pass into the pool, from which brewers will receive supplies in the proportions of 90 per cent. locally grown and 10 per cent. imported.

It should be remembered that there was no surplus production of Tasmanian hops until 1916, and that a big factor in that surplus was the decreased brewing of beer through about 250,000 hardy young Australians being absent fighting for democracy and liberty throughout the world, and restrictions in trading hours during the currency of the war.

CLASSIFIED ADVERTISEMENTS.

Wanted.

25 or 30 second-hand beer barrels. Metzger Bush or no bush preferred. Address: P. O. Box 547, Bellaire, Ohio.

Brewery for Sale or Rent.

In eastern Pennsylvania. Capacity, 15,000 bbls. Ice Plant. Artesian Well. Price and terms on application. Address: M. E. 1059, care of THE BREWERS' JOURNAL, 1 Hudson Street, New York.

Wanted.

Iron or Copper Still with Condensers, Second-Hand, capacity from 100 to 500 gallons. Must be in good condition. Address: Coast Trading Co., 417 Market St., San Francisco, Cal.

Position Wanted.

A good brewmaster, one who is not afraid to put his shoulder to the wheel, is open for a position. Also good on temperance beers of all kinds. Address: A. G. S. 464, care of THE BREWERS' JOURNAL, 1 Hudson Street, New York.

For Sale.

Stock Tubs. Four (4) new tubs; capacity, 112 bbls. each; all 10 feet high outside measure, or 103" deep inside measure; bottom diameter, 9'x7'9". Address: K. K., care of THE BREWERS' JOURNAL, 1 Hudson Street, New York.

For Sale.

Controlling interest in a small incorporated brewery and ice plant in central Pennsylvania. In first-class condition, good money maker and no trouble about license. If interested, write: G., care of THE BREWERS' JOURNAL, 1 Hudson Street, New York.

For Sale.

Two Round Pfaunder, 650-gallon, glass-lined tanks. One with bolted cover and one open, also two Tripure Water Stills practically new, 1,250 and 750 gallons capacity respectively. Address: Cumberland Glass Manufacturing Co., Bridgeton, N. J. July 17]

For Sale.

One Copper Round Hole False Bottom, 45,000 holes per square yard, 15' 9" diameter, number of plates 18, center hole 26" diameter, Brass Bars and Studs, in good condition. Price reasonable. Address: August Roos' Son, 429 E. 91st Street, New York.

For Sale.

A small brewery of 3,000 bbls. capacity, with ice machine, located at Hortonville, Wis., is for sale at a reasonable price. The territory is good. Would take in an experienced brewer with \$1,000 or more stock as manager. Address communications to:

Peter Olk,
Hortonville, Wis.

For Sale.

Beer Filters; Loew Blitz Blank, Loew Improved, Theurer with press, Goldman Double Cell with press, Karl Kiefer with press; large Cyclone Filtermass Washer; all in excellent condition. Address:

N. H. Heyman.
438 East 59th Street, New York, N. Y.

Wanted.

50 round tanks wanted. Good serviceable condition. Diameter not less than eight or more than eighteen feet. Depth not less than eight feet. In writing give full description of material, construction, hoops and exact condition. Name best price, stating if this includes taking down and loading on cars. Address:

S. F. Sherman,
Utica, N. Y.

Position Wanted.

Practical and theoretical brewer with long experience as brewmaster; thoroughly familiar with every modern innovation in American as well as German brewing systems. I guarantee full and perfect extract, producing goods of superior quality. Address:

A. B., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Brewery, in first-class condition, with modern up-to-date equipment. Capacity 20,000 barrels, and output always readily sold. Newly installed Ice Machine with 50 per cent. over capacity. Population served within 10 miles, 75,000; big iron industries. Best reasons for selling. Small amount of cash will secure controlling interest.

E. J., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale—Cheap.

15 Large Storage Tanks, double headed, 2" Cypress, 8 ft. diameter, 15 ft. high, Est. Capacity 150 bbls. each; 12 Fermenting Tanks, single headed, 2" Cypress, 8 ft. diameter, 6 ft. high, Est. Capacity 60 bbls. each; 15 Chip Casks, 2" Oak, 200 bbls. Capacity. These tanks are new, having never been used. For further information write to

J. B. Lagomarsino,
Sheffield, Ala.

Situation Wanted.

An experienced brewmaster with good practical and theoretical ability and good references, and inclined to use caution in obtaining the best product. seeks engagement as brewmaster in a lager beer or ale and porter brewery; he also is disposed, if it is desired, to invest some capital or accept stock as a part of his salary. Address:

S. M. 15, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewmaster Wants to Make a Change.

Experienced brewmaster, for many years in the trade, and graduate of two brewers' academies, at present employed, for certain reasons must make a change within one or three months. Has thorough knowledge of American and German brewing methods. Prefers large brewery where several kinds of beer and ale are produced; position to be permanent. Address:

J. C. F., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

We Pay Spot Cash for All Kinds of **Second-Hand Machinery**, such as Generators, Motors, Engines, Leather Belting and scrap metals of all kinds. Also have on hand all kinds of Machinery entirely overhauled.

HARRY E. SALZBERG & COMPANY
30 Church Street - - - New York City

FOR SALE

- One (1) 75-bbl. 20th Century Soaker, 2 compartments.
- One (1) 200-bbl. Loew "Hydro-Pressure" Soaker, 4 compartments.
- One (1) 150-bbl. Loew "Perfection" Soaker, 3 compartments.
- One (1) 100-bbl. "Very Klean" Soaker & Washer.
- Two (2) 100-bbl. "Monitor" Pasteurizers.
- One (1) 175-bbl. Loew "Monitor" Pasteurizer.
- One (1) 150-bbl. Loew "Monitor" Pasteurizer.
- One (1) 75-bbl. Loew "New Era" Pasteurizer.

These Soakers and Pasteurizers have been replaced by larger machines by Loew Mfg. Co.

- One (1) 40-ton Case Ice Machine.
- One (1) 90-ton York Condenser.
- One (1) 50-H.P. Webster Heater.

The last three items to be sold as one unit and guaranteed in first-class condition.

AUGUST R. ROESCH
Brewers' and Bottlers' Machinery

930 N. 8th Street

PHILADELPHIA, PA.

Wanted in France and Belgium

The Brewers' Association of the Invaded Regions of France and Belgium herewith asks the brewers and maltsters and supply men to offer them for the rebuilding of 3500 destroyed breweries:

- 3,000 Copper or Iron Brew Kettles of 60 to 150 hectoliters capacity;
- 1,500 Copper or Aluminum Coolers;
- 2,000,000 Kegs and Barrels of 50, 75 and 100 liters capacity each;
- Malt Mills;
- Mash Tubs;
- and all other Brewery Equipment.

Write to

Secretariat, Association des Brasseurs des Régions Envahies
9 Rue Belzunce 9, PARIS (Xe), FRANCE

Also to H. VUYLSTEKE, 2 Rue Mizon, PARIS (XVe), FRANCE

FOR SALE—Cellar Cooperage

- 16—Fermenting Tubs, 10 ft. high capacity 90 bbls. each.
- 3—Fermenting Tubs, 6 ft. " " 60 " "
- 1—Fermenting Tub, 7 ft. " " 75 " "
- 20—Storage Tanks, 14 ft. " " 160 " "
- 16—Pressure Tanks, 11 ft. " " 110 " "
- 8—Casks, " " 150 " "
- 3— " " 90 " "
- 2—Small Yeast Tubs.
- 2—Small Tubs of 9 and 8 bbls. each respectively.
- 1—Copper Coil, 30 inches diameter, of 22 ft. of 1½" pipe.
- 1—Water Tank, 6 ft. high, capacity 60 bbls.
- 10—Heiser Pat. Man Heads, 12"x18", new, never been used.

We also have Schreiber's Patent C. I. Stands and I Beams to go under all these tubs, tanks and casks.

All of the above cooperage is in very good condition. Will sell at a bargain. Make us an offer. Correspondence solicited.

Address **WM. WALLBRECHT, General Manager,**
Middlesboro, Bell County, Kentucky.

For QUICK Sale at BARGAIN Prices

We offer the following brewhouse machinery and equipment at bargain prices, everything guaranteed thoroughly overhauled and in the best of shape like new. Thirty days trial allowed to responsible parties. Let us have your inquiries. We can save you big money.

- 1 3-Arm Colby Simplex Racker. Latest style.
- 1 2-Arm White New Style Racker.
- 1 4-Arm White New Style Racker.
- 1 3-Arm White Old Style Racker.
- 2 20-Cell Theurer Beer Filters, with hydraulic presses. All newly retinned.
- 1 7-Cell Theurer Beer Filter, with hydraulic presses. All newly retinned.
- 3 20-Cell Loew Improved Beer Filters. Hand presses attached. All retinned.
- 1 10-Cell Loew Improved Beer Filter. Hand presses attached. All retinned.
- 1 Large Tandem Deckebach Cooler. Complete with all fittings. For fermenting cellar. Brine circulation. Capacity, 100 bbls. per hour.
- 1 No. 2 and 1 No. 3 Deckebach Racking Coolers. Complete with fittings. Brine circulation. Capacity, 30 and 50 bbls. per hour.
- 2 No. 2 Deckebach Racking Coolers. Ammonia circulation. Complete, all fittings. Capacity, 40 to 60 bbls. per hour.
- 1 6-Pipe Double Witteman Racking Cooler. Complete, all fittings. Brine system. Capacity, 40 to 60 bbls. per hour.
- 1 19 ft. long Baudelot Cooler. 36 2¼ O. D. copper water pipes. 12 iron ammonia pipes. Copper distributing pipe, with two brass spigots. Swinging patent copper beer troughs. Iron beer receiving pan.
- 5 High and Low Pressure Air Pumps and Compressors.
- 1 7x4½x10 Vertical Foster Steam Pump, brass fitted.
- 1 7½x5x10 Single Acting Knowles Boiler Feed Pump. Brass fitted.
- 1 10x6x12 Single Acting Knowles Boiler Feed Pump. Brass fitted.
- 1 10x6x24 Foster Deep Well Pump. Brass fitted.
- 1 6x4x6 Worthington Duplex Water Pump. Brass fitted.
- 1 No. 3 Simplex Knowles Water Pump. Brass fitted.
- 1 5¼x3½x6 Duplex Knowles Brine Pump. Brass fitted.
- 1 10x10x12 Single Acting Knowles Tank, or water pump. Brass fitted.
- 1 8x8x14 Duplex Knowles Brine Pump. Brass fitted.
- 1 9x8x12 Single Acting Foster Hot Beer Pump. Brass fitted.
- 1 14x10½x12 Foster Duplex Water Pump. Brass fitted.
- 1 9x10x12 Foster Single Acting, Pressure Regulating Air Racking Pump.
- 1 7x8x10 Foster Single Acting, Pressure Regulating Air Racking Pump.
- 2 5 Horse-Power Upright Steam Engines.
- 2 5 Horse-Power Horizontal Steam Engines.
- 3 Large Malt Mills, Kaestner & Hecht iron frame. Stoll & Wunder wooden frames.
- 2 Schock ½ bbl. size Keg Scrubbing Outfits. Scrubber, soaking tank and rinser.
- 2 Eureka Branding Machines. Gasoline and gas connections.
- 2 Power Crown Corkers. Self feed.
- 2 Foot Power Crown Corkers.
- 3 Taber Belt-Driven, Bronze Body Rotary Beer Racking Pumps. Fitted with automatic pressure regulators.
- 3 Taber Belt-Driven, Bronze Body Beer Circulating Pumps.
- Miscellaneous copper hot-water coils, attenuators, fermenting tanks, chip cask, and various other brewery equipment.

FRANK SCHAUB & SONS, Inc., 33-35 Clay St., Newark, N. J.

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

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Reminder to President Wilson:

To suddenly suspend, if not to destroy, the American Brewing Industry under the false pretense that such arbitrary action is "necessary" to enable the people to obtain enough bread, would be a crime as hideous as the destruction of the thousands of breweries in Belgium and France by shot and shell and spoliation!

Loss Would Be Appalling.

The agitation for nationwide Prohibition is calculated in one way and another to do far more harm than good. This is not a time for dividing and confusing public sentiment and distracting attention to side issues or distant results. It would require years to bring it about. It fortunately cannot be precipitated in an emergency like the present one.

The agitation is to be deprecated at this time, not only on account of the disturbing effect when there is the utmost need of concentration and harmony and national feeling and action, but because of the deeper considerations involved affecting established rights and interests. Under laws that have long existed, fundamental in State constitutions, authorized by legislative acts, and guaranteed by the Constitution of the United States, there has been an enormous amount of capital invested and labor employed in the manufacture of distilled and fermented drinks. Another large amount has been used in producing the raw materials and distributing products. The whole system of production and trade cannot be swept away in a hurry without causing a vast disturbance and enormous losses, which would be by no means confined to "the liquor business." This is a matter that cannot be settled by an outbreak of emotion or an exercise of sentiment. It is a matter that requires thought and reason and balanced judgment, and not precipitation of action in time of excitement. There is more than one kind of soberness desirable in human conduct for the safety of communities, states and nations. —(New York "Commercial.")

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Mashing—Aeration.

By MATTHEW J. CANNON, F.C.S.

Opinions differ widely as to the best manner of mashing brewers' grist, and modern developments, both in the milling machinery and in the internal fittings of the mash-tun have always been the subject of criticism. Sometimes the criticism, destructive rather than constructive, has tended to upset the views which were formerly held by brewers of life-long experience. There are some of us young enough to remember the practical brewer who knew that the proper means of making a mash was by means of a primitive oar, worked by the brewer himself. But we have progressed since those days. It is nearly fifty years ago since it was recognized that an external mixer was essential to successful mashing if an uniform mixture was to be secured in the mash-tun. But, even so recently as thirty years ago, there were a number of breweries, certainly of the smaller kind, which relied upon a somewhat haphazard method of mixing, the mash-tun being unprovided with either an outside masher of the Steele type or internal rakes. In certain cases, the mash-tun was unprovided with any appliance for mixing. Although to-day the employment of outside mashing machines is practically universal, various opinions have been put forward which appear to question their utility and economy. From some points of view the external mixer must be regarded as a makeshift appliance, not because it is inefficient in itself, but on account of its clumsy performance falling short of modern requirements. One of the defects of the modern external mixer is the limitation of the degree of thickness and the temperatures which can be employed in making up the mash. No doubt the possible limits of the water-malt ratio available in ordinary practice do not entail any wide variation in the compensation of the wort constituents, but the mechanical defect exists, and is likely to cause trouble if not kept under close control. When employing the assistance of machinery in making a mash, there are two objectives to be kept in view. It is desired to effect a preliminary admixture of the grist and mashing liquor at a uniform temperature and to prevent "balling," or formation of lumps. In connection with both these points one has always to take into account that the modern grinding machinery has resulted in the production of a finger grist which requires more careful handling. It is certainly a matter well worth careful consideration, whether the existing external mashing machine, devised primarily to deal with coarse grist, is altogether adapted to the exigencies of present-day necessities.

One of the greatest aids to healthy fermentation is aeration. This point is frequently neglected in brewery procedure, and sometimes the assistance which is casually given is lacking at the moment when it is most needed. If the yeast is to do its work efficiently, it is essential that a proper degree of aeration be induced at each of the separate stages of the brewing process. We need not refer to the many beneficent changes which result from aeration anterior to the mash-tun stage. After the copper stage the question of aeration becomes all-important from the point

of view of the progress of fermentation, the up-keep of the yeast stock and the stability of the beer. Before collection in the fermenting tun it is essential that close attention be given to hot and cold aeration during the cooling stage. The former has an important influence in eliminating undesirable nitrogenous and resinous matters from the wort; the latter representing oxygen mechanically absorbed or dissolved by the wort is absolutely indispensable to the development of the yeast organism at the initial stages of fermentation and immediately after pitching. Hot aeration, to be effective, should take place at temperatures between 200 deg. F. and 160 deg. F. For certain purposes the optimum temperature for hot aeration ranges between 180 deg. to 170 deg. F. To secure hot aeration practice and science has adopted many means, or endeavored to suit existing plant to the known requirements. The hop-back, the cooler and the refrigerator have each had their exponents as the only means of securing the desired degree of aeration. Frequently, however, in the many contradictions which have accompanied the statement of experience of type of plant, the real issue has been overlooked. Underlying the employment of the hop-back, the cooler and the refrigerator, the principle of aeration is supreme. Questions of filtration, deposition of sludge, and cooling of the wort are subsidiary matters from the standpoint of regular fermentations, vigorous and healthy yeast and sound beers.

Treatment of Casks and Vats.

By P. PETIT, "Brasserie et Malterie."

Some brewers employ a strong solution of sodium bisulphite instead of lime. This treatment is very uncomfortable for the operatives, owing to the escape of sulphur dioxide, but a gas helmet like those used by soldiers, with a pad of wadding dipped in sodium bicarbonate solution, would overcome this difficulty. Bisulphite injures the wood much less than lime or alkaline antiseptics, but its action on bacteria is less energetic, for it does not dissolve the scale which often serves to protect them. The great disadvantage of treatment with disinfectants is that these are only effective after prolonged contact, and a mere application with a sponge or brush has only a superficial action. If a vat is left full of antiseptic solution for 24 hours fairly complete disinfection is attained, but this treatment is scarcely practicable for brewers, although if a solution of sodium fluoride is used, this can be passed in succession into a large number of vats after they have been scrubbed and cleaned with water alone. The effect is rendered more rapid by using the solution warm. This treatment is often valuable when serious infection is discovered at the height of the brewing season, when re-coating is out of the question, and it might prove very useful under the present circumstances. The treatment should be repeated at least once every two or three weeks, the vats being sponged with the solution in the interval.

Sulphuring of vats, whether by burning sulphur or by use of sulphur dioxide, seems scarcely practicable, since it would be impossible to prevent the gas escaping into the fer-

mentation-room. Moreover, if the gas is dry, sterilization is only effective after a considerable time, and, on the other hand, if the vat is moist, a small quantity of sulphuric acid is formed, which acts on the varnish and even on the wood.

The use of formaldehyde vapors presents similar difficulties, besides which certain beers are known to be very sensitive towards traces of formaldehyde, such as might remain in the vat; this substance also has a toxic action on certain races of yeast, and influences the attenuation.

The World's Coal Resources.

Prof. Bone, who has made the subject of fuel peculiarly his own, has pointed out in a recent paper that the national aspects of fuel economy may be considered from two somewhat different standpoints, namely:

(1) In view of the economic situation created by the war, and the necessity of enforcing a policy of national economy in the utilization of essential commodities as the best means of paying a colossal war debt; and

(2) in view of the interests of that remoter, but nevertheless not far distant future, when our coal supply will be restricted by approaching exhaustion.

It was estimated by the International Geological Congress in 1913 that the total probable and possible reserves of coal of all kinds (including anthracites, bituminous coals and lignites) available within 6,000 feet of the earth's surface were 7,397,553 million metric tons, or approximately 6,000 times the present annual consumption. Therefore, the world as a whole need have no fear of any speedy exhaustion of its coal supplies. Of the estimated total reserves, 6.75 per cent. are anthracites (mainly located in China), 52.75 per cent. are bituminous coals, whilst 40.5 per cent. belong to the less valuable sub-bituminous class, which includes all the lignites and tertiary brown coals.

Prof. Bone gives a survey of the geographical distribution of the estimated reserves, from which it appears that no less than 69 per cent. of the total reserves of coal are located in America (almost wholly in North America). Further, of these estimated reserves 51.8 per cent. are located in the United States, 16.4 per cent. in Canada, 13.5 per cent. in China, 5.7 per cent. in Germany, 2.6 per cent. in Great Britain, 2.4 per cent. in Siberia, 2.2 per cent. in Australia, and only 0.8 per cent. in Russia.

Prof. Bone does well to insist on the relative insignificance of Great Britain's coal resources, and, as he truly points out, this is a fact of which our commercial and ruling classes seem to be profoundly ignorant, otherwise effective measures would have been taken long ago to check the wastefulness of all classes of the community using coal. Quinquennial averages of the coal production of the United States, Great Britain and Germany from the year 1900 to 1914 are given by Professor Bone, and he shows that the increased percentage production reckoned at compound interest in the three countries is as follows: United States 6 per cent., Great Britain 2 per cent., Germany 4 per cent.

These figures are well worthy of consideration, and in our own country there is another factor which should not be ignored, namely, that much of the coal is left in the mine instead of being converted at the pithead into useful forms of energy for public purposes—a point which has been strongly insisted upon by Prof. Louis, of Newcastle. Again, we have to consider the increase in the cost of getting coal in this country, due partly to deeper workings, and partly also to greater precautions for insuring the safety of the miner, as well as to higher wages.

It is at least satisfactory to note that a committee has been appointed by the British Association, which includes

representatives of the principal industrial users of fuel, as well as eminent "power" engineers and chemists, who have made a special study of gaseous fuels and combustion.—(London "Brewers' Journal.")

Influence of the Composition of Feed Water on the Boiler.

By E. BISCHOFF.

The chief constituents of water affecting the life of the boiler are dissolved oxygen, and consequently also, substances which give off oxygen, such as nitrates and organic compounds on the one hand, and sulphates and carbonates (especially those of lime) on the other. Gypsum forms the hard fur which adheres firmly to the boiler plate, whilst the carbonates produce a pulverulent deposit, which also becomes intermingled with the incrustation; and the principal action of soda as a fur preventer is to convert the gypsum into carbonate of lime. Now that carbonate of soda is dear, the only substitute that can be recommended is caustic soda, the action of which is known and controllable.

In connection with the improvement of boiler feed water, the recent experiments of Bosshard and Pfenninger on the behavior of iron towards water and aqueous solutions in boilers, are of interest. These workers point out that corrosion tests have hitherto been chiefly carried out at ordinary temperatures, or a boiling heat under atmospheric pressure, and have given results at variance with those met with in practical boiler work. Moreover, the old low-pressure boilers were mostly of wrought iron, whereas modern high-pressure boilers are made of mild steel plate which is far more susceptible to chemical reactions occurring in the water. The experiments referred to were conducted in a small vertical mild-steel boiler holding about 9 gallons, the working pressure in no case exceeding 15 atmospheres. The test plates consisted of small pieces of mild-steel boiler plate $\frac{1}{4}$ - $\frac{1}{2}$ inch thick, and weighing 400-500 grammes. The corrosion was determined by removing the rust by electrolysis, and reweighing the plates. The results showed that distilled water is the best preventive of corrosion, the next best being distilled water and feed water each containing 0.1 per cent. of NaOH, and distilled water with 1 per cent. of NaOH or $\frac{1}{5}$ per cent. of carbonate of soda. Distilled water that had been left exposed to the air was slightly inferior; and on a par with this were: distilled water containing 0.01 per cent. of carbonate of soda, tap water with 0.3 per cent. of carbonate, and distilled water with 0.01 per cent. of caustic soda. An approximate effect was obtained by adding 0.5-0.1 per cent. of carbonate of soda to feed water containing 0.1 per cent. of common salt; and also by adding 1 per cent. of soda to waters containing 0.1 per cent. of soda to waters containing 0.1 per cent. of Glauber salt and sodium nitrate respectively.

The most important result of this work is that caustic soda attacks the boiler fittings, but this requires confirmation by a series of comparative tests. An overdose of caustic soda is disadvantageous, 1 per cent. causing a loss of weight in the test plates, whilst 5 per cent. causes the formation of soluble ferrite. Very unfavorable results, as regards corrosion, were obtained with feed waters containing 0.1 per cent. of saline matters in solution, especially magnesium chloride, the sulphates coming next. It is noteworthy that the action of magnesium sulphate is twice as injurious as that of gypsum—an opinion confirming previous practical experience.

To endeavor to prevent the corrosive action of dissolved oxygen experiments were made with reducing agents. So-

dium hydrosulphate alone proved inoperative, with 0.06 per cent., and even 0.3 per cent., whilst preventing rust, did not stop loss of weight in the plates. On the other hand, the smaller dose, in association with 0.1 per cent. of soda, ensured good protection.

Quite recently, Heuss has published results of treating water with soda crystals, calcined soda and caustic soda, and has recommended the use of the last named, its efficacy being given as $1\frac{1}{2}$ times that of calcined soda, since 85 parts of 85 per cent. caustic soda are equivalent to 100 parts of 90 per cent. calcined soda, or 55 parts of 90 per cent. quick lime.—("Wochenschrift für Brauerei.")

Useless Resins.

It is a common cellar experience that, while a running mild beer will usually respond readily to the action of finings, a "bitter" will require a more extended period before it will exhibit the required brilliancy. This is obviously due in a measure to certain hop constituents which in the latter case are in excess of the solvent power of the beer to take into solution, although even with a mild ale such a phenomenon is by no means unknown, and may be put down to various causes, such as the use of excessive quantities of new or cold-stored hops, or again the boiling process may have been too violent, protracted or conducted under too high a pressure.

One of the objections raised to the substitution of the deep receiver for the cooler, is that the necessary oxygenation does not take place, much resinous matter consequently remaining in semi-solution, which in the shallower vessel is thrown out and left on the sides as a gummy film, but apart from oxygenation the temperature of the wort must also be a deciding factor in the process of elimination, for it is quite conceivable that the higher heat at which the wort from a deep receiver reaches the refrigerator does, to a marked extent, favor the passing forward of matters to the fermenting vessel which should have been separated from the wort and retained in the cooler or receiver.

When such fining troubles are met with, greater care should be exercised to ensure the complete separation and retention of the useless resins during the later brewhouse operations, and in this connection it should be noted that this is most effectually secured in those breweries where refrigerating direct from the hop back is practised, the hop bed retaining not only the resins, but many other matters thrown out of solution during the whole of the process of cooling, and which on other systems pass forward to the fermenting vessel.—F. M. M. in "Scientific and Practical Notes," "Journ. Inst of Br."

NEW ZEALAND has prohibited the importation of hop aromas, hop bouquets, hop essences, hop extracts, hop flavors, hop oil, and any substitutes for or imitations of any such articles, whether single or compounded in any manner with other material, and being capable of use in the making of beer or in any brewing process or for addition to beer.

LEBEDEV'S "HEFEMAZERATIONSSAFT." By M. W. Beyerinck and J. J. Van Hest, in "Folia microbiol.," "Physiol. Abstracts." The authors dispute the theory that the zymase of yeast-juice is a soluble enzyme. The activity of the expressed juice is proportional to the number of opened yeast cells. Zymase cannot diffuse out of the cells nor pass through a dialyzing membrane. The importance of the previous fermentation in Lebedev's process lies in the liquefying of the protoplasm of the yeast cells. The catalase of yeast, also an endoenzyme, has the same properties. The zymase molecule is probably greater than that of the common proteins.

Monthly Report from the Laboratory of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

May 15th to June 15th.

The samples received during the last month are classified as follows:

Malts	212
Malt Adjuncts	50
Colorants	15
Hops	3
Grains	6
Waters	11
Worts	66
Yeasts	193
Beers and Ales.....	284
Temperance Beverages	53
Fuels	31
Miscellaneous	29

953

Malts.

The most striking feature of this month's malts is their rather high percentage of moisture. Of the 212 samples analyzed 60 were made from Pacific Coast Barley; these showed an average moisture of 4.92 per cent., with an average yield of 70.4 per cent. The extract on dry basis averaged 73.8 per cent. In the 151 samples of Western Malt analyzed the moisture was still higher, averaging 5.18 per cent. and their yield of extract were proportionately low, only 68.4 per cent. average, which on dry basis corresponds to 71.4 per cent. A large number of the Western Malts contained an admixture of Pacific Coast Barley Malt in varying amounts. One sample of Caramel Malt was found to be satisfactory in every respect.

Malt Adjuncts.

Fifty samples of cereals and cereal products were classified as follows:

Corn Grits	14
Corn Meal	17
Refined Grits	14
Rice	4
Brewing Sugar	1

These were all satisfactory with the exception of a somewhat high amount of moisture in four samples of Corn Grits and two of Corn Meal.

Colorants.

Fifteen samples of various sugar and malt colors were tested and all found satisfactory for their respective purposes.

Hops.

Two samples were Pacific Hops of 1916 crop and were considered satisfactory in every particular. One sample was 1914 crop, but it was well preserved showing practically no deterioration from faulty storage.

Grains.

The six samples analyzed were all brewers' wet grains. Three samples were of satisfactory composition, while the others contained an excessively high amount of water-soluble extract indicating improper sparging operations.

Waters.

A biological examination was made of all samples submitted and four samples were also analyzed as to their mineral contents.

Worts.

Of 66 samples received, 57 were lager beer worts, 6 ale worts and 3 samples were for the production of beverages with less than 0.5 per cent. of alcohol by volume. A biological examination was made of 3 samples, taken from the cooling apparatus in order to trace sources of infection.

Yeasts.

One hundred and ninety-three samples were examined consisting of the following:

Ale Yeasts	44
Lager Beer Yeasts	149

Among these samples three ale yeasts and six lager beer yeasts were from our Pure Yeast Department and were all found in an excellent condition of health, purity and flavor. Of the brewery yeasts, three ale yeasts and ten lager yeasts were seriously infected and a new supply of Pure Culture Yeast was introduced into the various plants.

Beers and Ales.

One hundred and sixteen samples of ale and 165 samples of lager beers were received. These samples were all examined in the Biological as well as Chemical Laboratories. The average chemical composition was as follows:

Ales.

Original Gravity	13.2 deg. B.
Alcohol by weight.....	4.15 per cent.

Lager Beers.

Original Gravity	12. deg. B.
Alcohol by weight.....	3.28 per cent.

One sample of Weiss Beer and two samples of Malt Extract are also included under this heading.

Temperance Beverages.

These samples comprise six samples of Cider and 47 samples of Temperance Beers or Ales. The chemical composition of these showed the following average composition:

Original Gravity	5.8 deg. B.
Alcohol by weight.....	0.32 per cent.
Alcohol by volume.....	0.40 per cent.

Fuels.

In the Fuel Laboratory 30 samples of coal were analyzed; of these 15 contained excessive amounts of ash, while 16 samples were of satisfactory quality and heating value. One sample of ashes was analyzed; its composition indicating incomplete combustion contained over 60 per cent. of carbon.

Miscellaneous.

The 29 samples under this heading comprise mainly filter-mass, cleansers, lubricants, boiler compounds, disinfectants, pitch and varnish.

SIMPLE METHOD OF DETERMINING EXTRACT IN BARLEY. Heintz recommends the preparation of a malt extract by mashing pale, not too coarse, grist with 5 parts of distilled water at 45-47 deg. C., leaving to stand 10 minutes with occasional shaking, and then filtering and cooling. For the barley analysis, 25 grms. of the fine meal are mashed with 100 cc. of the malt extract (2-50) and kept for an hour at 50-52 deg. C., the temperature being then quickly raised to 70-72 deg. C. After half an hour, 50 cc. of water at 70 deg. C. are added, the beaker being kept at this temperature for half an hour, cooled, the contents made up to 225 grms., and the analysis then completed in the usual manner.—("Wochenschrift für Brauerei.")

Hop Economy.*

The word economy in a brewery very often spells deterioration in article produced and increased worry for the brewer, but in the case of the Hop Economizer this is not so, and so, bearing this in mind, the experience of one who is known to most brewers, it would be as well, before describing the actual practical working, to briefly consider the theoretical side of the question and to see how far these actual theories work out in practice.

For many years it has been recognized that if the volatile oils, which represent the flavoring matter, could be fully retained in the wort, a greatly improved flavor would be at once detected in the beer. This theory has been more or less accepted by a very large number of practical brewers, who for years have kept a certain proportion of their best hops out of the copper until a short time before turning off, so as to avoid the volatilization of these oils.

The retention of the oils is accomplished in a very satisfactory manner by the use of a Hop Economizer, as the heat at which the hops are stewed does not exceed 190 deg. F.

From several practical tests, there can be no doubt that an improved hop aroma is the result.

But in addition to the oils we have both the hard and soft resins. A great deal of argument has revolved round the question of the value of the hard as opposed to the soft resins, but out of the mass of contradictory evidence the one fact stands clear, that this yellow resinous matter termed lupulin does impart to the beer bitter and antiseptic properties.

Now the old method of boiling does not, in every case, extract the full amount of lupulin possible, especially where good hops are used and where some of the best are kept out of the copper until the boiling period is nearly completed. This being the case it naturally follows that the full value of the hops is not extracted.

When, however, hops have passed through a hop economizer the lupulin is thoroughly extracted owing to the tearing or shredding of the leaves from the stalks, so that although a less quantity of hops may be used, the same amount of resinous matter is supplied to the wort.

What quantity of hops may be safely cut down? It is generally conceded that from 10 to 20 per cent. of resinous matter is left in hops which have been boiled, so that it would seem to be quite justifiable to reduce the hops by 20 per cent. From personal experience it has been found that this amount has yielded good results, no deterioration in the keeping properties of the beer having been apparent.

Now, although this maceration of the hops may extract the full amount of preservative matter, there are some who fear that a harshness equivalent to that produced by over-boiling the hops may appear on the beer, but there is no evidence which can justify this assertion.

Furthermore, the question of hop back filtration is not one which can be lightly disposed of. There may be cases where, owing to the pulpy state of the hops, inefficient filtration would take place. If there was any tendency in this direction, wort agitation and the use of material containing less proteid matter would probably correct that fault.

There can be no doubt that a saving of 20 per cent. can be made, and this in itself should make this method of utilizing hops an attractive one, even if little adjustments have to be made to suit existing circumstances. The main idea of the apparatus having been briefly sketched from a theoretical point of view, the system on which it works may now be explained. The simplicity of working and the small

* "Journ. Operative Brewers' Guild."

amount of labor required is one of its chief attractions, so many economizing and labor-saving devices seem designed to create work for everyone concerned.

The Hop Economizer consists of a circular metal vessel fitted with steam-heating jacket for controlling the temperature. An agitator, fixed at the bottom of the vessel, helps to break up the hops. This agitator, or rake, has an upward circulating movement, so that the hops are driven to the top of the liquor and are then drawn down again by a revolving screw working inside a metal case. This disintegrates and squeezes the hop extract into the liquid, the hops being again circulated to the top by means of the agitator.

A sieve round the outlet pipe prevents the hops from being drawn off with the extract. After this is done the hops are washed through a large outlet pipe into the copper, wort from the mash-tun being used for this purpose. An actual detailed account of the work will perhaps help to explain the system more easily. Starting about an hour after mashing has taken place, enough water is run into the economizer to cover the bottom of the vessel. The agitator is started and the hops are then added. It is essential that the agitator be started before hops are added, otherwise the machinery is liable to clog, and it is also a good plan to see that each bag of hops is well mixed up before adding another to the vessel.

It is then filled up with water at 140-150 deg. F., and steam is turned on, and the time of infusion is taken from the time of turning on steam. The requisite heat, 190 deg. F., is reached in about twenty minutes. This will, of course, vary with the pressure of steam. A reducing valve set to somewhere about 30-lb. pressure is supplied in order to avoid injury to the jacket.

After one hour infusion, the agitator is stopped and the extract run off into a receiving vessel, where it is kept until the copper is turned off. The extract runs out in about fifteen minutes, and the hops will then be drained fairly dry. The valve is then shut and it is filled up with wort, this being conveyed by a pipe from the mash-tun underback. When the Economizer is full, the agitator is started again and the sluice is opened and contents turned into copper. The wort should be allowed to run in until hops are washed out so as to ensure a proper emptying of the vessel. This, then, is the regulation way of working it. There are, however, a few points which are interesting to notice.

Taking first the amount of hops which can be placed in the Economizer, it is always advisable to introduce less than the machine is estimated to take, as a more perfect mixture takes place, because although a machine is guaranteed to hold, say, 250 pounds, it will, as a rule, be very difficult to soak this amount properly.

A good plan for introducing hops into the vessel is to place a small pulley wheel above the machine, the bag containing hops is then drawn up mouth downwards, and when over the aperture at the top of the vessel is opened and the hops fall into the machine. This obviates the difficulty of hoisting it up by hand, which would require the services of two men.

Care must be taken that the hops are not allowed to drop into the case containing the screw; if this should happen, the screw will clog.

The sluice through which the hops pass on their way to the copper should be one which will open quickly, otherwise the liquid is liable to drain off and leave some of the hops behind. It is also necessary to have a large outlet pipe, say 6-inch.

It is not necessary to have the vessel made to hold all the hops for one brew. These can be infused in two por-

tions, or, in some cases, three infusions can be made. It is usual to start infusing one hour after mashing. The first lot of extract is emptied, when ready, into receiving vessel and the Economizer filled up again, this extract being run off into a second receiving vessel.

To ensure a thorough admixture of the extract with the wort it is advisable to run the former through a small pipe into copper outlet or trough. The tap should be so adjusted as to take the extract during the whole of the time the wort is running off.

The Economizer requires very little extra labor; in most cases it will be found that one of the copper attendants can do all the extra work in connection with it.

Barley Germination.

By GAESSLER-NOIROT.

Whereas formerly malting was more less a routine process, the chemical changes which it entails being ignored, it is now known that the real object of the various operations is the production of enzymes having the power of converting the starchy matter of the corns into maltose and dextrins, the development of plumule and radicle constituting, as it were, merely a side issue. It is also known that the barley corns suffer a loss of weight in malting, 100 parts of barley yielding only 78 to 80 of malt, and that this loss is due to the difference in moisture between the raw grain and the dry malt, as well as to the formation of plumule and radicle. Now, whilst the former loss is a necessary sacrifice, the latter can be minimized to some extent by special precautions in malting, without affecting the production of the needed enzymes. Scientific research has shown that the ordinary malting process furnishes a larger proportion of enzymes than is actually required for the conversion of the starchy matter present, and that the surplus, which corresponds to an increased production of plumule and radicle, and therefore to an increased loss in malting, is of no assistance in the brewing process. It is therefore of interest to the maltster and brewer to have some simple and reliable method of ascertaining at what period of germination a sufficiency of enzymes has been formed to accomplish, ultimately, the work of conversion; and it has been proposed to solve this problem in the following manner:

The barley is steeped for eight hours in water at 59 deg. F., followed by 26 hours in water to which lime has been added, the whole being then discharged, over a large sieve, into a second vat on a lower floor, in such a way that the barley undergoes a preliminary washing during the transfer. After a further steeping for 15 to 20 hours in two changes of water, the barley is transferred to a tank, where it is put through a final washing at 60 deg. F., the water being then drawn off and air blown through the barley by a fan to dry the corns and remove the carbon dioxide formed during steeping. In the next stage the steeped barley is treated in series of six superimposed boxes, connected by a passage, which enables the corns to be transferred from each box in turn to the one next below. Each box has a false bottom of sheet metal, perforated with holes about 1-16 inch in diameter, and a passage is provided for the escape of carbon dioxide. In the top box the barley is spread out to a depth of 40 to 60 inches and left for a day, after which it is transferred for a similar period into each of the others in succession, the whole process being complete in six days, by which time germination is finished. The carbon dioxide formed is removed, along with the air which has served for oxygenation, through the space below the false bottom, warm, moist air being introduced above the malting grain.

The fan is arranged so that each box can be aerated separately. Since the formation of carbon dioxide goes on more actively in the earliest stages of the process, the air is admitted every two, three or four hours, but at longer intervals afterwards. When a sufficient quantity of the enzymes has been formed, the air supply is stopped, and the malt is left in an atmosphere of carbon dioxide, with intervals of oxidation over 12 or 20 hours, according to the rise in temperature and production of gas. From the last box the malt is delivered, by an elevator, to the withering floor, or to the kiln.

According to the inventor of this system, it economises labor and gives $1\frac{1}{2}$ to 2 per cent. more malt, of better quality than the flooring process. The cause of this superiority has not yet been ascertained, but the malt is stated to possess a nutty flavor and to give beers of finer quality, fuller flavor, and increased head retention. Possibly the improvement is due to a polymerization of the protein molecules under the pressure of the carbon dioxide, accompanied by decreased solubility of the starchy matters and improved saturation by the physiological salts contained in the radicles; though other reasons have been advanced, such as the presence of toxins or antitoxins, the presence of carbon dioxide on the kiln, the difference in the ratio of sugar to non-sugars, or the absorption of salts from the radicle. In the author's opinion, the last-named cause seems worthy of credit.

Nitrogen Content and Size of Corns as Inherited Factors in Barley.

By KIESSLING.

The author's researches are considered to demonstrate that the faculty of storing up nitrogen in the barley corns is specific for the individual races, and must be regarded as a racial characteristic. Whilst the differences, in this respect, between various pure races are mostly slight in comparison with the modifications observed, nevertheless the greater or smaller tendency of the individual races to store up more or less nitrogen in the corns, under definite conditions, should not be neglected, because if the various conditions favoring the accumulation of nitrogen should coincide with high accumulative racial faculty, corns may acquire properties which are undesirable in practice, whereas should corresponding conditions of growth occur in the case of other races, these might still furnish a suitable malting product. The specific racial tendency, in relation to the conditions of growth obtaining at the time, is always a point of importance, so that, as long as brewers attach value to a low nitrogen content in barley, endeavors should be directed to cultivate such races as have a low tendency to accumulate nitrogen under average conditions. This can be done by selection from country barley, hybrids, etc.

In the case of pure races it has been found impossible to detect any alteration of the genetic constitution of the race by five selections, and consequently, no hereditary modification of the racial specific protein content could be erected by employing parent plants which had been modified, in point of increased or diminished nitrogen accumulation, by selection. On the other hand, the employment of such selected corns has been found to influence the crop from same, inasmuch as, on the average, and in the majority of cases, parent plants rich in nitrogen have produced descendants also yielding corns rich in nitrogen. This effect is, however, primarily only physiological, and to be regarded as an influencing of the nutrition of the young plants, and, therefore, also as a modification; in the author's experiments it did not extend beyond the individual life of the plants

produced by the abnormally constituted corns, and was not capable of any increase. This "after effect" on the progeny of the character of the parent is, moreover, so slight that it can be masked by the other concurrent or antagonistic causes of modification. At present it is impossible to say whether other results could be obtained with other races, or under modified experimental conditions, or by an increase in the number of successive generations.

The size of the corns was found to constitute an hereditary racial characteristic of barley, thus confirming earlier positive results and disproving the converse opinion on the point. Consequently, it is practicable, by separating the races, to produce varieties yielding corns of different qualities and different weights. In any given race no definite influence of the size of the corns from the parent plants on that in the progeny could be ascertained with certainty; but, since only very vigorous and well-developed medium corns from the best ripened ears were used—because the question of influencing the weight of the corns did not primarily lie within the scope of the investigation—it is always possible that by taking corns of very divergent sizes, one might be able to produce an after effect of selection attributable to influence on the nutrition of the embryo in a given race.

A positive correlation exists between the nitrogen content and size of corns of the two different races examined. Nevertheless, the cultivation experiments carried on by the author with other races (as also the earlier experiments of Johanssen) have shown that this correlation is by no means free from exceptions, but that, in comparing the races together, the extent of the one property may be similar antithetical or indefinite in relation to the other. Moreover, the ratio is frequently affected by the influence of the season and local conditions.

Within the limits of the pure strains there also exists a definite, and occasionally considerable, positive correlation between the weight of the corns and the nitrogen content. This relation, however, is subject to extraordinarily numerous individual exceptions, and is so much under the influence of causes of modification that it is sometimes destroyed in the individual case or throughout a whole culture.

The calculation of the nitrogen content of the corns brings into greater prominence the difference between the races of similar character in respect of size and nitrogen content, and throws light on the physiological behavior of the corns, besides revealing more clearly the effect of selection.

The selection of the parent plants according to nitrogen content has no demonstrable influence on the productivity of the progeny. In practice the method of racial separation, followed by examination of the progeny for several years under different conditions of existence and weather, is capable of leading to varieties with low capacity for accumulating nitrogen and definite size of corns; but in view of the wide limits of modification of the nitrogen content, the examination of individual plants, and also of the original parent plant, is of little value, and it is more important to examine a large number of the corns from uniformly developed and fully ripened ears. According to present experience, there is little prospect of any immediate success in attempting selection for influencing the size and nitrogen content of corns in a pure race. The weight of the corns, however, is unsuitable as an index of selection for the specific nitrogen capacity of the barley, although the instances of positive racial correlation between the two properties seem to be more plentiful than the converse conditions.

The demonstration that nitrogen content and weight of corns are each separately hereditary as racial characteristics, establishes the possibility of combining the two proper-

ties in various ways in individual varieties of barley by systematic hybridization, and thus create races having different specific protein capacities allied with a given or different size of corns, or having an equal capacity for accumulating protein but different size of corn.—("Wochenschrift für Brauerei.")

Accurate Aeration Method for Estimating Alcohol in Fermentation Mixtures.

By A. W. DOX and A. R. LAMB.

The estimation of alcohol in distillates by physical methods, *e. g.*, determination of specific gravity, is subject to small errors, owing to the fact that traces of other substances formed during fermentation are carried over with the alcohol during distillation. The oxidation of alcohol to acetic acid, and the estimation of the latter by titration after distillation, is not open to objection to the same extent, since the only substances which would affect the results are such as produce volatile acids on oxidation. The authors first studied the conditions under which small quantities of alcohol can be estimated by oxidation with chromic acid mixture, distillation of the acetic acid formed and titration of the distillate. They found that, using an oxidizing mixture containing 10 grams of potassium dichromate, 20 grams of sulphuric acid, and 70 grams of water (free from carbon dioxide), small quantities of alcohol were oxidized rapidly in the cold, and all that was necessary was to allow the reaction-mixture to stand for a short time in the distilling flask at the ordinary temperature, and then proceed with the distillation of the acetic acid. The distilling flask was supported on an asbestos card with a hole in the centre, and heated by a Bunsen flame. The distillate was titrated with barium hydroxide solution, as this would show at once if any sulphuric acid had been carried over. Before use, a number of blank distillations were carried out with the oxidising mixture, diluted each time with water free from carbon dioxide, until the distillate required not more than 0.5 c.c. of N/10 barium hydroxide solution.

The authors found, further, that from dilute solutions of alcohol, saturated with ammonium sulphate, the whole of the alcohol could be removed at the ordinary temperature by a current of air, and quantitatively collected in cold sulphuric acid.

The authors' method for the estimation of small quantities of alcohol is accordingly as follows: An aëration train is set up, comprising a guard bottle containing some of the oxidizing mixture, a flask containing the alcoholic liquid under test saturated with ammonium sulphate (as neutral as possible), and two 100 c. c. cylinders containing respectively 18 c. c. and 8—10 c. c. of concentrated sulphuric acid. A current of air is drawn through the apparatus at the rate of about 25 litres per hour for 8—10 hours; or, if the maximum of accuracy is required, a slower current is employed for 24 hours, minimizing the spattering of the sulphuric acid. The sulphuric acid in the cylinders is then mixed with 10—15 grams of dichromate dissolved in water in the distilling flask. The cylinders are rinsed out with water free from carbon dioxide, and after the contents of the flask have stood for about 15 minutes the distillation of the acetic acid is proceeded with as described above, and the distillate is titrated with N/10 barium hydroxide solution. Amounts of alcohol up to 2 grams can be estimated accurately in this way. When more than half a gram of alcohol is present it is necessary to mix the sulphuric acid and dichromate solution carefully, with cooling. The entire estimation occupies 12—30 hours, but requires less than one hour's personal attention. The

results are as accurate as, and more trustworthy than, those obtained by any other method applicable to fermentation mixtures.

Acetone is carried over by air, like alcohol, but the greater part of it distils unchanged from the oxidizing mixture; about 0.6 gram of acetone only yielded 0.003 gram of acetic acid. Certain esters, such as ethyl acetate, interfere with the estimation of alcohol by this method, but they may be estimated separately. Acetaldehyde volatilizes readily in an air current and is converted into acetic acid by the oxidizing mixture, but aldehydes are usually only formed in small quantities as intermediate products in fermenting liquids. Methyl alcohol, under the conditions of the method, is almost completely oxidized to carbon dioxide and water; 0.185 gram was found to yield only 0.012 gram in the form of formic acid.—("Journal Am. Chem. Soc.")

Air in Beer.

It is probable that it is almost impossible to overestimate the importance of the air question in a finished beer. This is one of those scientific problems which ought to afford a fruitful field for the investigations of the chemist. The practical man has a great number of questions which he requires to be answered.

In the first place, why is it that air in the finished beer constitutes a danger? Is it because of the bacterial or wild-yeast infection, which accompanies such aëration, or is it owing to some degradation, or change, in the nitrogenous matter, caused by the presence of the air itself. It is obviously important that the brewer should be told as to what is the scientific truth about these two propositions, as his brewing practice will depend largely upon what is told him. If, for instance, the first is the truth, that is that the air itself does not constitute a menace, but only the fact that it carries infection along with it, then he can go ahead and purify his air supply and feel that he is taking those steps which the best modern practice would indicate.

On the other hand, if he is told that the air itself constitutes the danger, then the money spent on the purification of the air will have been largely thrown away. Considerable experience, and a fairly deep practical research into the question of air contamination, in beers intended for bottling, have led us to form some general conclusions at any rate. Air in bottled beers is certainly objectionable. That is to say, if careful estimates are made of the air contents of bottled beers, and those bottled beers which contain comparatively large quantities of air are compared with those samples which contain comparatively small quantities, it will be found that the presence of over 2 per cent. of air, in the total gas content, has a decidedly prejudicial effect on the palate. There is a certain harshness and flatness of palate, which always accompanies air infection, and which is most characteristic and can always be recognized by an investigator who is used to this sort of research.

The question as to whether this high air content affects the keeping quality is harder to answer, because the investigator is liable to be baffled by other factors, which may have a stronger bearing on the keeping qualities than the question of air content. But investigations which we have undertaken in order to satisfy ourselves whether or not the keeping qualities are affected have, on the whole, satisfied us that the keeping qualities of a bottled beer are dependent, to quite a large extent, upon the amount of air which it contains.—(London "Brewers' Journal.")

Famous Physician Favors Beer and Light Wines.

By DR. MENAS S. GREGORY,

Head of Psychopathic Ward, Bellevue Hospital, New York.

"Prohibition is a much more dangerous experiment than the liquor men suppose. Any superficial observer can see what drink does to people; what we need is a scientific understanding of why people drink.

"When I say that drunkenness is a greater evil than Prohibitionists imagine it to be, I mean that the evil is deeper than the question of the presence or absence of the saloon in the community. To take away the saloon and not provide for the human motives and impulses that called it into being would be a doubtful blessing.

"If the people only understood a few simple facts of psychology, the drink problem could be more rationally approached. The real objection to alcohol is its effect upon the human mind. But those who see these effects have generally contented themselves with analyzing alcohol; they haven't stopped to inquire what the human mind is like. The result is that the arguments advanced for total abstinence and Prohibition have usually been almost as stupid as the arguments advanced against them.

"Reformers never accomplish anything much, because they are forever dealing in thoughts. They forget that there is something in the human mind more fundamental than thoughts—the elemental impulses from which thoughts arise. Those elemental impulses are neither good nor bad; they are simply impulses which may be satisfied in good or bad ways. All the sin, all the evil, all the misery in the world is due to man's attempt to satisfy these desires. But so is all the achievement, all the beauty and all the joy of life. When reformers ignore this second fact, they defeat the very object at which they aim.

"The intoxication impulse is one of these fundamental human passions. It is not necessarily the impulse to drink, but it is an impulse which calls for drink when there is no other way of expressing itself. It is the impulse to transcend the hard realities of life, the impulse to expand, to abandon one's self completely to something beyond the range of practical necessity. The impulse which leads men to drink is the same impulse which leads them to the higher things in life—to poetry, to Prohibition propaganda or to prayer.

"The Scriptural injunction, 'Be not drunk with wine but be filled with the Spirit,' is in line with the most advanced psychology. Any man who has a tendency to get drunk needs something more than morals to keep him straight. He may need religion—emotional religion—at any rate, he needs an experience of something away beyond the confines of the practical.

"A great love experience may answer the demand. Many a man has been saved from drink by such an experience; but the woman who sets out to save a man is quite likely to fail. Too often she fancies she can do it by managing his life, by keeping track of him, by making him account for all his time and money. You can't blame her for doing this, but it seldom reforms a drunkard. That is because she appeals to his sense of duty, to his judgment and to his personal honor. To reform a drunkard you have to appeal to something deeper down in the human nature than that. You must appeal to his soul—to his elemental impulses.

"It isn't that the drunkard always has less honor than the sober citizen. He may have more, and be shaken at the same time by turbulent, unsatisfied passions that the sober, efficient and practical citizen knows nothing about. He seldom understands his own case, and he thinks he can quit by swearing off, just as people think they can

'cure' by taking away the liquor. Unless some provision is made to satisfy those elemental passions on a higher plane, these passions are quite apt to assert themselves on a lower. The great trouble with our temperance movement has been that it expected to take away the saloon without leaving anything in its place.

"Prohibition, wherever it is enforced, does a lot of good. But—and this is the fact which propagandists are forever trying to dodge—it also does considerable harm unless ample provision is made to satisfy the impulses which lead to drink. The drug evil is increasing alarmingly in New York, due in a measure to Prohibition. There are thousands of employers here who will not employ a man who drinks. They may be drinking men themselves, but they insist on their employees being teetotalers. Efficiency demands it.

"'Why don't you drink instead?' I have asked some of these victims of opium or heroin. 'I can't,' they have told me. 'I would lose my job. The boss could smell liquor on my breath—they could see by looking at me that I had been drinking—and there are strict rules against it.'

"But they can take drugs for six months or a year without being detected.

"Drink leads many people to crime, but it leads some away from it. I know a man who gets drunk and beats his wife. I know another who gets drunk instead of beating his wife. In one case intoxication stimulates an element of ugliness in the man's nature. In the other it acts as a sort of safety valve, relieves the nerve tension from which he suffers and leaves him an altogether amiable husband.

"There are some people who would be great artists if they didn't drink. Others cannot give expression to their artistic talents because they don't. Prohibition, without any other change in our social structure, would be an inestimable boon to the former, but it might place a handicap upon the second group.

"Right here is where most temperance reformers fall down, for each individual soul is different from every other. It has different longings, different aspirations, different needs, and under the very same conditions will act in a somewhat different way from every other. You can't treat them all the same and produce the same results.

"Stimulating the social life of the people should be the first aim of every sincere enemy of the saloon. If this cannot be accomplished without alcohol, some concession to alcohol might be made, for alcohol, historically, has been a socializer. It is worth while to consider the advisability of workingmen's clubs, in which beer and light drinks are dispensed, to take the place of the saloon. We should remember, at any rate, that the so-called substitutes for alcoholic beverages, tea and coffee and soft drinks, are not substitutes. Soft drinks may please the palate, but they make no appeal to the elemental passions. Love, friendship and social cooperation in work and play do. They are the substitutes for drink which intelligent reformers will look to.

THE "DRY" REPEATER OF ST. LOUIS. In St. Louis there is one ward that is full of breweries. In a recent election the local option question was up. After the election the clerks were counting the votes. One was calling off and another taking down the option votes. The first clerk, running rapidly through the ballots, said: "Vet, vet, vet, vet." . . . Suddenly he stopped. "Mein Gott!" he cried. "Dry!" Then he went on: "Vet, vet, vet, vet." Presently he stopped again and mopped his brow. "Himmel!" he said. "Der son of gun repeated."

Turning Loss Into Profit.

By JACOB LOEWER,

President V. Loewer Gambrinus Brewery Co., New York.

It certainly doesn't require a whole lot of business genius to conclude that swapping dollars or doing business at a loss, which is only another way of saying the same thing, isn't a very worth-while game.

My father was one of the pioneers in supplying bottled beer to the trade, and while it is a fact that we sold our product at that time for \$1.25 per case, cold figures told us plainly that it wasn't a paying venture, and not being in business altogether for the love of it, we directed our activities along lines that showed us a better return on the money and effort invested.

When, however, bottled beer became very much the vogue, we began to seriously analyze just wherein the bottling end of the business proved a losing venture and at the same time took steps to solve the problem of making it pay a profit.

We are absolutely convinced that we put our finger on the trouble and we found that it wasn't that beer bottling isn't profitable, *but that not getting bottles and cases back isn't sensible.*

It is the case and bottle loss that sends the business to the wrong side of the ledger, and it is the elimination of this loss that puts it on a sound, practical profit making basis.

We treat our bottles as cash. When a customer gets a case of our beer he pays so much for the beer, plus a cent each for the bottles. For every bottle he returns he receives a cent rebate. There are no exceptions to this rule, and there can be no misunderstanding relative to our system, for every bottle leaving our plant carries a label advising that one cent will be paid for its return to us.

Upon the other hand, our drivers are paid a stipulated salary, plus one cent each for every case they collect and turn in, but the cases must be *our* cases and contain *our* bottles, for the driver must unload before our expert *checker*, who makes him no allowance for broken or strange bottles or cases.

Thus it is plain how the plan works out. We get cash for bottles, the consumer is interested in getting *his* cash back, so makes an effort to safeguard and return them. The driver increases his income by returning the cases, and he is stimulated to efficient activity by the checker, who will not credit him for any returns not ours.

And how does it work?

The following figures are the best evidence. During the year ending June 30th, 1916, our output was 303,993 cases. In the same period 295,733 cases were returned and for the unreturned cases we had cash in hand. While this apparently looks like 8,000 cases lost, such is not the fact, for the business of 1915 to 1916, over 1914 to 1915, showed an increase in output of approximately 90,000 cases.

The average number of bottles per case returned over the same year was 23.62—a loss of less than one-half bottle per case, or less than 2 per cent.

Then, too, we keep a very careful return record of each and every customer.

If the one-cent rebate doesn't make them careful about returning our bottles we make it two cents, having previously added the extra one cent to their initial cost.

Here's how that works out. One such customer's record shows that in 60 cases his average return was only 9.3 bottles per case. After putting him on a two-cent basis a subsequent 71 case lot showed a return of 22.5 bottles per case and a 64 case lot 23.85.

But as shown by the following, our experience is merely a duplicate of what the other New York brewers are doing with this system, practically all of whom have adopted it.

During the first eleven months of 1915 in which the system was in force for the first time and wherein the business done was greater than during the twelve months of the preceding year, more than \$1,000,000 less of bottles and cases were bought.

Think of it! \$1,000,000 saved in cases and bottles to the industry in one city alone.

Isn't it time for every beer bottler in the country to give the adoption of such a loss saving system his immediate consideration?—("The Crown of Baltimore.")

AUTOLYSIS OF STARCH. By Biedermann in "Fermentforschung." This author has shown, that dilute boiled starch solution can be hydrolized with comparative rapidity by the ash of the saliva; he ascribes this as due to an enzyme being liberated from the starch under the conditions of the experiment. He has now further shown that similar hydrolysis occurs without any addition if the starch solution is made at 70 deg. to 90 deg. C. Reaction occurs considerably more rapidly at 35 deg. to 40 deg. C. than at ordinary temperature, and only the portion of the starch which remains in solution undergoes this autolysis. Extracts prepared by grinding starch with water do so much more rapidly. The diastatic power of such an extract is similar to that of a very dilute saliva solution, and transforms starch completely into sugar. Of the salts contained in saliva the chlorides, particularly calcium chloride, promote diastatic action. The marked action of saliva ash in promoting the decomposition of starch solutions which have been subjected to prolonged boiling suggests that this mixture of salts promotes the new formation of diastase from starch. The action of the ash is much more pronounced than that of the individual chlorides contained in it, and so no artificial mixture of salts of similar activity has been obtained.

NATURAL AND ARTIFICIAL CONDITIONING OF BEER. Beers which have been fully matured in bottle or cask undoubtedly hold their gas in a different manner from those in which the condition has been artificially induced by saturation under pressure. In perfect natural maturation the gas seems to have become part of the "soul" of the beer, while carbonation under pressure seems to thrust a somewhat false brilliancy upon the liquid. Some chemists assert that the difference is due to the formation of real orthocarbonic acid in the natural beer, while the carbonated beer is a simple solution of carbon dioxide. There is no proof that this theory is correct, although the experience of mineral water manufacturers seems to favor it. Freshly made minerals do not hold their gas as well as those a little older in which the gas may have had time to pass from the state of simple solution to that of orthocarbonic acid. Some of the recent discoveries of physiologists with respect to the carrying of carbon dioxide from the tissues to the lungs in the blood for respiration, may possibly afford a clue to the undoubted difference between natural and artificial condition of beer. According to the latest work carbon dioxide forms a dissociable compound with protein. There is a strong possibility that such a combination occurs in a naturally conditioned beer which is often fairly rich in nitrogenous bodies. On the other hand chilling followed by filtration has the deliberate effect of removing such bodies, and this removal may affect the manner in which the carbon dioxide is held in the beer.—(London "Brewing Trade Review.")

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

L. A. The packages that are used for shipping should always be pitched when they come back to the brewery, and before being refilled with beer. Your question would imply that you fail to grasp the real object of pitching, which is to render the vessels impervious to air, and to give a smooth, glassy surface to the inside of the package, so that no yeast or other organisms can find a resting place in it. The rough method of testing pitch which you have outlined, and which you state has been adopted in your brewery with great success, is perfectly logical and practical, and we have no adverse criticisms to make upon it.

V. P. M. We cannot give you authoritative information on the subject you mention. We are not familiar with the process by which the material is manufactured, nor can we even say with certainty whether it is or is not a product of nature. So far as we have ascertained by analysis, it contains about 0.16 per cent. of oil, or fat, with a mere trace of albuminous bodies, which are coagulable by boiling, and which consequently remain in the mash tun grains.

(2) We cannot attempt to answer your question on such slender information. We advise that you send representative samples of all the beers you name to the chemical laboratory with which you are affiliated, with instructions to examine them biologically, and report the nature of the organisms present.

H. H. B. We cannot understand how you can justify the use of such high sparging temperatures, and we believe they are responsible for all the trouble you are experiencing with your primary and final attenuations. There is absolutely no ground for believing that the use of such hot sparge water increases your yield of extract, and even if such a belief were justified, the practice should be condemned on account of the character of the bodies extracted.

J. J. Q. There is literally no reason why well equipped commercial maltsters should refuse to sell their malt on the basis of a guaranteed chemical analysis, provided that intelligent provision be made for allowable differences in analytical results. The matter is entirely in the hands of the brewers themselves. Directly they become unanimous in their demand for proper guarantees of quality, the maltsters will see the necessity for compliance, and all present troubles will come to an end.

H. C. C. The sample of water appears to have been collected in a dirty demijohn, which had previously contained kerosene. As, however, you merely desire our opinion as to its fitness for boiler use, we are able to say that it may be used with perfect safety for making steam. It is an unusually soft water, containing no salts that are likely to produce boiler scale.

M. J. S. We are strongly in favor of using ethyl, or denatured grain alcohol in the manufacture of brewers' varnish. The fewer risks you take during the varnishing season, the better you will be off. In order to get over your difficulty, we recommend that you proceed as follows: Make a connection with your blower and an ordinary beer hose. Let the exit end of the hose be put into the cask through the manhole. Before allowing the workmen to

enter the cask, let the blower be started, and the air be blown in through the manhole, and out through the bung-hole at the top. At the end of five minutes, the cask will be ready to be scraped and washed with soda, and finally dried by means of a brazier inside of the cask. As soon as the casks are ready to be varnished, the blower is started again, and thenceforward until the varnishing is completed, the air is continually renewed. If warm air be required, it can be taken from the brewhouse or from the engine room.

E. M. It is a well-known fact that moulds grow very luxuriantly in damp cellars, and that they require very little nourishment. Whether the moulds usually found in our brewery cellars are directly injurious to the beers or not is a disputed point, which our experience has led us to pronounce in the negative. They, however, make the air of the cellars foul and disagreeable, and disgusting odors are always liable to have a disagreeable effect on such a delicate product as beer or ale. We therefore advise that you take every precaution to remove mould growths, and to prevent their recurrence.

O. B. The sample of malt you have marked "W" is entirely unsatisfactory. It appears to have been made from a mixture of barleys (two-rowed and six-rowed) of lean and inferior grade. It contains nearly 30 per cent. of ungerminated corns, which we have been unable to grow in our germinating apparatus. This malt can only give a very low yield in ordinary brewery practice, and we cannot see how your brewmaster is to be blamed for the poor quality of the beer, unless he himself selected this material.

H. J. W. We have no criticism to make of the beer, which is of normal composition, and satisfactory attenuation. It appears to have been properly pasteurized and does not develop any organisms by a severe forcing test. We cannot detect any objectionable "cooked" taste. Its foam keeping qualities are excellent. It only develops a slight haze after remaining packed in a mixture of ice and salt for 24 hours. Although not entirely "chill-proof," as that term is now understood, it remains absolutely brilliant at all temperatures down to 38°F., which ought to be sufficient for your purposes.

C. R. T. A rational and satisfactory answer to, and explanation of, your question, may be briefly formulated as follows: If a perfectly healthy and normal yeast be used in the fermentation of a liquid containing very little assimilable nitrogenous matter, the yeast development will take place at the expense of its own substance, and the percentage of nitrogen in the crop will be less than the percentage of nitrogen originally existing in the yeast sown. On the other hand, if fermentation is induced in a liquid very rich in soluble, or assimilable, nitrogenous bodies, it will be found that the yeast produced is considerably richer in nitrogen than the original yeast used as seed.

J. J. S. We must refuse to enter into any such controversy as that which you necessarily follow from the expression of our opinion in these columns. What your maltster has told you concerning his views of the kilning process is not only ridiculous, but entirely of variance with elementary facts. Why do you not adopt the common-sense alternative of buying a few carloads of very pale, high dried malt from some well-known commercial maltster and then confront the maltster you mention with the results, shown by your finished beers. If you and other brewers were buying your brewing material in accordance with business principles, and on the lines laid down by modern science, such difficulties as you are now experiencing would be entirely obviated.

— THE —

National Brewers' Academy

AND

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Is the U. S. Still a Democracy?

1917 Record Grain Crop.

The crop estimators in the United States Department of Agriculture in Washington, D. C., reported on June 8th, 1917, that this year's barley crop will aggregate 214,000,000 bushels, or a great deal more than in many previous years. In fact, it appears that we are going to have a record year for barley.

The brewing industry will probably require about 50,000,000 bushels of barley this year—maybe a little more, or a little less. At any rate, there will be over 150,000,000 bushels of barley available for other purposes—feeding humans and animals—here and abroad.

The total yield of the 1917 wheat crop is estimated at 656,000,000 bushels, or 16,000,000 bushels more than the total yield of the 1916 crop. Rye and oats, at the rate of 57,900,000 bushels and 1,381,000,000 bushels respectively, will bring up the grain crop to 2,308,900,000 bushels, not including corn, which the estimators in Washington failed to mention, but which in 1916 amounted to 2,583,241,000 bushels and to 2,994,793,000 bushels in 1915, so that we may safely assume it will add more than 2,500,000,000 bushels to the cereals already mentioned, making a grand total of about 5,000,000,000 bushels.

Of this about 1,000,000,000 bushels is to be exported to Europe, as announced by the various government departments, in comparison with 435,679,323 bushels of all breadstuffs, including bran, bread and biscuit, buckwheat, cornmeal, dried grains and malt sprouts, mill feed, oatmeal, preparations for table food, rice, rye flour, wheat flour, etc., exported in 1916, the total exports of barley, corn, oats, rye and wheat aggregating 349,415,508 bushels in that year.

As the total cereal production in the United States this year will by far exceed the one of last year, which amounted to 4,745,429,000 bushels, it is inconceivable for anyone of a sound and fair mind why the brewing industry, which consumed 70,505,488 bushels of grain in 1916, should be suspended this or next year under the fictitious pretense that the American people would have to go hungry unless of over 5,000,000,000 bushels of grain 70,000,000 were taken away from the brewers!

The whole agitation for war Prohibition of alcoholic beverages is unjustified when the argument is advanced that we have not enough grain in this country to feed the population and to export all that may be needed in Europe.

The figures of the crop estimators in Washington and the statistical figures relating to exports of breadstuffs, as contained in the Statistical Abstract of the United States, 39th number, just published by the Department of Commerce, give the lie to the hysterical demand of agitators and enemies of the masses of the American people that the brewing industry must be killed because there is not enough barley in this country to make beer with!

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Is the U. S. Still a Democracy?

The Nation Disgraced by its Misrepresentatives.

"We are in this war to make the world safe for Democracy," says the President of the United States—to make it safe from the assaults of autocracy and its military devilment.

Do the so-called "Representatives" in Congress, who are supposed to guard and represent the interests of the whole nation, act upon the principle proclaimed by the President? They do not!

In the dead of the night of Saturday, June 23rd, the House of Representatives has passed a bill, by a vote of 365 to 5, which, if enacted into law, would wipe out an industry in which thousands of millions of dollars are invested, employing several millions of men and women and, with its products catering to centuries'-old tastes and enjoyments of a nation of one hundred million souls; deprive the government of thousands of millions of dollars in National and State taxes; disarrange not only dozens of affiliated industries but also almost the entire machinery of Federal and State governments.

And why?

Because those misrepresentatives, only alert and looking out for their own selfish interests, voted for that autocratic measure because they thought that thus they could win the approval of small numbers of fanatics, theologians and their political tools in their respective Congressional Districts.

The civilized world stands aghast at such a spectacle.

Nowhere else has such a step been taken. The nations abroad, after having bled and wasted their substance in a three years' universal slaughter, have not dared to take from the masses their customary potions of beer and light wine, which they have also copiously decanted to their armies in the field. Nowhere it has been pretended that the brewing and wine industries must be suppressed, because there are not barley nor grapes enough in the world to feed civilians and soldiers. It was left to the American House of Representatives to hide behind a false pretense in order to reap a selfish advantage from a hypocritical vote for a dastardly outrage.

Fortunately the United States Senate, yielding to the universal and indignant clamor of the millions, can still make it possible for President Wilson to avert the disaster which would result from the stupid and barbarous action of our Misrepresentatives and, we believe that in Woodrow Wilson the nation may safely trust its welfare and fortunes.

Why National War Prohibition Should be Opposed.

1. It would destroy a present Federal revenue of \$250,000,000 and a future revenue of \$500,000,000 almost immediately available, at a time when every dollar is needed for war purposes.

2. It would destroy state and municipal revenues amounting at the present time to \$100,000,000.

3. It would require immediate redrafting of the War Revenue Act, and the imposition of hundreds of millions of dollars of direct taxes upon the American business interests in addition to the heavy war burdens now imposed upon them.

4. It would require drastic and sweeping changes in the tax-systems of many States and hundreds of cities, with heavy increases of taxation upon the lands, buildings and personalty of the residents thereof.

5. It would cause the total and immediate destruction of business enterprises capitalized at more than a billion of dollars.

6. It would cause the sudden throwing upon the market of thousands of store rooms now profitably rented and immense losses to real estate investors in the way of decreased rentals and lowered property values.

7. It would produce complete paralysis of trade in many communities, and its blighting effect would be felt throughout the whole country.

8. It would produce a feeling of anger, resentment and disaffection among millions of American workingmen who have officially gone on record through their trades' assemblies as opposed to such a step, and to whom a glass of beer has been a daily necessity, and upon whom our success in this war depends. Great Britain and other warring countries have preserved their brewing industries in order that their soldiers and workers may have an adequate allowance of their accustomed beverage.

9. The time requires above all things a calm, courageous consideration of the facts in every situation and a refusal to yield to the demands of hysterical or notoriety-seeking individuals or organizations.

There is more food produced in the United States than its people need, and enough to feed the belligerents in Europe. The only question is proper and scientific distribution and prevention of hoarding and cornering by greedy and disloyal speculators.

The lies circulated by enemies of the United States, that hundreds of American warships have been sunk and that thousands of wounded soldiers and sailors are crowding our military hospitals are of the same tenor as the lies by virtue of which poverty-pinched parsons and selfish peanut politicians are hoping to improve their miserable economic condition when they pretend that the brewing and distilling industries must be destroyed by Prohibition. The Prohibitionists are giving aid and comfort to the enemy in that the scheme they propose to make the law of this country would render the American people inefficient in a military as well as in a financial sense.

Liberty Bonds.

We have bought a Liberty Bond. So have some of our sons and daughters. We consider it to be the duty of every American who has \$10 or more to spare to buy one of these bonds, the money for which goes into the United States treasury, being intended to be used for the great ideal of a future world without wars and the autocracies that instigate them for their own personal benefit, security and, if possible, aggrandizement.

It is unnecessary to boast that the men who have been and are now engaged in the American brewing industry are loyal citizens. We know they are. Therefore, it has not been necessary for us to vociferously call upon them to purchase Liberty Bonds. We know that all American brewers are doing all they can for their country in this present dreadful emergency. And all this in view of the fact that State and National Legislatures are forever planning to wipe out the brewing industry by Prohibition measures!

Is there a more heroic example than that exhibited by the members of this trade? Men sacrificing themselves for a government that is only too eager to confiscate their property—wipe it out of existence!

The heroism of the American brewers is unique in the history of the world, because the United States is the only country where laws are made to destroy an industry without compensating its dependents. Germany, whose people at home are near the starvation point, has encouraged and assisted its brewing industry as far as it has been possible under the most aggravating circumstances and, of course, the German and Austrian brewers have invested millions of marks in the war bonds of their countries. No one threatens their industry with annihilation. The brewers in England, Scotland, Ireland, Canada, Australia, Africa and India have done and are doing what their colleagues in Germany did and do: they bought war bonds and sent their sons to the firing line. Their governments do not propose to stop the breweries, although barley, rice and corn are almost as scarce in Great Britain as they are in Germany. We all know how the brewers in Belgium and France are situated. Most of their breweries being destroyed, they still aid their governments with money and men to the limit of their capacity. No Prohibition laws threaten the French and Belgian brewers. To the contrary, their governments have taken steps to reimburse the brewers whose property has been destroyed by the enemy, and work is going on now to re-erect their breweries.

And yet the American brewers do not despair of a fair and happy future. They know that the masses of their fellow citizens are with them and should the theological, political and economic enemies of the brewers succeed in temporarily destroying this great and necessary industry, the time will soon come when all foolish Prohibition legislation will be repealed at the indignant and determined demand of the masses.

The firm conviction that nonsense cannot prevail forever, and the confidence placed by the American brewers in the intelligence of their people, enables them to be loyal and enthusiastic, liberty-loving American citizens.

Can the Prohibition preachers and politicians say the same of themselves? Are not they delaying necessary war legislation, only to attach to it Prohibition riders and amendments? Are not most of them hare-brained pacifists and slackers? Did they buy Liberty Bonds?

"MAYBE THEY HAVE 'EM. Now that they are regulating everything, the Prohibitionists might pass a law prohibiting a man who has hairy legs from wearing a nightshirt and compelling him to wear pajamas."—(Luke McLuke.)

Will We be Permitted to Aid the Red Cross?

From Mr. Henry P. Davison, Chairman of the War Council, Washington, D. C., we have received the subjoined letter, dated June 11th., 1917:

My dear Sir:—You have, of course, observed that the President has appointed a War Council to administer our Red Cross during the war. For your information, I am enclosing a copy of the President's announcement, as well as his letter asking me to accept the Chairmanship of the Council.

"I am writing this letter to you to ask your cooperation in our work. We shall need the very active and generous support of the public, and this can be obtained only as we get our message before the people. We must depend largely upon the press to accomplish this purpose.

"Our army and navy represent the will of the American people; our Red Cross represents the American heart. Our duty is primarily to relieve suffering and restore to health and strength the sick and wounded; that is a vital part in winning this war.

"I am enclosing for your information a copy of a statement setting forth our needs as disclosed by preliminary consideration of the emergency. May I ask you to read it and to bring attention of your readers, either in your news columns or by editorial comment?

"We need and beg your earnest cooperation. We want our Red Cross to respond nobly and tremendously to this supreme call to the American people for service and sacrifice. Your suggestions and assistance—indeed, your criticisms—will always be welcome.

"With thanks in advance for what I am sure will be your cordial cooperation, I am,

"Very truly yours,

"H. P. DAVISON,

"Chairman, War Council."

Our reply to Mr. Davison follows:

New York, June 12th, 1917.

My dear Sir:—Your appeal to me, dated June 11th, 1917, asking my cooperation in Red Cross work, is at hand. In reply let me state that I have been a Red Cross worker for many years and propose to continue. I shall even do all I can to assist you as a public writer. However, I am afraid that the foolish parsons and their political tools in Congress, who are trying to destroy the American brewing industry may succeed in their nefarious scheme and then I shall be unable to serve our cause in an editorial capacity, as then brewing trade papers would no longer exist in this country.

Therefore, if you desire that we shall be able to assist you, tell the President that he should prevent the brewing industry from being destroyed by fool legislation.

Very truly yours,

THEO. F. CUNO,

Editor, The Brewers' Journal.

Is the U. S. Still a Democracy?

The interning of brewers during the war was advocated at the Baptist ministers' union in the Masonic hall by the Reverend Elmer L. Williams, pastor of the Grace Methodist Episcopal church. "The brewers are a menace to the nation," he said, "and they ought, therefore, to be interned."—*Chicago News Item*.

What a howl would these "brethren" raise if we were to advise that theological fakers and liars should be interned! But we forbear. We simply laugh at them. Ridicule is more deathly than denunciation and exposure of palpable nonsense.

"Utterly Unreasonable—Therefore Without Justification."

In the House of Representatives 365 members, after a bitter contest, have chosen to go on record as favoring absolute prohibition of the manufacture of intoxicating liquors during the war. It is probable that many of those who voted for the drastic liquor amendment Saturday night did so in order to get the bill through on time, confident that the Senate would reasonably modify it. Restriction of the use of foodstuffs in distilleries may be necessary. It is well for the law to recognize the essential fact that our food supplies must be protected at whatever cost. But to turn the Food Administration bill, at the last moment of the House debate upon it, into a strict prohibition measure, without counting the cost at all, is going too far. It is utterly unreasonable. . . . Senator Wadsworth has proposed an amendment to the Food Control bill which gives the President power to prohibit the use of food materials in the manufacture of distilled liquors, beers, and ales. That is the proper method. . . . The President may be trusted to use that authority with discretion. Instead of making an iron rule, founded on a disputed theory, give the President the power to act as necessity requires. That is sound economics. The other course is premature, and therefore without justification.—(New York Times, June 14, 1917.)

Is the U. S. Still a Democracy?**American Soldiers and Sailors in Europe.**

Weak-kneed politicians in Congress have decreed that American soldiers and sailors are to be deprived of beer, wine and spirits during the present war. Heavy penalties are to be visited upon those who sell intoxicants to American men in United States uniforms.

It is pretended that alcohol makes the soldier inefficient and insubordinate. That this is untrue has been testified to by military authorities in this country for many years. Officers, surgeons and chaplains have said so on many occasions to committees of Congress when the question of abolishing the army canteen was being discussed. Notwithstanding all this, the American soldier and sailor is to be "dry" for the present, although the result will be that thousands of enlisted and drafted men will desert from the ranks as they have done for years, even in times of peace. Thousands deserted during the Civil War, when no one thought of Prohibition and generals as well as privates could obtain all the whiskey they wanted. Prohibition will only increase the number of desertions.

But there will be few desertions from the army when in Europe. There soldiers are not deprived of wine, beer and spirits. Wherever American battalions arrive and march upon European soil they will be hailed with shouts of joy by liberty loving populations; they will be feasted and toasted by civic authorities, social societies and, above all, by their European comrades-in-arms—officers as well as men.

And will they toss the loving cup from them when offered to them by those who expect them to aid them in overthrowing the autocratic governments who have invaded their countries and involved them in the most cruel and sanguinary struggle of history?

They will not! The American soldier fighting the battle for freedom will become Europeanized. He will be as efficient, as valorous, as victorious as the men marching under the flags of his European allies, no matter what American politicians, whipped in line by theological fanatics and schemers have decreed to make him inefficient, obstreperous, ridiculous and miserable. American soldiers and sailors will drink plenty of beer, wine and spirits in Europe.

Maintain Existing Labor Standards.

At a meeting held by the Executive Committee of the Committee of Labor, appointed by the Advisory Committee and Council of National Defense, Washington, D. C., resolutions were adopted, saying:

"The defense and safety of the Nation must be the first consideration of all patriotic citizens. To avoid confusion and facilitate the preparation for national defense and give a stable basis upon which the representatives of the Government may operate during the war, we recommend:

"First.—The Council of National Defense should issue a statement to employers and employes in our industrial plants and transportation systems advising that neither employers nor employes shall endeavor to take advantage of the country's necessities to change existing standards. When economic or other emergencies arise requiring changes of standards, the same shall be made only after such proposed changes have been investigated and approved by the Council of National Defense.

"Second.—That the Council of National Defense urge upon the Legislatures of the States, as well as all administrative agencies charged with the enforcement of labor and health laws, the great duty of rigorously maintaining the existing safeguards as to the health and the welfare of workers, and that no departure from such present standards in State laws or State rulings affecting labor should be taken without a declaration of the Council of National Defense that such a departure is essential for the effective pursuit of the national defense.

"Third.—That the Council of National Defense urge upon the Legislatures of the several States that before final adjournment they delegate to the Governors of their respective States the power to suspend or modify restrictions contained in their labor laws when such suspension or modification shall be requested by the Council of National Defense, and such suspensions or modifications, when made, shall continue for a specified period and not longer than the duration of the war."

The maintenance of the Standard of Life of the laboring masses has always been of vital importance to the brewing industry of every country. To reduce that standard would mean to reduce the purchasing power of a nation. When wages are high and the cost of living is proportionate to the average wage of a man, his purchasing power keeps the wheels of industry lubricated and running well. Strikes and periods of wide-spread unemployment always reduce the output of the brewing industry.

Brewers must always keep this in mind and it is, therefore, their duty to induce their business associates and friends to maintain the standards of wages of their working people, particularly now, when industrial activity and prosperity are required to enable the United States Government to do its duty in the present world-wide crisis.

The law to prevent papers containing liquor "ads" from being mailed to "dry" places cannot be enforced to its letter because neither publishers nor postal clerks know what in this country is "dry" and what is "wet." The "dry" and "wet" map is changing almost every five minutes.

There are slackers not only among those who should go to the firing line, or those who should buy Liberty Bonds, but also among those whose industry is threatened with extinction by Prohibition. Join the organization of your trade! That is your first duty to yourself and to your fellow men, in war as well as in peace.

Is the U. S. Still a Democracy?

Doctors and Alcohol.

Some doctors holding a convention in New York City last month adopted resolutions saying that "Alcohol's only place now is in the arts and sciences." Other doctors have used alcohol as a stimulant for heart failure ever since alcohol has been known. Doctors will disagree. Just ask two of them to consult over a "case" and you will see that neither of them can tell you exactly what is to be done. What we have said thousands of times, that alcohol, civilization and human progress are inseparable, is now also gradually recognized as true by many other journalists. Says the New York "Evening Sun," discussing the above-mentioned alcoholophobic doctors: "It remains to be explained why the most industrious races of Europe and the most advanced cling to alcohol, while the great intellectual races of the East, notably the Chinese, Hindoos and Arabs, avoiding alcohol for centuries, have failed in any respect to reflect the benefit that should result. It is still to be learned why a number of so-called modern diseases either increase or fail to diminish under present-day sanitary conditions. It is still a question what has caused the enormous and to many persons unwholesome increase of consumption of sugar, alcohol's close chemical similar. The time has come for less popular agitation and misconception on the subject of alcohol and more accurate study."

Is the U. S. Still a Democracy?

Congressman Lever, Prohibitionist from South Carolina, hopes that his alleged food-control bill will be a lever to lift upon the backs of the American people the barbarous burden of Prohibition, but all signs now point to the probability that Mr. Lever has made a miscalculation in regard to the pivoting point whereupon his lever is to turn to produce the desired pernicious result.

Some "Literary Digest."

Messrs. Funk & Wagnalls, publishers of Prohibition literature, in their issue for May 26th, of their "Literary Digest," have published an article on "Nation-wide Prohibition as a War Measure," favoring it, of course. Why should they not? If they were to oppose it, would not their Prohibitionist subscribers tell them to stop sending their paper? Of course, they would. Consequently we have nothing to say about the necessities of Messrs. Funk & Wagnalls' pious business. But we must object to the means and ways which they employ to "get away with it." They pretend that: "We have taken an impartial poll of the press in States that have experienced prohibition in actual operation, and the result of our canvass is presented with strict non-partisanship."

Nothing of the kind have they done. Their wage working editors have clipped sentences from a lot of back-woods country papers run for the benefit of Prohibition persons and their political tools; they have garbled articles of papers opposed to Prohibition and from their poll thus hypocritically manipulated they conclude that the American press is favoring "Prohibition as a war measure."

It is useless to argue with Prohibitionists. Therefore, we need add nothing to what we have said about the doings of Funk & Wagnalls. We might as well try to grow wool on the hide of a crocodile.

Arbitrary rules as to food and drink in this war—or at any other time—cannot be enforced unless the masses of the people approve of them. The American people will not approve of any rule depriving them of their accustomed potion of beer.

The Colored Migration.

The National Association for the Advancement of Colored People recently caused a careful investigation to be made to ascertain the reasons why over 250,000 negroes have left their homes in the South to seek better conditions in northern States, the conclusions drawn from the material being that the migrating masses complain of bad treatment, low wages, lack of employment, being prevented from voting and enjoying other constitutional rights, poor educational facilities, etc., all this denoting a general dissatisfaction with Southern conditions of living.

And the character of the people who are leaving the South is described by an Alabama contemporary as follows:

"It is not the riff-raff of the race, the worthless negroes, who are leaving in such large numbers. There are, to be sure, many poor negroes among them who have little more than the clothes on their backs, but others have property and good positions which they are sacrificing in order to get away at the first opportunity. The entire negro population of the South seems to be deeply affected. The fact that many negroes who went North without sufficient funds and without clothing to keep them warm have suffered severely and have died in large numbers, has not checked the tide leaving the South. It was expected that the negroes would come back, sorry that they ever left, but comparatively few have returned. With the approach of warmer weather the number going North will increase."

The States from where the negroes are leaving are Prohibition States, with the exception of Louisiana, Texas and Florida, from where comparatively few emigrants have gone North, to wit: Oklahoma, Arkansas, Mississippi, Tennessee, Alabama, Georgia, South and North Carolina, and the Northern States to which they emigrated are: Missouri, Illinois, Indiana, Michigan, Ohio, Pennsylvania, New York, Massachusetts, Maryland, Delaware and Connecticut, mostly License States, when Michigan and Indiana are excepted, where Prohibition is about to become operative.

The negro has become enlightened. He no longer listens to the hollow tirades of his parasitic preacher, who is trying to hold him in economic, political and social bondage, just as he did in ante-emancipation times. He is tired of being oppressed and he goes where oppression is less tormenting. He wants to enjoy life just as his white brother is enjoying it.

Prohibition, foisted upon the South by unscrupulous theologians, politicians and exploiters of labor, is depopulating the fairest and most beautiful part of the United States!

The Merchants' Association of New York has suggested to President Wilson that he emphasize the fact that this is not a good time to cancel or postpone conventions. Business should go on as usual. No one should practice niggard economy, as that would clog the wheels of trade. Work and live as if there were no war. That is the best way of aiding the Government in the pursuance of its grave duties. Hold your conventions—don't postpone them!

Shall we send American barley to England and France or shall we keep it here? To send it away would mean that English and French brewers shall brew more beer than they are doing now, while the American people shall have no beer. To be sure, barley would not be eaten by Englishmen and Frenchmen. They eat wheat bread. Let them have all the wheat we can spare, by all means. But don't tell us that barley will go into anything else but beer if you send it to Europe! That lie is too flimsy as not to be exploded as soon as uttered.

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

Is the U. S. Still a Democracy?

Washington, D. C. President Wilson has been presented with the largest petition ever brought to the White House. A committee representing the laboring men of the country delivered a document signed by the official representatives of trades unions comprising more than two million workmen. The purpose of the petition is to protest against any program of food conservation which would necessitate the closing of the breweries of the country or prevent the manufacture and sale of beer. The four men who composed the committee which handed the President the petition were Milton Snelling, Chicago, president of the International Union of Steam and Operating Engineers; Joseph Dehan, New York, legislative agent of the Cigar Maker's International Union of America; Martin McGraw, Chicago, president of the Keg Beer Wagon Drivers, Chauffeurs and Helpers' Union, and Joseph Proebstle, Cincinnati, International Secretary of the United Brewery Workmen of America.

Representative Webb, chairman of the House Committee on the Judiciary, made the announcement on June 2nd that no national prohibition measure will be introduced in the House this session unless the President personally recommends it, and it is not anticipated that this will happen.

Herbert C. Hoover, the head of the food conservation movement, refuses to be stampeded into any prohibition mistakes. He says that prohibition, as prohibition, has nothing to do with the handling of the food problem. If the use of grain were prohibited or curtailed for the manufacture of alcoholic drinks it would be only after a careful study of the problem by a commission, which would consider whether the amount of grain saved would offset business disturbances and the revenue problem. Mr. Hoover, asked about his attitude on the clause in the Lever bill giving the President power to forbid the use of foodstuffs for distilling and brewing, said that the measures proposed in the bill were only for war emergencies, and had nothing to do with the ethics of temperance or non-temperance. "If the problem of giving administrative action to the provisions of the Lever bill came up to me," said Mr. Hoover, "I should first want to determine accurately and beyond all question the facts as to how much saving could be made in the consumption of cereals and the importance of this saving. In order to determine these facts I should, if the legislation passes, and if I have to deal with the matter, recommend to the President the appointment of a committee of national scope and entire independence of view to determine exactly how much could be effected by such action. Such a committee would naturally take evidence under proper conditions and with fairness to all sides. After the finding of this committee it would be necessary for the President to weigh the results to be obtained as against other questions such as the dislocation of revenue and business. What is wanted in all these matters is real facts, and not hysteria."

An excellent speech against the Lever bill was made on June 14th by Senator Reed, of Missouri, who denounced

it as vicious and unconstitutional, maintaining that no such power as it contemplated was ever wielded by a King, a Potentate, a Czar, a Caesar, or a Kaiser. He also declared that it was altogether unnecessary to destroy the brewing industry under the pretense that the barley grown in this country would be needed for food. "We have not come to that predicament yet," he explained, "and the country is not likely to come to it either."

Secretary Daniels has addressed a letter to Speaker Clark urging that the legislation incorporated in the army bill prohibiting the sale of intoxicating beverages to any officer or uniformed soldier be extended to cover the navy. Senator McKellar, of Tennessee, author of the provision in the army bill, said he believed the term "military forces" is a general term and includes the men of the navy as well as the army. The prohibition against selling liquor to men in uniform, coupled with the recent order requiring every army man on duty to wear his uniform, has had the effect of making the army nearly bone-dry. The law, at least in the army and navy clubs, has not been interpreted to apply to the navy, and the result of this is that when the two services foregathered in their clubs it became necessary for all of the buying to be done by the navy men.

The prohibitory tax on foodstuffs used in making beverages was, on June 13th, still further increased by the Senate committee on finance, and then formally written into the war tax bill. The new rate is \$60 per hundred pounds instead of \$20 per bushel. Distillers' representatives here declare this unquestionably would force suspension of the distilling industry. The section as provided also prohibits the importation of distilled beverages. Rates on distilled spirits, malt liquors, wines and soft drinks, raising an aggregate of about \$166,000,000, were finally approved by the committee virtually as agreed upon by the House. The House rates of \$2.20 per gallon on distilled spirits and \$2.75 per barrel on malt liquors were retained for the present, although there is no certainty that these will not be radically changed by the Senate.

A complete report upon the relation of the liquor trade to the food supply has just been compiled for President Wilson after careful investigation by an expert. It will be used in connection with the new food administration's work and in dealing with all the prohibition problems arising during the war. The report is said to hold that the manufacture of whiskey does not substantially affect the food supply, because corn is the chief ingredient, and the 32,000,000 bushels of corn converted annually into whiskey is not an appreciable part of the country's yearly 3,000,000,000 bushel corn crop. Any interference with whiskey manufacture by the administration, therefore, it is asserted, will be to secure an adequate supply of alcohol for commercial and war purposes, not as a food conservation measure.

The sixteen cantonments for the national army will be centers of "dry" deserts which will border the camps for two miles on all sides. When the regulations concerning the sale of liquor near these camps are issued it is understood that the President will require that no liquor be sold

within two miles of a cantonment. The army act contained only one mandatory prohibition with respect to liquor—that none should be sold to a soldier in uniform. It gave discretionary power to the President, however, to impose such regulations as he thought desirable. It is not the purpose of the war department to issue the regulations until the cantonments are ready for occupancy. The general outlines of the regulations have been drawn, however, and it is stated on the authority of Major Oury of the war department that the first effect of the orders will be to wipe out the sale of alcoholic drinks within two miles of the national army camps.

Grain alcohol advertisements and solicitations for orders for such alcohol will be barred from the mails when addressed to dry territory, according to a ruling just made by the postoffice department. The department holds that grain alcohol is intoxicating liquor under the act. Advertisements of denatured alcohol will not be barred, as the liquor is held not to come under the head of intoxicants.

On Saturday, June 23rd, late at night, the House of Representatives, brutally ignoring the welfare of millions of Americans, passed the Lever Food Control Bill with an amendment providing that no grain shall be used in the manufacture of spirits, wine or beer. The vote stood 365 against 5, the only opponents being McLemore, Splayden and Young, of Texas; Meeker, of Missouri, and Ward, of New York.

At this writing the Senate is discussing a proposition of its Committee on Agriculture to permit only wine to be made as long as the war lasts. Should this pass, the President has still his veto power. Will he make use of it? If he is a safe and sane Democrat—he will!

Senator Lodge firmly opposes the outrage.

President Pabst, of the United States Brewers' Association, and many other representatives of the organized trade are present in Washington, doing their level best to protect us from disaster. To arouse the members of the trade throughout the country, President Pabst sent out the following "wire":

"Will you immediately urge your civic and commercial bodies, financial institutions and prominent citizens to wire the Senators of your State protesting against the confiscation of brewery property as proposed by the prohibition amendment inserted in the bill which passed the House on Saturday."

The appeal was at once acted upon, as thousands of telegrams to Senators poured in a few hours after it had left President Pabst's hands.

Denver, Colo. The Horton Prohibition enforcement bill has become operative in Colorado. It is a makeshift and will not make the State "bone-dry," as the Prohibitionists themselves declare, who vainly asked Governor Gunter to veto the flimsy measure.

Hartford, Conn. The House of the Connecticut Legislature, by a vote of 126 to 110, passed the bill authorizing the Governor to close the saloons in the State during the war, and changing legal hours for saloons to from 8 A. M. to 11 P. M., this to take effect November 1st, 1917; the bill also provides for compensation to saloonmen and lessees. The Senate postponed action on the bill indefinitely, after organized labor and many representatives of business and trade had passed resolutions opposing the bill.

Lansing, Mich. Governor Sleeper has signed the Damon "bone-dry" liquor bill, which prohibits the possession of more than eight ounces of liquor at one time after May 1st, 1918. Even the eight ounces must be shown to have been obtained for mechanical or medicinal purposes.

Harrisburg, Pa. The Mitchell bill to make Pennsylvania

"dry" until the end of the war and the bill making it a misdemeanor to procure or attempt to procure intoxicants have both been defeated in the House of the Pennsylvania Legislature by a vote of 104 to 60.

Representative Powell, of Luzerne County, has introduced a bill providing that judges shall be required to issue licenses on the following basis: One license to every 750 inhabitants in second-class cities. One license to every 500 inhabitants in cities of third-class boroughs and townships.

Madison, Wis. Wisconsin will not be pestered with Prohibition legislation for some time; at least not this year, as the Senate of the State Legislature, by a vote of 19 to 12, has indefinitely postponed the Prohibition referendum bill after it had been changed to suit Governor Philip.

In the Assembly the bill which would permit breweries in territory gone "dry" to sell liquor in "wet" territory was non-concurred in. Kurtenacker, Grell and C. Hansen argued for the bill and maintained that it was a measure of fairness. It would permit breweries to sell their product where it was permitted. Hansen contended that it would enable Madison breweries to continue business in spite of the fact that Madison went "dry" at the last election. Evjue charged that there was a "big joker" in the measure. "You will observe," he said, "that the measure lets down the bars for the liquor people are now beginning to put in an appearance. This is what happens at the end of every session. These bills appear when it is hard to keep the farmer members here. I do not believe that the people of the State of Wisconsin are in a move to let down the bars at this time in view of the record of the present legislature."

There is a bill pending which provides that "if by reason of any law passed by Congress or any regulation or order made by lawful authority the manufacture or sale of spirituous, vinous or malt liquors is suspended or prohibited, any licensee holding a license for the manufacture or sale of any such liquor shall, upon the surrender of any such license, be entitled to a refund of such proportionate share of the amount paid for such license as the remainder of the year for which granted, from the time of such surrender, bears to the whole year."

The Assembly has passed a bill providing for a three-mile "dry" zone around any military reservation or training camp used for the purpose of training Wisconsin National Guards, soldiers, sailors or marines of the United States. The measure specifically mentions the military reservation at Camp Douglas and the United States military reservation near Sparta.

Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc., Action by Civic Bodies and Others For or Against Prohibition.

Arkansas. Sheriff W. G. Hutton recently reviewed a parade at Little Rock to show some "wet" goods he and his deputies had confiscated in this so-called "dry" State. It consisted of ten wagons, each laden with barrels of wine which had been concealed in a citizen's cellar. After the parade was over, the wine was stored in a vault under the jail.

In Janesboro a large "moonshine" still has been seized by U. S. Revenue officers.

California. Saloonmen in many California cities are now closing on Sundays, and they otherwise strictly observe the law.

In Napa, where saloons were reduced from 32 to 24, one saloonkeeper has been compensated with \$500 by the City Council.

Stockton has raised saloon licenses from \$400 to \$800 per year.

Anti-saloon campaigns are going on at Colton and Santa

Monica. Imperial has been made "dry" by a majority of 26 votes.

Colorado. The Oak Creek district is full of bootleggers who sell their outrageous "whiskey" at \$7.00 per quart.

Since the new prohibition enforcement law went into effect in Colorado the greater part of those applying at the county recorder's office in Denver for permits to ship in liquor have been women, because the person who obtains the permit must receipt for the liquor, and a man probably would lose a day's work by having to care for his liquor shipments. One woman recently applied for a permit for sacramental purposes. She said she was the sole member in Denver of a certain religious sect and the liquor was to be used at religious services of her faith. Her request was refused.

Frank Nicoletti, in whose home in Denver three officers confiscated two gallons of whiskey which he had bought for his personal use, is suing the city authorities for \$10,000 damages, alleging trespass and illegal seizure.

Delaware. Citizens of Georgetown are testing the constitutionality of the liquor anti-shipping law which limits the amount of whiskey that may be carried into "dry" territory to one quart per person.

Georgia. Atlanta, now "bone-dry," needs more money to carry on its municipal business. Licenses for almost every trade in the town have been raised, and to prevent negroes from going North, the licenses of labor agents have been increased from \$300 per year to \$300 per day!

Recorder Johnson, of Atlanta, is opposed to the police making liquor raids in citizens' homes. He says there is no law to warrant such raids, as "a man's home is his castle, and it cannot be ruthlessly invaded unless the police have good reasons to believe the law is being violated. And then a search must be made in accordance with law."

Illinois. The "dry" towns in Southern Illinois are losing in population and wealth, while the "wet" ones are booming, particularly East St. Louis, where not only people from "dry" towns like Anna, Ashley, Carbondale, Carmi, Metropolis and Sparta, but also many negroes from the South are rapidly finding employment at advancing wages.

In some Illinois cities beer is now being sold at 5 cents per pound.

In Sangamon County Sheriff Wheeler has recently raided a number of "blind pigs," finding enough whiskey to start a government bonded warehouse.

In Waukegan a man has been fined \$75 for soft drinks containing a small percentage of alcohol.

In Urbana a bootlegger named Albert Tolliver has been fined \$200.

Robert Bethmann, general manager of the East St. Louis Heim branch of the Independent Breweries Co., St. Louis, has resigned from the St. Clair Country Club because it stopped serving beer, etc., in its dining room, and he is suing the club for the return of his \$100 initiation fee.

Indiana. The County Board of Indianapolis has reduced the assessments of the breweries in its jurisdiction, the owners having declared that, as Prohibition is about to drive them out of business, it would amount to robbery if they were taxed as high as originally proposed.

Charged with violation of the internal revenue laws a man who resided about fourteen miles from La Follette and was said by citizens of the community to be a "preacher," according to United States Internal Revenue Deputy Collector F. D. Higgins, was recently tried before United States Commissioner Jesse L. Rogers and bound over to the next term of the Federal Court. A bushel of malt and a half gallon of whiskey were found at the home of the alleged "preacher."

Iowa. The pious preachers at whose behest a bunch of drunken peanut politicians of Iowa have made this unfortunate State "bone-dry" are now in high glee, as the Iowa "blue laws" are also rigidly being enforced, particularly the Sunday closing law under which thousands of businessmen, private citizens and wage workers have been arrested and fined, among them editors, reporters and compositors, whose profession requires them to work on Sundays. Barbershop, candy stores, cigar stores, "movies," everything is closed on Sundays, and Municipal Judge Joe Meyer, of Des Moines, has even fined 62 Jewish grocers who close on Saturdays, but keep open on Sundays.

Kansas. That the Kansas prohibition law does not prohibit was recently demonstrated in the Wichita District Court when a large number of alleged bootleggers were arraigned, but not one of them could be convicted, as their trial was a howling farce, witnesses and prosecutors being apparently determined not to permit any evidence to come before the court.

Whiskey sells in Kansas at from \$5 to \$7 a quart. You can get it anywhere and everywhere, but you must have a throat that cannot be scorched by nitric acid to drink the stuff without injury to your digestive system.

Kentucky. The Christian Moerlein Brewing Co., Cincinnati, Ohio, won its suit in the Kentucky Court of Appeals against the city of Dayton. The company was fined in the Police Court of Dayton, Ky., on the charge of selling beer in that city without license, and the company defended its conduct on the ground that the respective ordinance was void because it was in contravention of the commerce clause of the constitution of the United States. The ordinance provided that no person shall deal or sell, barter, exchange, give or deliver to another any spirituous, vinous or malt liquors in Dayton without first having obtained a license so to do. The license required was \$300. The company held a lease on the building at Sixth and Berry streets, in Dayton, and subleased the building to Frank Bauman. The Court held that under the circumstances of this case the sale was made in Cincinnati and that the city could not collect a license from the company.

Maine. From South Parsonfield, W. E. Bickford, formerly Superintendent of Construction for the U. S. Steel Corporation, writes: "When I first came to Portland, I saw more drunks on one afternoon than I ever saw in Ohio in the 26 years I lived there. They make whiskey here that is called 'Barbed Wire,' and any person drinking it is made crazy drunk. There are over 300 illicit distilleries in Cumberland county, and the Sheriff's office is as good a paying job as the President's of the United States. No one goes to church here. They stay at home to make this poisonous whiskey and sell it. Every county near here has decreased in population since 1865. Our own town went down from 3,400 to 1,920. Our States Prison in 1870 had 108 inmates, to-day there are 251, and still growing; the insane asylum is crowded to overflowing and every jail and workhouse is in the same condition. It seems that we have seen nothing but rum and crime ever since I came here."

Maryland. Cardinal Gibbons, when interviewed upon the stupid and barbarous action of the House of Representatives, tacking nation-wide Prohibition onto the Food Control Bill, said, June 25th:

"I do not believe in national prohibition of light wines and beer, and am of the opinion that such a law could not be enforced.

"I am opposed to any State-wide or Nation-wide prohibition measure. A law of this kind interferes with the personal liberty and rights of the people and creates hypocrisy on the part of the public.

"The history of the world down to the present time demonstrates the fact that the people have and always will indulge in intoxicants, irrespective of any restraining power that it is attempted to saddle upon them."

Minnesota. An order, which is to prevent dancing and cabaret performance in places where liquor is sold, has been issued by the State Public Safety Commission. It was drawn up to apply to the three largest cities of the State, Minneapolis, St. Paul and Duluth. It also forces the closing of all saloons between 10 o'clock at night and 8 in the morning.

Missouri. Through the war tax measure between 500 and 700 saloons will probably be closed in St. Louis, unless a glass of beer be sold for 10 cents and a drink of whiskey for 25 cents.

Nebraska. Governor Neville has directed a test suit to be brought in Douglas county to determine just what kinds of drinks can be made and sold under the prohibition law. The governor, following a conference with Attorney General Reed, instructed Food Commissioner Murschell to secure samples of certain beverages now being produced in former brewery plants in Omaha, which will be analyzed by the State chemist. The chemist will be expected to report back how much alcohol they contain and whether or not they are malt liquors. When the tests are completed, the State expects to file complaints against the manufacturers and put the entire question up to the courts for a judicial interpretation of the exact meaning of the prohibition law, with regard to soft drinks.

During the first thirty days after Nebraska had been made a Prohibition State, bootleggers have appeared almost everywhere in this State. The class of "booze" which is now coming into Nebraska is not unlike that which has been the downfall of other prohibition States. It would make any man beat up his mother or commit a more serious crime. The usual bootlegging price of \$1.50 per pint holds good at present, with demand good and market steady. Many substitutes for intoxicating liquors in its various forms are making their appearance in the shape of specially prepared patent medicines. They contain from 20 to 95 per cent. alcohol, mixed with harmless ingredients. The most natural substitute for whiskey seems to be Jamaica ginger, composed of 92 per cent. alcohol. A small mixture of it with the various imitations of beer will produce the usual lugubrious ecstasy which comes from over indulgence in beer and booze.

New Hampshire. In the First New Hampshire Congressional District, Sherman E. Burroughs, a Republican of Manchester, has been elected over Cyrus Adams Sullivan, Democrat, who represented the District for the last 22 years. Burroughs' majority was 1,240 votes in a total of less than 34,000. He is unequivocally committed to "national prohibition as a war measure."

New Jersey. The educational moving picture campaign being conducted by the Associate Mercantile Association of New Jersey to show the truth as to the effects of Prohibition is meeting with great success, and thousands who have viewed the pictures acknowledge that their opinion on the so-called "liquor problem" have undergone a decided change. These views, taken from life in the "dry" sections of New Jersey and other States, have satisfied them that prohibitory laws, instead of preventing the use of alcoholic beverages, actually result in increased intoxication, and often in the use of the deadly substitutes—drugs.

Judge Lawrence in the Monmouth County Court has said that wholesale dealers are resorting to subterfuges in making deliveries by so-called express, in some instances

delivering their wares as far as four or five miles and charging five cents for the delivery. "It is perfectly obvious," he said, "that no expressman could afford to make deliveries that distance at that price, and he wanted it understood that he would have no controversy with dealers who, if they persist in resorting to subterfuges to circumvent the law and sell outside the municipality for which they have license, they will place their license in jeopardy."

In Asbury Park Mrs. Van Note, 1206 Washington street, was recently arrested on complaint of her husband for having bought some whiskey. The police released her after she had told them the drug store where she had obtained the whiskey. Then the druggist was arrested.

Many retailer's organizations in New Jersey have agreed not to sell to intoxicated persons, and to send them home at the organization's expense.

Free lunch has been abolished by agreement in Trenton saloons.

There is some trouble in Hudson County where saloonmen have been selling to soldiers and U. S. sailors. Many arrests have been made, particularly in Hoboken.

At Freehold a baker has been sent to prison for three months and fined \$500 for having sold intoxicants over his counter.

In Hamilton and Ewing Townships saloon license fees have been raised from \$150 to \$300, and from \$100 to \$150 respectively.

Judge Davis in the Gloucester County Court has denied the petition of the Anti-Saloon League against the granting of any licenses at this term of court. He allowed renewals in every case except one in which a remonstrance had been filed.

The fifty-odd cases of Sunday selling pending in the Bergen County Court have been disposed of by Judge Seufert. Five hotel keepers who had stood trial and were convicted, were fined \$500 each; one who had changed his plea before his trial was conducted was fined \$250, and the remainder pleaded guilty and their sentences were suspended.

Sam. Green, who pleaded guilty to Sunday selling and keeping a disorderly house, was sentenced by Judge Daly in the Middlesex County Court to two months in jail and a fine of \$500.

New Mexico. The Supreme Court of New Mexico has decided that municipalities have a right to raise saloon licenses. The decision was rendered in the case of the town of Gallup, where the license fee had been advanced from \$300 to \$1,500 per year.

New York. The members of the Buffalo Brewers' Exchange agreed to cancel about 25 per cent. each of their saloon interests. By this action the drinking places in Buffalo will be reduced from 1,650 to about 1,200 on October 1st, when licenses expire. The matter is simply a question of reducing expenses, owing to local option and increased taxation.

At Rochester a new Retail Liquor Dealers' Association has been formed, the members of which pledged themselves to sell beer and light wines only.

Supreme Court Justice Giegerich, New York City, has rendered a decision prohibiting the sale of liquor in the Century Theatre on the ground that the theatre building is not the required distance from the Ethical Culture School at the northwest corner of Sixty-third Street and Central Park West.

The United Liquor Dealers' Association of Kings County has put its ban upon free lunch.

Italian newspapers in New York City are solidly opposed

sonal considerations we believe that Latin civilization is fundamentally democratic and superior, in that respect, to all others past and present. Latin civilization has had for its basis that spirit of individualism which, with all its rebellious faults, withstood successfully all servility and domination; never let the Huns establish themselves permanently in their midst and gave us the immortal French revolution. Isn't the world up in arms to-day to defend the old Latin civilization embodied in the patriotic undaunted spirit of Belgium, France and Italy, against the autocratic rule of the Central Empires? Prohibition is a similar morbid form of organized autocracy against the sacred natural rights of mankind to govern its own habits of living according to races, climatic conditions and education. We believe that an ancient recognized custom, like the drinking of alcoholic beverages, cannot and should not be treated like a child's whim. Prohibition wherever tried, simply represented the enactment of harsh oppressive measures which never brought permanent good results but rather reacted very grievously sooner or later. Our senses revolt at the thought of being ruled by the few absolutely abstemious, against the will or habit of the immense majority of the people."

North Carolina. Attorney General Thomas H. Peoples has ruled that residents of North Carolina who desire to avail themselves of the new law whereby permits are granted for the receipt of a quart of liquor a month must apply in person for such permits, as they will not be issued on mail requisition. The law becomes operative to-day, and "moonshine" whiskey will go up to \$10 per quart.

Ohio. The members of the Cleveland Brewers' Exchange, supported by allied industries, are determined, if necessary, to test the power of Congress to prohibit the use of cereals in the manufacture of beer during the war. "Our advice is that the measure is unconstitutional and its provisions are obviously and manifestly unfair to the brewing industry," Carl E. Moore, secretary of the Brewers Exchange, has declared, and President Albert Panek has asserted that while there is sufficient whiskey in bond and on hand to last the country for four or five years, and perhaps a three-year stock of wines, the brewing of beer is virtually a day-to-day proposition. "One great flaw in the amendment," Mr. Panek said, "as we see it, is that while the barley and grain that has been bought for brewing purposes cannot be used in the United States for this purpose, there is nothing to prevent the purchasers sending it to Europe or South America to be converted into beer."

When the Ohio Anti-Saloon League was recently requested by patriotic citizens not to spend its large campaign fund this year for political purposes, but donate part of it to the Red Cross, the request was flatly refused. In consequence of this unpatriotic action on the part of the Antis, the Ohio Home Rule Association has issued an appeal to the people of Ohio not to permit the Anti-Saloon League to force a division of the people of this State by the third submission of a prohibition amendment, with all the bitterness that will follow in the campaign if this proposition is to be voted on. They appeal to the patriotism of the people to thwart the selfish and destructive designs of that anarchistic, reckless prohibition clique, styling themselves the Anti-Saloon League.

Oklahoma. In South Coffeetown, Federal officers recently made a raid and seized liquors valued at about \$8,600. Not a single one of the bootleggers was taken into custody. Several places, including residences, barns, a hotel and a drug store, were the subjects of the raid, and the announcement was made that 4,178 half pints, 581 pints, 822 quarts and three five-gallon kegs of whiskey, 47 gallons of alcohol

and 1,935 pints and 321 quarts of beer were confiscated and destroyed.

Pennsylvania. Brewers throughout Pennsylvania are withholding financial aid from the retail trade and the result will be a considerable reduction in the number of saloons in this State. In Philadelphia alone nearly 400 licenses have lapsed consequent upon prevailing conditions. The trade of the breweries is not affected by the reduction.

At a recent session of the Philadelphia Methodist Episcopal conference, Dr. Clarence True Wilson, head of the misnamed National Board of Temperance of the Methodist Church, denounced D. Clarence Gibbony, president of the Law and Order Society, a sincere prohibitionist, for advocating compensation for the men put out of business by prohibition, while at the Bethlehem Diocesan convention the Reverend H. E. Durell, pastor of the Episcopal Church of Mauch Chunk, declared that he was opposed to any plan of rational prohibition that called for the confiscation of breweries unless the brewers and liquor men were compensated for their losses. He said such confiscation would only lead to confiscation of property along other lines and that he feared evil results would be caused the country over.

South Dakota. Sioux Falls and other South Dakota papers agree that the Prohibition law of this reactionary and poorly informed commonwealth is a dead letter and that the State is "wet," unholily and preposterously "wet." A South Dakota druggist can sell alcohol for medicinal use only upon prescription by a physician. He can sell all the alcohol he pleases for veterinary use without prescription by a veterinarian. "Any owner of an animal," says the Sioux Falls "Press," "may, without prescription, buy alcohol in as large quantities as the druggist will sell for 'scientific purposes' by giving the druggist the inference that it is for a sick animal."

Tennessee. This State has now had Prohibition for five years and in everyone of them the State treasury has piled up a deficit of about \$500,000, and there is no prospect of ever reducing the rapidly increasing debt. The Anti-Saloon League still collects money for its agitators, which goes to show that even in Prohibition States the agitating business is a paying proposition.

Virginia. Coffee-pot stills may now be found in thousands of households of Virginia, women and girls operating them for the benefit of the men in the family.

In Norfolk, Richmond and other cities the express offices are choked with packages containing liquor which men have ordered for "friends" whose names they failed to register and, consequently, the packages cannot be delivered.

Wisconsin. The Wisconsin Brewers' Association is making a determined effort to eliminate the objectionable features of the retail trade, and to place the saloon business on a more substantial basis. In a circular recently issued the Association says to the licensing boards: "We recommend that the character of all persons applying for a retail license be carefully scrutinized, and we urge that no license be issued to anyone whose moral character is bad; to no one who himself drinks to excess, or sells or permits the sale to anyone bordering on intoxication; to no one who permits minors and loafers to congregate and hang about his place; to no one who permits females to frequent his place for the purpose of meeting the opposite sex, or who permits females of questionable character access to his place at all; to no one who permits rowdy conduct in his place; to no one who does not keep his place sanitary; to no one who so conducts his place as to disturb his neighbors and constitute a nuisance. If you will carefully observe these suggestions in acting upon applications for license, it will be of great

nuisance. If you will carefully observe these suggestions in acting upon applications for license, it will be of great aid and assistance in cleaning up and elevating the character of the saloon and its keeper. We assure you of our cordial cooperation."

At Superior, where saloons have been reestablished, Mayor Konkel has appointed a special police force, whose sole duty will pertain to the enforcement of the new ordinance governing the regulation of the liquor traffic.

Canada. Although this Dominion, excepting Quebec and Yukon Territory, is under Prohibition, it is not what in the United States is called "dry." The Canadian prohibition laws do not interfere with the sale of a high grade of beer, and such beer is to-day being sold throughout the Dominion, not only without a tax on the manufacturer thereof, but also without the payment of special licenses or excise fees by the retailers. The brewers pay a special excise tax of three cents per pound on all malt, used in brewing, without regard to the character of the product. These laws are aimed solely at the sale of intoxicants and not at the manufacture or importation thereof.

The count of soldiers' deferred votes has shown that in Vancouver, B. C., Prohibition has been defeated by 822 majority.

Mexico. Saloons and places where alcoholic beverages are dispensed in the City of Vera Cruz are required, by order of the municipal authorities of that place, to close at 6 P. M.

Uruguay. In Uruguay an Anti-Liquor Women's League has been started, which demands, as an entering wedge to Prohibition, that saloons and wine shops be closed on Sundays and holidays.

Australia. The Australian "Brewers' Journal" says: "Teetotal fanatics are not satisfied with restrictions on the sale of liquor; they want the State Governments to follow the example of Great Britain by limiting liquor production. If the States are at all coy or reluctant to obey this direction, then they would stir up the Commonwealth Government to use the ubiquitous powers of the War Precautions Act to effect by drastic regulation of breweries that reduction of liquor consumption which the law has failed to achieve by means of curtailed hours. The subject is constantly raised at temperance meetings by mischievous meddlers who do not know what they are talking about, and who appreciate neither the necessities of the situation nor the economic considerations involved. But the whole teetotal movement is run by cranks and doctrinaires, and the appeal to lessen the output of beer to enable more grain to be despatched for England and her Allies is a piece of hypocritical humbug. It is an attempt to destroy the liquor trade, not with the weapons of truth and reason, but to stab it with the poisoned blade of trickery and deceit."

"PROHIBITION OF LIQUOR ONLY A STARTER. The 129th general assembly of the Presbyterian Church in the United States of America, assembled in Dallas, Texas, has gone on record prohibiting moving-pictures, theatres, dancing, card playing, liquor, tobacco every day in the week; and newspapers, street cars, traveling on railroad trains, the opening of drug stores, cigar stores, ice cream parlors, fruit stands, baseball, or any other enjoyment on Sunday. They also disapprove of the use of public or school buildings for community forums or any other kind of meetings on Sunday. This should convince 'the most skeptical what the fanatic reformer really is trying to do.' When any one votes for prohibition they are encouraging all of the above. THINK IT OVER."—"Current Thought.")

Book Review.

The Australian Brewing Students Manual, by Grove Johnson, F.C.S. Published by the Proprietors of the Australian Brewers Journal. Sidney, Australia, 1917.

This new publication has been written by the widely known brewing expert, Mr. Grove Johnson, with the view to provide the Australian brewer with a text book containing all the well-known and proven methods of chemical analyses and biological examination, which are so essential for the successful operation of a modern brewery and for the guidance of a competent master-brewer and brewery manager. The book consists of 213 pages, containing all the essential chapters of the volume, with a table of contents of five pages in the commencement of the book giving a brief synopsis of the 22 chapters; but an alphabetical index is sorely missing. The book is written in popular style and easily grasped by the man of elementary education. It is written in an entertaining manner and presents, in many cases, the personal investigations, experiences, and views of the writer.

The first five chapters are devoted to a general explanation of the fundamental principles governing the Malting, Brewing, and Fermentation processes together with some methods of calculation. A short treatise is also given on Non-Intoxicating Beer.

The next three chapters deal with the practice of fermentation, the various systems operated in practice, as well as the pure culture method. The eighth chapter in particular deals with the nature of infectious organisms, with sources of infection, and methods of treatment in practice. This is followed by a short and ninth chapter describing the use of the microscope and calling attention to the advantage and the necessity that the practical brewer should have a thorough and competent training in the microscopy of fermentation organisms.

The next six chapters are chiefly devoted to a presentation of the methods of analyses and valuation of various materials, such as Sugar, Hops, Malt, and Waters, closing with a chapter on Specific Gravity, Alcoholometry, and the examination of Ale and Stout with a few alcohol and gravity tables. In the chapter on Australian Waters, the author also discusses the treatment of water with certain mineral salts for specific purposes.

The next and sixteenth chapter deals in a clean and comprehensive manner with the subject of Acidimetry, winding up with the method of estimating the acidity in beers, ales and stouts.

In the last four chapters, the author takes up some subjects which are not generally found in text books of this kind, such as the principles and practice of the manufacture of Beer Vinegar, the Pure Food Laws of Australia, and some analytical methods prescribed by the Australian Pure Food Law.

The book is of convenient size, printed on heavy paper, and in clear type. The author's name is so widely known among the brewing fraternity that this publication should not be missed in the reference library of every laboratory devoted to brewing and fermentation.

E. S.

"CONTRARY TO OUR INSTITUTIONS. To enforce in the various States an unpopular sumptuary law by Federal authority and Federal officials would be so vicious in practice, so contrary to the spirit of American institutions, that none but the most fanatical Prohibitionist could indorse it. But even such a fanatic should be given pause by a little reflection on the sinister precedent that would be established by such an enforcement of such a law."—(Cardinal Gibbons.)

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building
Randolph and 5th Avenue.

CHICAGO, June 27th, 1917.

The output of beer by the Chicago breweries for May amounted to 398,720 barrels, as compared with 479,189 barrels in May, 1916, 407,392 barrels in May, 1915, and 526,302 barrels in May, 1914.

More disgrace has been heaped upon this fair City by its unspeakable Mayor. Thompson must be insane. The man's rascality could not be explained by the natural laws of mere cussedness. To his refusal to entertain the French and British missions to the United States Government he recently added a refusal to assist in making the Liberty Loan a success in this City. And when a general shout of indignation and fury arose from the people, he offended them by a low political trick to retrieve his lost power, trying to make a personal machine of the city's educational system. He appointed a number of members to the Board of Education, no more fit to serve than persons who never learned how to read or write. That action of Thompson's broke the camel's back, like the proverbial straw, and the City Council met to test the Mayor's power of appointment. But that was not all: Impeachment proceedings were also instituted against Thompson.

It goes without saying that the Board of Education has refused to recognize Thompson's appointees.

The Mayor's finish is at hand. He can never expect to rise again in Chicago politics. The people have rejected him. If they had failed to do so they would have been guilty of descending to his own low level. Thus the fate of the traitor to the trade has been sealed. Chicago has washed the Thompson stain from its record of being a fair, a decent, an intelligent and a progressive American city, and Governor Lowden, in accord with public sentiment, has been chosen by the United States War Department to be substituted for Thompson in his capacity of acting in registration and exemption matters.

About 200 saloons have recently closed their doors in this city, owing to the stringency of excise conditions. Some saloonists also met with disaster for failing to obey the war-law prohibiting the sale of intoxicants to soldiers and sailors in uniform.

The City Council is considering a proposal to compensate members of the trade who may suffer loss through war conditions. The Council also passed an ordinance prohibiting free lunches in saloons.

The press of Chicago has been valiantly fighting against Congress imposing nation-wide prohibition as a war measure, considering it to be unwise, unnecessary and apt to seriously injure the industrial capacity of the entire country. Most of the local papers, though, have expressed their confidence in the sagacity and fairness of President Wilson to avert the disaster which would be precipitated upon the American people by wily and unscrupulous politicians who only look out for themselves and "let the people be damned."

The Manufacturers and Dealers Association of America

has circulated a brilliant speech by C. A. Windle in which he said, among other things: "As you study the mysterious workings of 'Prohibition' in Maine, Kansas, Georgia and other virtuous states, you find that you must readjust your prohibition ideas as you go along. You are surprised when you learn that in the nation of France, with a population of 39,601,509, where there are no prohibitionists and no prohibition, there is less drunkenness than in the state of Maine with a population of 742,371, which is a pure prohibition state. You are surprised to learn that in the whole of Germany with a population of 64,925,993, where the Government itself supplies beer to the soldiers, and where there is no prohibition, there is less drunkenness than there is in the state of Kansas with a population of 1,690,949 and a pure prohibition government. In Germany, where there is no prohibition, the Government takes the tax off beer supplied to men in hospitals and in the trenches, and compels breweries to supply 250 carloads of beer to the army each week—and in Germany we see no drink problem. How does it happen that Germany would laugh at the idea of any drink problem in the army, and that France so marvelously managed has no drink problem, except that of making sure that the soldiers have enough? And France at the same time forbids the exportation of wines from France, in order to make sure that the soldiers shall have enough."

Mills, the owner of the Mills Novelty Co., Chicago, who has "done time" for violating federal laws against gambling, is now an ardent Prohibitionist and liberal contributor to the funds of the Anti-Saloon League.

The annual meetings of the Hotel Men's Mutual Benevolent Association, the American Hotel Protective Association, and the Congress of American Hotel Associations, held here from June 12th to June 14th, were grandly successful. Delegates from all parts of the country attended and they did splendid work in the great campaign against Prohibition.

The plant of the Mullen Brewing Co., 40th and Wallace streets, has been purchased by Edward Landsberg, president of the United States Brewing Co., the deal being consequent upon a \$22,000 mortgage and the Mullen Company continuing in possession temporarily.

"NO FREE NATION has ever submitted to a law like this which puts the whole power of the customs and excise of the United States against your taking a drink unless you make it yourself or import it from abroad, as a rich man would do. In this it is a rich man's bill."—(Wayne Parker, M.C., New Jersey.)

"THE DRY CRANKS forget that the country is passing through a time of peril. They forget that we have to face issues more urgent and more difficult than any we have had to meet since the Civil War. Their own little 'dry' issue is not a thing that must be settled on the instant. But the 'drys' would keep out of the Senate every valuable diplomat and authority on international affairs, desperately needed now, just because most of these—all of them perhaps—won't sign up for nation-wide 'dry' legislation."—(The "Booster.")

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, June 20th, 1917.

San Francisco will raise \$1,000,000 this week for the Red Cross. Leading business men of the city are putting up an aggressive campaign that is bringing in the dollars faster than they can be counted. Among the first to donate was the Brewers' Protective Association of San Francisco. The association donated \$2,500.

California did her share when it came to subscribing for the Liberty Bonds and the brewers of the State did more than their share, taking over \$52,000 worth of the bonds. The Brewers' Protective Association of San Francisco proved its patriotism, if proof was needed, by taking \$100,000.

So that the retailer may know the numerous laws, Federal, State and Municipal, that govern the sale of liquor the California Wet Federation has issued a pamphlet essence of these laws as well as the laws relative to labeling and substitution as set forth by the United States Pure Food Department.

This month the mail order houses are winding up their affairs getting ready to close their doors as the bone-dry laws in Oregon and Washington, which are now in effect, have put them out of business. How extensive their business was can be judged by the fact that one house alone paid to the express companies six thousand a week for carrying parcels to Washington.

The little brewery at Petaluma was bought this month by the Grace Brothers of San Jose. The brewery only made steam beer and has been closed by the new owners who will take care of the trade at their brewery in San Jose.

The grocery stores which handle great quantities of bottled beer and wines have been hard hit by a new ordinance which went into effect last week. They are now compelled to close at seven o'clock week nights and remain closed Sundays. While the new ordinance works a hardship on the grocer, it benefits the saloonkeeper who pays a five hundred dollar a year license to sell liquor while the grocer pays almost nothing. The saloons keep open Sunday in San Francisco.

Here they are putting the registration cards to more than one use. The saloonman here has long been the victim of the husky youth looking twenty-one and more who went to the bar and bought a drink and then went out and complained that he had been sold liquor. Now when the saloonman has the slightest doubt as to a prospective customer's age he merely asks to see his registration card and if he hasn't one—it settles the argument.

At this writing it seems certain that the much discussed Rominger Bill will be submitted to a vote of the people in November, 1918. This bill, fathered by the Hearst papers, was defeated at the Legislature after a spectacular campaign. But the Hearst papers and the Grape Growers' Protective Association have not been willing to accept the defeat in the Legislature as final. The Grape Growers held a meeting in San Francisco and appointed a committee to draft some sort of an initiative to go on the ballot in 1918 that would save the State from prohibition. As many of the grape men believe that only drastic measures will save the State, they decided to submit the Rominger Bill to the voters. The brewers are not in sympathy with the grape growers and point out the fact that the grape growers are in many cases not wine men in any sense of the word but growers of raisin and table grapes. And in turn the Grape Growers' Protective Association says they will save the brewers of the State in spite of themselves. The brewers

worked with the wholesalers in the defeat of the Rominger Bill.

The Rominger Bill is a long unwieldy regulatory measure. It provides for the sale only of such beverages as contain less than fourteen per cent. of alcohol, closes the saloons and puts restrictive conditions on the drug stores and generally gives the prohibitionists every thing they want almost except prohibition itself. The Grape Growers' Protective Association will call a mass meeting July twenty-first to ratify the action of the committee. They have not announced where they will hold the meeting but have stated that it will not be in San Francisco but will be somewhere in the viticultural districts away from San Francisco where the delegates will not be subjected to "intimidation" by the other wet organizations.

The Prohibitionists will hold their convention in September in Fresno when they will decide on the wording of the amendments to be placed on the ballot in 1918.

The fate of Imperial still hangs in the balance as the case has been postponed until after the first of July. The saloons, according to the law that is being contested, were to have been closed July first but will be allowed to remain open until the case has been decided. Which means at least that Imperial will have a "wet" Fourth.

Modesto will have an election on the "wet" and "dry" question some time as soon as the "drys" have a petition before the City Council asking for an election. They tried to have the election set on the same date that a special election had been called to vote on bonds for city improvements. If the election had been called on that day it would not have allowed the Wets any time at all for registration or preparation but they spoiled the plans of the Drys by going to Council and telling them if they allowed the Drys to put over a deal like that they would defeat the bonds much as they disliked too. The City Council saw the point and decided not to call the election at this time. The Drys have a new trick in this State which is to circulate a petition secretly, get the required signatures, all the time registering their people and have the election set for four weeks from the time the petition is presented which automatically closed the registration books and gives the Drys a big unfair advantage.

Thomas Alton, President of the State Brewers' Association, was elected president of the Brewers' Protective Association, of San Francisco, this month.

This is beer weather in San Francisco and business is fine.

TEMPERANCE GAINING IN SPITE OF FANATICS AND LIARS. "Mankind is and for centuries has been becoming more temperate. This has been, not on account of, but in spite of, the law. The alcoholic appetite is not progressing. One of the favorite statements by which the anti-drink fanatics try to scare the people into abstaining from alcoholic drink is that it has an inherent tendency to create a growing appetite, and this leads to excess. Really, nothing is further from the truth. The charge is made on the theory that alcohol is exclusively a drug, and, like other drugs, tends to create a habit, with the habit goes increased tolerance, calling for ever-increasing doses and finally wrecking body and mind. But alcohol has, in small quantities, and in proper dilutions and mixtures, only a slight drug action which it shares with many other foods, condiments and relishes, and the progressive appetite rarely, if ever, shows itself except in defective constitutions, and there only as a symptom, not a cause."—(Rochester, N. Y., "Labor Herald.")

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., June 11th, 1917.

The output of the breweries in the United Kingdom during the first three quarters of the fiscal year 1916—1917 was 20,298,403 standard barrels, while during the fourth quarter 6,326,597 barrels were produced, making a total for the fiscal year of 26,625,000 barrels, as compared with 33,099,411 barrels produced in 1914—1915.

The British Government have decided to take over the control of the breweries in the United Kingdom. Very well. Now let them show us what they can do in supplying the people and its army in the field with more and "better" beer than the brewers of this country have been able to do under the most aggravating conditions. Beer we must have. That question is settled!

As to the State purchase of all breweries, the Government is also determined, but the wish in this case is only an academic father of the thought; for, where is the money to come from for such a formidable purchase? The Government need every farthing they can scrape up for the war, and as to issuing paper for breweries purchase, we should think that the national debt now being piled up is large enough already. Therefore, it appears that State purchase will have to be postponed indefinitely, to the great regret of our phantastic Premier, whose fanciful idea that State ownership of breweries would ultimately lead to doing away with beer altogether will have to wait for its being realized also for Doomsday. The socialization of the means of production and of all other means of this nation may come some day, but that day is still far distant, no matter what results the war may produce in other countries, where repudiation of national debts might be looked for when certain elements gain the upper hand. Britons pay their debts, and they stop contracting them when they become aware of the fact that bankruptcy would be the result of still further trying to accomplish the impossible.

In the meantime representatives of the trade are co-operating with Lord Milner, who is to be in charge of the Government control, to elaborate a practical plan under which to carry out the Government's proposition. When the Brewers' Society discussed the matter, this statement was made: "As it is impossible to allocate more grain to the brewing trade, and the limited output of beer must go round the whole country, it is deemed advisable by the Government that State control must be resorted to first, to subtract from one district the beer that is urgently required in another, and, second, to make further reductions in licenses. For instance, under Government control, it would be possible to take from, say, West London a supply of beer and send it to York. This will not work in practice, since West London to-day only has the quantity of beer that it requires, with none to spare; and if there is to be a sudden shortage of beer in one spot the working man will want to know why. Nevertheless, that is the Government's plan, which it is hoped can be made so adjustable that it will work out far more satisfactorily than at present, since, as indicated the problematical shortage at, say, York is already a fact. How this circle can be squared is not yet explained. The standard gravity of beer is to be reduced to 1.040, which means that a gallon of beer will weigh not quite 6½ oz. more than a gallon of distilled water. All of which means that Englishmen will get very "thin" beer, "thinner" than ever before, under State control and at higher prices too, the Government having conceded that present prices are "too low."

Many brewers, of course, are strenuously opposed to

State control, and as a sample I only mention the subjoined resolution recently passed unanimously at a meeting of the brewers of Burton-on-Trent:

"Resolved, That this representative meeting of Burton brewers desires to impress upon the Prime Minister the very grievous hardship that would be inflicted upon the town and industries of Burton by the establishment of such a form of control upon the breweries of the Kingdom as is being discussed in the Press at the present time. The restrictions already in force have caused most serious damage to Burton, and this meeting most earnestly trusts that if any form of control be decided upon, the special circumstances of this town, mainly dependent as it is upon its great brewery industries, will receive very careful consideration from the Government."

The Central Control Board of the Liquor Traffic in their third report assert that it has been proved that by extinguishing private interest in the sale of liquor and by establishing a strict system for the control and inspection of public-houses, it is possible both to reduce excessive drinking in a very marked degree, and to insure that restrictions such as those imposed by the Board's orders shall be effective to an extent impossible under conditions of private management and of ill-regulated trading. That in houses in which liquor can be sold under conditions of comfort and decency, and in which facilities are provided for recreation and for the sale of food, not only is supervision made easier, but customers are less inclined to drink to excess than they are in houses which have been designed as mere drinking bars. That many of the people who frequent public-houses desire food as well as drink, and that whatever the régime, the attempt to meet this demand, duly safeguarded against possible abuse, should be encouraged. That under a unified system, such as that involved in State management, arrangements can be made to regulate the conduct of the trade in order to meet local requirements or temporary emergencies. But as to the cost of the experiment the Board say that it would be "premature" to publish statistics. No doubt, the experiment will come high.

The malt situation is worse than ever. No barley has been malted for nearly four months and what little malt there is, some even propose to take away that and mix it with flour to bake bread with. In regard to this Mr. Kennedy Jones has said: "Only a small percentage of malt—certainly not more than 5 per cent.—can be mixed with flour in bread making, or it produces a sticky and unpalatable loaf; and I suggest that, when you get down to the consideration of whether you are going to stop the brewing of beer from barley already fermenting you have got to measure the possible discontent and resentment which would be caused against the value of the saving, small as it would be, you would make in bread-stuffs." The brewers are making a determined effort to procure barley by growing large quantities in this country and to import still larger amounts from the United States, the price of American barley being expected to increase enormously through the raising of freight and insurance rates. To produce the 10,000,000 barrels of beer permitted annually we require about 367,000 tons of barley, 21,500 tons of corn grits and 45,000 tons of brewing sugars.

As the Government have decreed that no information be given any more regarding the imports of food and drink, the usual statistics on beer and hop imports are no longer available. The exports of beer and ale in March comprised 46,708 barrels, compared with 64,611 barrels in the same period of 1916, and 32,472 barrels in 1915. The figures for the first three months of the year 1917, 1916 and

1915 are respectively given in barrels as follows: 136,973, 209,640 and 103,022. The exports of domestic hops for the first three months of 1917 total 4,872 cwts., against 2,445 cwts. in the same time in 1916, and 2,006 cwts. in 1915. The exports of foreign hops for the first three months of 1917 total 361 cwts., compared with 365 cwts. in 1916, and 398 cwts. in 1915.

Lieutenant F. Chesney Chubb, who has been wounded in the right leg by a machine gun bullet at Salonica, is the only son of Mr. C. W. F. Chubb, of Messrs. Hall's Oxford Brewery, Ltd. Lieut. Chubb has been head brewer to W. Hancock & Co., Ltd., of Wiveliscombe, Somerset.

Captain Robert Theakston, wounded and in hospital in France, having had his right leg amputated below the knee, is the eldest son of Mr. Thomas Theakston, of Bellfield, Masham. Capt. Theakston was at the outbreak of war managing director of Messrs. T. & R. Theakston, Ltd., The Brewery, Masham.

By Cable—London, June 22.—The present state of affairs is largely due to economic and social conditions. Long hours of work, hot weather and high prices for poor quality beer form one combination which is breeding unrest among a large class. Profiteering in food necessities is another. This, the government recognizes, is shown by the announcement in this morning's newspapers that the reduction in the annual output of beer of 10,000,000 barrels, decreed last February, has proved too drastic. There has been a deficient supply in the ammunitions during the recent hot weather, which condition, added to the prospective difficulty in the rural districts at harvest time, has influenced the government to allow an immediate increase of 33 per cent. in the barrelage of beer.

Brewing News from the European Continent.

When the second ration of barley of the three promised to the breweries of Germany by its Government had been delivered last month, the brewers were notified that the third ration would have to be kept back, as all barley available must be used for baking bread. The breweries, consequently, will have to worry along with the little barley left over from last year's crop, and it is doubtful whether enough beer can now be produced to satisfy the needs of the army in the field.

From Copenhagen it is reported that "the prospects for the German grain crop are becoming dark owing to the long continued drought. There has been no precipitation, or at most only an occasional and isolated millimeter of rainfall, and high summer temperatures prevail. These conditions on the light sandy soil in a large part of Germany are conditions in June most dreaded by the farmers. With such a season, the crop experts, who a fortnight ago were saying that with plenty of rain an average crop could be expected, have of late discontinued discussion."

The Government in Washington has reports from Germany saying: "Supper is the problem in the average German household. Generally there are no potatoes left over from noon, and if there are there is no fat in which to fry them. The usual German supper before the war consisted of cold meats, sausage, cheese, bread and butter, and beer. There is no meat, no cheese, and no sausage; no butter on four or five days of the week, no more bottle beer, and many saloonkeepers refuse to sell beer to be consumed off the premises. The beer, moreover, is all but undrinkable. There remain then only bread and fish, fresh, smoked, dried, or canned. And here the problem of cost is added to that of monotony."

Other reports state: "The Germans now add ammonia to the waste liquors of breweries or sugar factories, and produce food proteins directly with the aid of yeast. Reports also come on high authority that in Germany artificially digested wood fiber is being used in stock-feeding."

"The lack of oils and fats has been Germany's greatest difficulty, and she has only been able to supply her wants of nitroglycerin at the expense of the health of the community. Hence, the chemical papers have constantly published the results of the analyses of the little-known home-grown seeds which have never before been regarded as possible sources of oil. It has been shown that asparagus and vegetable seeds contain a considerable proportion of oil, though it is doubtful whether they would repay the labor of extracting it."

"Berlin's food and drink woes are now aggravated by the prospect of a beerless summer. The Greater Berlin Brewers' Association announce that their supplies of malt and barley have been cut down so ruthlessly by the Food Dictator that no 'real beer' at all can be brewed for the thirsty general public. Such as is to be manufactured has been commandeered almost in its entirety for the army and munition workers. In these circumstances Berlin will have to be satisfied with a 'very thin beer,' made from the small quantity of raw materials left after brewing for the soldiers and the shell-makers. At present the brewers must content themselves with 25 per cent. of their former allowance of malt and barley, although only about 14½ per cent. of the allowance has actually been delivered. The brewers have agreed among themselves to make nothing for the public but a 'standard thin beer.' Consumers are assured in advance of its inferior quality. A lamentation in the 'Local-Anzeiger' says: 'Well, our summer beer will at least have the quality of harmlessness. If it is found too light, we can always go to the water-tap and improve the beer by "diluting" it.'"

"The Bavarian food authorities have had to work out with intricate care a new scheme of beer control for the coming summer. They have hit upon a scheme which they think will avert beer-tickets. Publicans from now till October 31st will be allowed to serve to customers only one-third of the amount supplied by them in the corresponding period of 1916 (instead of one-half as hitherto). A customer may not be served with more than a half-liter (about a pint) of beer at lunch, and not more than two half-liters (about a quart) in the evening hours."

"Products derived from yeast form a substitute for meat extracts, which are now very scarce. They enable soups made from vegetables to be made more palatable. In addition to yeast extracts, dried beer-yeasts are produced. By using nitrogenous inorganic salts, such as sulphite or acetate of ammonium, etc., Professor Delbruck, of Berlin, has succeeded in cultivating yeast in solutions of sugar or molasses. Thus nitrogenous combinations entirely worthless for human food are transformed by the yeast fungus into organic albumen, so nourishing to man. Twenty-five to thirty grammes of this 'food yeast' may be used conveniently in a meal, and improves its flavor. Whether as an extract or dried, yeast is an excellent food substitute."

An Amsterdam cable says: "Commerical Councillor Weyermann of Bamberg, Bavaria, has been sentenced to four months' imprisonment and the payment of a fine of 716,000 marks for illicit dealings in malt."

U. S. Consul Graham H. Kemper has reported from Prague, Bohemia: "The close of 1916 found the brewing operations of Bohemia very much reduced, with little prospect of an increase during the ensuing year. It is true that

the hop yield of the country, while not equaling that of former years, was sufficient to satisfy all reasonable demands of the breweries; but, all the barley of the country having been taken over by the Kriegs-Getreide Verkehrsanstalt established by the Government, the breweries have been unable to obtain the usual amount of barley for malting purposes. It is estimated that during the period from September 1st to December 31st, 1916, 160 breweries suspended operations, and it appears probable that a greater number will suspend operations in 1917, as the small reserve supplies of raw materials are gradually exhausted. The price of beer has steadily risen since the beginning of the war, until now it retails at almost four times its normal price."

The production of beer still increases in France. During April the taxes paid by the French breweries amounted to 1,425,000 francs, or 35,000 francs more than during the same month of normal years and 606,000 francs more than in April, 1916. During the first four months of 1917 the French beer tax brought 4,555,000 francs, as compared with 2,786,000 francs during the corresponding period of 1916. However, the brewers of France, like those of all other European countries, are laboring under great difficulties, as their government has requisitioned 3,000,000 quintals of barley, needed for food production and there is but one solution of the question, and that is: France must import enough barley from the United States unless the French brewing industry be seriously crippled. The British soldiers in France must have beer. They don't like wine. From England they cannot get more than a small quantity and, therefore, France must furnish the bulk required by the British army. To supply them, Americans are expected not to drink any beer?

Large sums are being appropriated by the French government for reconstructing the breweries in the invaded regions and for compensating brewers for their losses. The breweries are to be rebuilt according to a standard plan adopted by the Brewers' Association.

There will be no Prohibition in France for quite a while, although Jean Finot, noted French writer, author and president of the French Society for Action Against Alcohol, predicts a long and bitter fight before France is placed on the footing of prohibition. Widely circulated reports that French legislative bodies would make France "dry" are denied by M. Finot. He says: "Prohibition in France does not mean, as the word means in America, an absolutely dry France. It means the elimination of brandy, whiskey and other spirituous liquors which do so much damage to the peoples of any country. Beer and light wine will always remain. The fight against alcohol which the prohibition forces of France are making has the most bitter opposition. When it is considered that over 4,000,000 people have their interests connected with the production, distribution and sale of liquor this is not surprising."

The names of M. H. Macaire, brewer at Lillers, Pas-de-Calais, and Aimé Charles Jacquin have been added to the pages of the Golden Book of the French Brewing Industry, M. Macaire for having bravely rescued a night transport of wounded soldiers and M. Jacquin, son of the former proprietor of a brewery at Ventelay, Aisne, for having sacrificed his life upon the field of honor.

The Belgian Government has appointed a commission to elaborate a bill for the suppression of the manufacture of spirits and the decrease of licensed places for the sale of beer and wine.

The breweries of Holland require more barley than that country can produce or import from European countries. Therefore the brewers in Holland expect the United States

to supply them with more barley and malt than has heretofore been imported from America.

The Nederlandsche Browsersbond has appointed a special committee with instructions to purchase all malt they can get in the United States.

Petrograd, May 29.—The increase in the illicit sale of vodka and the general wave of intoxication which threatens to spread throughout the country, provoking disorders and endangering the internal peace of the country, is the subject of a stirring appeal to citizens issued by the executive committee of the Council of Workmen's and Soldiers' Delegates. "We notice an increase of drunkenness in Petrograd and other parts of Russia," reads the appeal. "It is noticeable in the streets, railways, factories and barracks. Vodka readily is found in the villages of the interior as well as at the front. An examination shows that many deplorable events in the last few weeks were due to drunkenness. Formerly the Emperor encouraged drunkenness, since it helped to support the imperial throne. Now the Black Hundred is trying to intoxicate the country because it wants to create disorders, cause civil war and the return of the monarchy. Massacres will follow the appearance of vodka, villages will fight with each other and then the servants of the old régime will emerge from their hiding places and there will be a repetition of what happened in 1905. The work of the revolution will be drowned in blood by the enemies of the people. No one has the right to buy vodka or to drink it. Let it disappear forever with the old régime."

Stockholm, June 3.—Sweden has extended the restrictions on the sale of distilled liquor to cover wines and beer. Private saloons will be abolished and every customer of public dispensaries must have all sales recorded. The law takes effect January 1, 1919.

Christiania, Norway, June 6.—Great demonstrations against the unsatisfactory food situation were held throughout Norway to-day. To prevent rioting the Government prohibited the sale of alcoholic beverages for three days, and the restaurants were closed.

Paris, June 25. M. Malvy, Minister of the Interior, as the result of a Cabinet meeting, has addressed to the prefects of all the departments in France instructions to forbid the sale at retail of spirituous liquors testing over 18 degrees of alcohol in cafés and saloons, except during the hours when the principal meals are served. Adult males can procure liquors during these hours, but women and minors under 18 years will be unable to get them at any hour. Bottled goods may be sold only in two-litre quantities, M. Malvy seeking thus to exclude those desiring to purchase small bottles. Excluded from the scope of the proposed regulations are beer, wines, cider, imitation wines and liquors, and all other aromatic wines not possessing over 18 per cent. of alcohol, and liquors prepared from fresh fruits not possessing over 23 per cent. of alcohol.

CHIEF CAUSES OF CRIME. "In recent years, the consensus of opinion among criminologists is that the chief causes for crime are: Defective mentality, inherited weakness of will, malnutrition (insufficient or improper feeding in childhood); lack of proper moral training in youth, unwise selection by parents of unsuitable trades or vocations; and very largely to poverty. To what extent these various causes influence character, particularly in the formative period is difficult to determine, but it is the opinion of many students of the problem that poverty, and the evils arising out of it, such as overwork, too long hours, child labor, crowded tenements and other unsanitary housing conditions are largely responsible."—(Albert J. Noch.)

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—American Brewing Co., New Orleans, La., have installed a 100-ton ammonia drier-cooler-purifier; made by the York Mfg. Co., York, Pa.

—Bergner & Engel Brewing Co., Philadelphia, are making improvements in the equipment of their brew house, the cost to be about \$1,500.

—Connecticut Breweries Co., Bridgeport, Conn., recently installed one 150-ton and a 100-ton vertical single-acting double cylinder high speed enclosed type refrigerating machines, direct connected to uniflow poppet valve engines, all furnished by the York Mfg. Co., York, Pa.

—Erie Brewing Co., Erie, Pa., are erecting an addition to their plant.

—Home Brewing Co., Canton, Ohio, are making improvements in their refrigerating department.

—Humboldt Brewing Co., Eureka, Cal., are installing new fermenting tubs, storage tanks and other equipment at a cost of over \$10,000.

—Independent Brewing & Malting Co., Oakland, Cal., at whose plant steam beer is being made, have installed a bottling department for bottling lager beer brewed by the Santo Cruz Brewing Co., Santa Cruz, Cal.

—Lone Star Brewing Co., San Antonio, Tex., have installed a one-ton vertical single-acting belt driven enclosed

type refrigerating machine and high pressure side complete, purchased from the York Mfg. Co., York, Pa.

—Frank Jones Brewing Co., Inc., Portsmouth, N. H., are considering the erection of a large new plant at Marlboro, Mass.

—Paducah Brewery Co., Inc., Paducah, Ky., recently installed a 30-ton flooded freezing system and miscellaneous material, including four "Shipley" atmospheric ammonia condensers, each 20 feet long, 12 pipes high, made of 2-in. pipe, all contracted for with the York Mfg. Co., York, Pa.

—Peter Schoenhofen Brewing Co., Chicago, have installed 12 coils of atmospheric ammonia condensers, each 20 feet long, 24 pipes high, made of 2-in. pipe, by the York Mfg. Co., York, Pa.

—Stark-Tuscarawas Breweries Co., Canton, Ohio, are adding to the equipment of their New Philadelphia plant at New Philadelphia, Ohio, a 60-ton double-pipe ammonia condenser.

—Otto F. Stifel's Union Brewing Co., St. Louis, erect a one-story brick addition, the cost of which is estimated at about \$5,000.

—Wilber Brewery Co., Wilber, Neb., are converting their plant for the manufacture of grain vinegar and similar products.

—Several breweries in Pennsylvania have discharged their collectors to economize.

—The Wm. Rahr Sons Co., Manitowoc, Wis., has purchased a large elevator from the Chicago & Northwestern Railroad Co.

—The Lion Brewery Co., Wilkes-Barre, Pa., on May 18th, filed a petition in bankruptcy in the Wilkes-Barre Federal District Court.

—Part of the old Fink brewery, West 39th street, between 8th and 9th avenues, New York, has been leased for 20 years to a concern of moving-picture film manufacturers.

—In the plant of the former Star Brewery Co., Vancouver, Wash., the Interstate Products Co. are now manufacturing sauerkraut and other vegetable products on a large scale.

—The Peter Breidt City Brewery Co., Elizabeth, N. J., have joined the Motor Truck Club of New Jersey, pledging their assistance to that organization in its fight on the unjust and ill-advised new motor truck laws of New Jersey.

—Burglars secured \$25 when they blew open the safe of the Hagemeister Brewing Co., Green Bay, Wis., early on May 23rd. Heavy charges of nitroglycerine blew both safe doors from their hinges. The robbers made their escape in an automobile.

—Brewery collectors and agents in Baltimore have organized the "Association of Brewery Representatives, their first meeting having been held at the Broadway Hotel, and the second meeting at the office of the Standard Brewery Co., Baltimore, Md.

—The Emil T. Raddant Brewing Co., Shawano, Wis., have notified their customers that henceforth all cases and bottles will be charged for at the standard prices and must be paid for in cash. When returned the same will be credited or paid for in cash.

—The plant of the defunct Elgin National Brewing Co., Elgin, Ill., was sold at auction, June 2nd, to Charles Winfield, a Chicago lawyer, for \$38,000.

—Some dissatisfied stockholders have asked the court at Shreveport, La., for the appointment of a receiver for the Shreveport Ice & Brewing Co., charging the board of directors with alleged irregularities in their management of the company's business.

—The Arnold Schonegg Harmony Brewing Co., Inc., Ambridge, Pa., out of business since 1916, was duly adjudged a bankrupt May 26th, 1917, by F. G. Moorhead, Referee in Bankruptcy, in the Federal District Court for Western Pennsylvania.

—At a conference with the Pennsylvania State Industrial Board representatives of the organized brewers of Pennsylvania have agreed to no longer use charcoal in heating tanks preparatory to cleaning and revarnishing, electricity being preferable for sanitary reasons.

—The plant of the Forest Park Brewing Co., St. Louis, has been "bought by the Griesedieck Beverage Co., incorporated by Jos. Griesedieck and the Griesedieck Brothers, to be used for the manufacture of a near-beer beverage. It is a separate corporation, and while its members are interested in this concern, they are under separate management and will not manufacture beer."

—Metz Brothers Brewing Co., Omaha, Neb., are suing the county and city treasurer of Omaha to prevent him from collecting the 1917 tax levied on the brewery's personal property in 1916. The brewery alleges that the protection of the tax is denied for a period of eight months, by reason of the prohibition law having gone into effect May 1st. The petition sets out that to pay the tax would be "inequitable, unjust and confiscatory."

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW INCORPORATIONS. Independent Koenig Brewing Co., Inc., Auburn, N. Y., to operate the plants of the Independent Brewing Co. and of C. A. Koenig & Co., Auburn; capital, \$450,000. Incorporators, C. and W. and C. Koenig.

Hausmann Brewing Co., Madison, Wis., to operate the Hausmann plant, existing for many years; capital, \$150,000. Incorporators: Carl J. Hausmann, William Hausmann and Adolph Hausmann.

Zobel, Stein & Campbell, Inc., New York City, manufactures colors and dyestuffs; capital, \$20,000. Incorporators: H. E. Zobel, G. M. Campbell, B. F. Meyer, 253 9th Street, Brooklyn, N. Y.

Officers have been elected by brewery companies as follows:

Becker Brewing & Malting Co., Ogden, Utah: President and treasurer, G. L. Becker; vice-president, A. E. Becker; secretary, J. S. Becker; additional director, E. Mallison, Jr.; brewmaster, Henry Lotz.

Daniel Bermes Boulevard Brewery, Union Hill, N. J.: President, general manager and brewmaster, Frederick Schimper; vice-president, Lena D. Sauer; secretary and treasurer, George F. Sauer; additional directors, Amelia K. Schimper and William S. Salway.

Billings Brewing Co., Billings, Mont.: President and general manager, Phil Grein; vice-president and brewmaster, Jacob Jacobson; secretary and treasurer, A. Trenerry; additional director, Walter Mueller.

Calcutt Brewing & Malting Co., Ltd., Peterborough, Ontario, Canada: President and treasurer M. J. Calcutt; vice-president and secretary, H. G. Logan; brewmaster, David Hummel.

Calgary Brewing & Malting Co., Ltd., Calgary, Alberta, Canada: President and general manager, Alfred Ernest Cross; vice-president, William Roper Hull; treasurer, Charles Wilfred McMillan; secretary, D. Clive Betts; brewmaster, Percy Barton; additional directors, William E. Cochrane, Hon. F. A. Macnaghten, and A. H. Eckford.

Cerveceria Cuauhtemoc, S. A., Monterrey, N. L., Mexico: President, Isaac Garza; treasurer, José Calderón; secretary, José A. Muguerza; general manager, Francisco G. Sada.

Compañía Cervecería Internacional, Havana, Cuba: President, Emeterio Zorilla; vice-president, José Marimon-Juliá; secretary, M. J. Manduley; superintendent and brewmaster, Gustave Varrelmann.

Consumers' Brewing Co., New Orleans: President, Julius Wyler; vice-president, Frank Kruse; treasurer, J. J. Grover; secretary, J. J. Egloff; superintendent and brewmaster, Henry Reininger; additional directors, Joseph Harz, Joseph Reuther and Paul Blum.

Cronmiller & White Brewing & Malting Co., Ltd., Port Colborne, Ontario, Canada: President and general manager, Thomas F. White; secretary and treasurer, Otto C. N. Kanold; brewmaster, Edgar T. White.

Diebolt Brewing Co., Cleveland, O.: President, A. J. Diebolt; vice-president, Joseph A. Diebolt; secretary and treasurer, M. L. Diebolt; brewmaster, Paul Hohman.

East Buffalo Brewing Co., Buffalo, N. Y.: President, Henry W. Brendel; secretary-treasurer and general manager, John C. Schenk; brewmaster, Frank Feltes.

Fell Brewing Co., Carbondale, Pa.: President and general manager, Peter Krantz; secretary and treasurer, Frank Krantz.

Fleischmann Malting Co., Cincinnati, Ohio: President, Julius Fleischmann; vice-presidents, A. M. Curtiss, A. Zeckendorf and Max C. Fleischmann; treasurer, Casper H. Rowe; secretary, Charles J. Christie; general manager, Dr. T. Sedlmayr; superintendent of manufacture, Bruno Reinicke.

Forest City Brewing Co., Cleveland, Ohio: President, V. Humel; vice-president, F. J. Jankovsky; treasurer, J. V. Chapek; secretary, J. F. Troyan; general manager, Albert Panek; additional directors, John Vevera, Josef Rybak, Vaclav Rybak, A. V. Charvat and Fr. E. Albl; brewmaster, Marion Hansky.

Golden Lion Brewing Co. (1907), Ltd., Prince Albert, Saskatchewan, Canada: President, H. M. Sibbold; vice-president, G. Wagner; secretary and treasurer, W. E. Bristowe; superintendent and brewmaster, G. Wagner; additional director, A. Ballantine.

H. Griesedieck Malting Co., St. Louis: President, Paul Griesedieck; vice-president, A. Griesedieck; secretary and treasurer, T. C. Mann, superintendent, Albert Fischer.

Haberle-Crystal Spring Brewing Co., Syracuse, N. Y.: President, Charles Schwarz; vice-president, Benedict F. Haberle; secretary and general manager, Edward Oswald; treasurer, Frank C. Biehler; manager of National Branch, Charles Schwarz; brewmasters, Michael Zahm, Haberle Brewery; John Granger, National Brewery.

Hand Brewing Co., Pawtucket, R. I.: Vice-president and treasurer, A. E. Hand; secretary and general manager, Thomas F. Connell; brewmaster, William G. Gindele.

Hastings Malting Co., Hastings, Minn.: President and general manager, Jacob Hiniker; treasurer, Peter Hiniker; secretary, Mrs. Jacob Hiniker.

Home Brewing Co., Shenandoah, Pa.: President, general manager, treasurer and secretary, Christian Schmidt; vice-president, Hon. Joseph Wyatt; brewmaster, Nicholas Stang.

India Wharf Brewing Co., Brooklyn, N. Y.: President and general manager, Louis B. Schram; vice-president, David Goodman; secretary and treasurer, Thomas H. Ben-nis; brewmaster, John Jahreis.

Frank Jones Brewing Co., Ltd., Portsmouth, N. H.: Chairman, Charles Eves, London, England; treasurer and general manager, Christopher H. R. Woodward; secretary, E. A. Freeman, London, England; brewmaster, A. F. Neschke.

Krug & Zimmermann Malting Co., San Francisco, Cal.: President and general manager, Philipp Zimmermann; vice-president, George A. Zimmermann; treasurer, The Anglo-Californian Trust Company; secretary, Fred B. Sierck.

Lake View Brewing Co., Buffalo, N. Y.: President and general manager, Philip G. Schaefer; secretary and treasurer, Henry W. Brendel; brewmaster, Ferdinand Lehman.

Isaac Leisy Brewing Co., Cleveland, Ohio: President's office vacant; vice-president and treasurer, A. L. Corlett; secretary, Hugo A. Leisy; additional directors, W. T. Corlett and S. H. Holding; brewmaster, Carl Faller.

Lethbridge Brewing & Malting Co., Ltd., Lethbridge, Al-

berta, Canada: President and general manager, Fritz Sick; vice-president, E. H. Wilson; secretary and treasurer, W. S. Fairfield; brewmaster, Alvin Rane; additional directors, J. N. Ritchie, H. Macbeth, C. B. Bowman, M. Freeman, Chas. F. P. Congbeare.

Lewistown Brewing Co., Lewistown, Montana: President, general manager and brewmaster, Gus Hodel; vice-president, John P. Schmit; secretary and treasurer, Anna Hodel.

Massachusetts Breweries Co., Boston: President, Charles Pfaff; vice-presidents, A. H. Alley, E. J. Casey and F. J. Alley (also treasurer); secretary, Edward Ruhl; additional directors, A. C. Ratschesky, Michael Burke, I. R. Clark and Sebastian Gahm.

Mishicot Brewing Co., Mishicot, Wis.: President, A. E. Frank; vice-president, superintendent and brewmaster, John P. Scheuer; secretary and treasurer, Raymond Scheuer, additional directors, G. Scheuer and M. Frank.

Monumental Brewing Co., Baltimore, Md.: President, Frank B. Cahn; vice-president, Jacob B. Cahn; treasurer, Philip G. Straus; secretary, Frank H. Settele; general manager, William L. Straus; brewmaster, John Kresslein.

Narragansett Brewing Co., Providence, R. I.: President, John H. Fehlberg; treasurer, Fred A. Browning; general manager, Emil Schierholz; brewmaster, O. Henn.

Prairie du Chien Brewing Co., Prairie du Chien, Wis.: President, general manager and brewmaster, George L. Schwarz; vice-president and treasurer, William Garrity; secretary, Marie Schwarz.

Reading Brewing Co., Reading, Pa.: President, Ferdinand Winter, succeeding Philip Bissinger, who resigned, owing to illness and advanced age.

Rieger & Gretz Brewing Co., Philadelphia: President, William Gretz; treasurer and general manager, Charles W. Gretz; secretary, William Gretz, Jr.; additional directors, Leonhard Rieger, Jr., and Mary Rieger.

E. Robinson's Sons, plant of the Pennsylvania Central Brewing Co., Scranton, Pa.: Department Manager, J. George Hufnagel; brewmasters, William Fischer and Joseph Madenspacher.

C. Schmidt & Sons Brewing Co., Philadelphia: President and general manager, Edward A. Schmidt; vice-president and treasurer, Henry C. Schmidt; secretary, Frederick W. Schmidt; additional directors, Anna M. Zoller and Amelia Ebling; brewmaster, William Hipp.

Robert Smith Ale Brewing Co., Philadelphia: President, Edward A. Schmidt; vice-president, Fred. W. Schmidt; treasurer, Henry C. Schmidt; secretary, Rudolph H. Wolf; brewmaster, Charles Schmalzried.

Smith Bros., Inc., New Bedford, Mass.: President, Joseph T. Smith; vice-president, Bernard P. Smith; secretary and treasurer, James F. Smith; brewmaster, George B. Schumm.

WHERE WILL THEY STOP? "If the Prohibitionist can say to me: 'You must not drink beer,' what will stop him later, to the end that he may continue in his wage and keep himself a job, from telling me, 'You must not drink coffee or tea?' What will prevent him from declaring, 'You must not eat any meat?' What will prevent him from saying, 'You must not wear a certain cut of clothes?' Too much coffee or tea or too much meat are just as injurious as too much beer. So, too, many fashionable clothes are economic extravagance. They cause waste, and damage follows therefrom just as from too much drink. But is there no place where we can draw the line of the right of one's own privacy? Are we to be a people dictated to in all the things we strive for?"—"Enlightenment."

Personal Mention.

Walter Ashton, superintendent of motive power of the Anheuser-Busch Brewing Association, St. Louis, and designer and superintendent of construction of the plant of the Merchants Ice & Coal Co., St. Louis, of which plant he also is superintendent of motive power, has been for some time at Sarasota, Fla., on account of ill-health. He will remain in Florida till early this or next month, after which he expects to return to St. Louis.

Randolph Beadleston, a member of the family of brewers who have been in the trade for more than a generation, the firm being known as Beadleston & Woerz, New York, on June 18th married Miss Florence Harper, of No. 58 East 55th Street, New York. Young Mr. Beadleston is the son of the late William H. Beadleston, former president of the Beadleston & Woerz corporation, and Alfred M. Beadleston, now president, is the benedict's uncle.

Albert C. Blatz, president of the Valentine Blatz Brewing Co., Milwaukee, observed the sixty-second anniversary of his birth on June 1st. There was a big stag party at the Blatz farm, on the Green Bay road, to which the numerous friends of Mr. Blatz, among them many of the old timers who, with him, have built up Milwaukee, merrily attended.

John Brown Cuno, forester and son of the editor of THE BREWERS' JOURNAL, is a Second Lieutenant in the United States Reserve Corps, Regiment of Engineers, now drilling at Belvoir, Va., whereto his company was recently transferred from the training camp of the Chattanooga, Tenn., Military Branch, at Fort Oglethorpe, Ga.

Walter Daubenspeck, brewmaster of the Buffalo Brewing Co., Sacramento, Cal., is not dead at all. As in the case of Mark Twain, the report of his alleged death was "greatly exaggerated," owing to a misleading notice we saw in a local Sacramento paper. Mr. Daubenspeck, to the very contrary, is doing well, thank you, and he regularly attends to his work in the brewery. What he suffered from his recent automobile accident is now simply a matter of faint recollection with this dauntless member of the trade. May he live and prosper for uncounted years to come!

Louis J. Ehret, son of George Ehret, New York, has again become a happy father, his charming young wife having blessed him, June 5th, on the very day of Registration, with a bouncing and beautiful little daughter.

Berthold C. Fallert, vice-president and secretary of the Joseph Fallert Brewing Co., Brooklyn, N. Y., celebrated his birthday June 5th, receiving gifts and congratulations from the members of his family, among them from John F. Becker, treasurer of the William Ulmer Brewery, Inc., who is his father-in-law.

William Hamm, president of the Theodore Hamm Brewing Co., St. Paul, Minn., recently purchased the Sherman Hotel property in that city, the consideration being over \$250,000.

Earl L. Hansell, whose father is W. P. Hansell, president of the Independent Brewing Co., Pittsburg, is an officer in the United States Army Aviation Corps, having been ordered to report for duty at Columbus, Ohio.

Oscar Lehmann, superintendent and brewmaster of the Salt Lake City Brewing Co., Salt Lake City, Utah, is slated for the appointment by the Governor of Utah for the position of warehouse dispenser under the new Prohibition law of Utah.

August S. Lindemann, secretary and treasurer of the Milwaukee-Waukesha Brewing Co., Milwaukee, has resigned

from his position which he had held for many years. He went into the machinery business.

Joseph E. Magnus, Chicago, grandson of the late Adolphus Busch, president of the Anheuser-Busch Brewing Association, St. Louis, enlisted in the United States Army early in May, not waiting to be drafted. He is 22 years old and a college man. Although relatives of the Busch family are officers in the Imperial German army, young Magnus is eager to be on the firing line in France to fight against autocracy for the world's liberation and universal democracy.

V. A. Oswald, proprietor of the American Brewery, Altoona, Pa., has purchased a magnificent mansion at Johnstown, Pa., where he now resides.

Henry Pabst, son of Gustave Pabst, president of the Pabst Brewing Co., Milwaukee, and also president of the United States Brewers' Association, has enlisted in the U. S. Marine Corps, having tendered his services to his country as a private at the recruiting office in Salt Lake City, Utah.

Colonel Jacob Ruppert, president of Jacob Ruppert, Inc., New York, has again obtained a number of first prizes with several of his renowned St. Bernard dogs, which he exhibited last month at the fifteenth Annual Dog Show of the Ladies' Kennel Association of America, held at the grounds of the Mineola Agricultural Society in Mineola, Long Island, N. Y.

Emil Schaefer, son of Rudolph J. Schaefer, president of the F. & M. Schaefer Brewing Co., New York, is vigilantly doing patrol duty as a member of the Home Defense League of his residence district.

Edward G. Schlieder, president and general manager of the American Brewing Co., New Orleans, La., has given the Liberty Bond campaign one of the biggest boosts it has received in New Orleans. With his personal subscription of \$10,000, Mr. Schlieder has headed a list of bond subscriptions by officers and employes of the brewery which totals \$18,150. Every employe of the American Brewing Company has subscribed to at least a \$50 bond. Mr. Schlieder personally circulated the list and arranged that all were able to participate without personal discomfort. The effort is the most comprehensive carried through in any New Orleans institution and its success is due to Mr. Schlieder's personal activity.

Gustav Schock, known throughout the trade as one of the most successful manufacturers of brewery machinery, New York, recently celebrated the fiftieth anniversary of his arrival in the United States, when he was barely twenty-one years old. By close application to business and a number of important inventions made by him, Mr. Schock has become one of New York's highly honored business men.

Robert Schock, of Gustav Schock & Son, manufacturers of breweries machinery, 512-522 West 57th Street, New York, is the happy father of a newly arrived girl baby, who, with her two brothers, is the joy of life to her delighted parents.

"ALL 'DRY' ORATORS AND WRITERS endeavor to impress people with the idea that prohibition and temperance mean the same thing. Is this conception a fact or a fallacy? If temperance and prohibition are interchangeable terms, every man opposed to prohibition is an enemy of temperance. If this were true the cause of the wets would indeed be hopeless. The reverse is true. The words stand for opposing principles and cannot be reconciled. Temperance has to do with YOUR control of YOURSELF. It is right in principle and practice. Prohibition has to do with YOUR control by OTHERS. It is wrong in principle and despotic in practice."—(C. A. Windle.)

Among the Brewmasters.

ALBANY. The officers of the Albany District have been reelected: President, Ernst Uhlmann; vice-president, Henry Luebbert; treasurer, Otto Mittenzwey; secretary, John Andresen; directors, William Hammer, George Neher, and Otto Mittenzwey. Colleague, William M. Betzwieser, of the Hinckel Brewery Co., Albany, has been admitted to membership. The District has stated that its members "have absolute confidence and faith in our Executives, and if it is possible to do anything that will be 'assisting the industry,' may they go to it, and more power to them."

BUFFALO. The Buffalo District has celebrated colleague Gus. Braun's silver wedding and presented him with an appropriate gift, and colleague Philip Visher, of Rochester, N. Y., who has retired from the trade, was elected an honorary member. The questions of "Which is the most advantageous, the cold or the hot aeration of the wort?" and "How can you recognize metal turbidity in the beer before it is ready for the market? What are its causes and remedies?" have been exhaustively discussed, and colleague W. F. Otto has shown how malt bins may be protected from fire, while colleague R. Schwartz has related his experience on saving coal in the brewery by analyzing the flue gases, so that coal bills were cut down by him 2½ tons per day. No summer outing will be held this year. The regular August meeting is to take place in Erie, Pa.

CLEVELAND. The Cleveland District has discussed Prohibition, non-alcoholic beverages and the effects of the war upon the brewing industry, the speakers refuting the lies of agitators in regard to the use of brewing materials that might be "saved" for feeding Europeans, while depriving Americans of their national beverage.

CINCINNATI. The members of the Cincinnati District have entered upon an aggressive campaign against Prohibition by electing their president, Walter Weingaertner, delegate to the Ohio Liberal League to act with its members for the best interests of the trade.

NEW YORK. On Saturday evening, June 9th, the New York District held its annual meeting with President Robert Weigel in the chair. Colleague Guntrum reported that the Revision Committee had found the books and records of the District in good order. The officers submitted their annual reports, after which a resolution of thanks and appreciation for their services, as well as that of the Revision Committee, was spread upon the minutes. Colleague Michel, speaking for the Nomination Committee, said it was the sense of that committee that the entire board of officers be reelected, which was accepted unanimously. The officers for the year 1917-18 are: Robert Weigel, president; Max Papai, vice-president; John Knoll, treasurer; C. F. Guntrum, trustee; John Koenig, Jr., secretary; Jefferson E. Thumm, trustee; Gottlob Treffinger, trustee. Relative to a communication from the "Agricultural Labor Relief," an organization asking for our support, the chairman appointed a committee composed of Colleagues Michel, Kayan and Papai to investigate and report at the next meeting. A suggestion, that the July meeting be held at Albany, the home of President Weigel, thereby arranging an outing in connection with the meeting, was enthusiastically received and a committee consisting of Colleagues Koenig, Gress and Balz were appointed to make the arrangements. The routine business having been disposed of, the members were treated to a very interesting lecture by Chas. Neeson, entitled "High Speed Ammonia Compressors," during the course of which illustrations were shown with lantern slides.

JOHN KOENIG, JR., Secretary.

PHILADELPHIA. The Philadelphia District has reelected

its officers: President, William Hipp; vice-president, George N. Wagner, treasurer, Martin Grauer; trustee, G. J. Enders; secretary, Paul Kaiser.

National Brewers Academy Alumni's Mid-Summer Re-Union.

Prompted by the unusual interest displayed in the coming mid-summer reunion, the Dinner Committee held its first meeting in Rochester on May 24th and set Saturday, September 15th as the day on which the affair will be held at Corbett's Glen, Rochester, N. Y.

The Dinner Committee consists of August Moeller and Ed. Neschke of the Bartholomay Brewery Co., Edward W. Loeb and Charles Fromm of the American Brewing Co., and Louis A. Wehle of the Genesee Brewing Co., all of Rochester. Mr. Emil Schlichting, president of the National Brewers Academy, attended the above meeting and was afterwards invited by the Committee to inspect the place where the bake will be held. After looking the grounds over he expressed himself as well pleased and is eagerly looking forward to the reunion. It is hoped that all the graduates will endeavor to attend and make their arrangements plenty of time in advance.

Barley to be Grown by the Brewers?

E. Clemens Horst, the eminent hop grower and hop merchant of San Francisco, Cal., has suggested to the United States Brewers' Association that its members should grow their own barley. He says:

"While none of the barley or rice food value is lost in brewing, since the food value in the beer plus the food value of grain and sprouts used for animal feedstuffs constitutes its total food value, the United States Brewers' Association offer to plant enough otherwise unfarmed lands to produce sufficient barley and rice to equal the entire food value of barley and rice in beer.

"It would be better if brewers would offer to grow enough barley and rice to equal their consumption, but that would be a big job to undertake. Each brewer or group of brewers could do the farming near or far from home as preferred.

"The expense of such an operation is negligible compared with that of closing up the breweries. In California we could handle the proposition on an enormous scale. The development of the rice industry in this State is principally due to the action of the breweries. It has developed from nothing in 1912 to 100,000 tons in 1917.

"I have suggested to the Association that offers of this kind ought to help their campaign against war prohibition, by showing that the brewers can really cooperate with the public in producing foodstuffs.

"I have urged the association to make plain the unfairness of exporting malt and barley for brewing in foreign countries, if this is to be continued, while breweries in this country are closed, and that exports should certainly be stopped before such drastic action is taken in the United States.

"I also suggested that before the breweries are closed the manufacture of distilled liquors should be stopped, since there is on hand for a long time to come plenty of distilled liquors. This is evidenced by the fact that many of the distillers have already ceased operations on account of the high price of grain and the large stocks of spirituous liquor in warehouses. It would certainly be unreasonable to close the breweries and permit the distilleries to continue to pile up liquor stocks for consumption five years hence."

Our Output of Beer Enormous.

WASHINGTON, D. C., June 20th.—According to a report made by the United States Internal Revenue Bureau yesterday, the fiscal year now drawing to a close is the greatest year the country has ever known in the consumption of liquors and the taxes paid thereon. With eleven days yet to hear from there has been collected on whiskey \$178,000,000, the largest amount in any year. At the time of this report more than a million dollars a day are coming in. At the tax rate of \$1.10 a gallon this means that the consumption has been about 154,000,000 gallons. This exceeds by nearly 12,000,000 gallons the next highest year, 1913. Revenue from beer is about \$94,000,000, which is a little less than the year 1914, when 66,000,000 barrels—taxable at \$1.50 per barrel—thus making is about 62,666,666 barrels so far—were consumed. It is expected that when the fiscal year closes on June 30th the 1914 beer consumption record will be considerably surpassed.

P. O. Defines Prohibited Liquor Advertisements.

Washington, June 19.—Any drink containing alcohol was defined by the Postoffice Department to-day as intoxicating liquor within the meaning of the law forbidding mailing of liquor advertisements into dry territory after July 1st. Methyl, wood and denatured alcohol are excepted.

The department ruled also that the prohibition against advertisements applies to liquor for scientific, sacramental, medicinal and mechanical purposes.

Theodore C. Eppig, former manager of the defunct Joseph Eppig Brewery Co., Brooklyn, N. Y., died at Mineola, L. I., June 27th, aged forty years.

"THERE IS A BIG DIFFERENCE between beer and brandy, a big difference between whiskey and wine, yet all are lumped by most of our legislation, proving a rather astounding ignorance on the part of the zealots who are rushing their measures through Congress. However, this feature is likely to come out in the wash."—(St. Louis "Times.")

"MODERN PREACHING, with its political harangues growing out of the desire to control political organizations, together with the preachers' venomous pulpit attacks upon the character of the men engaged in the liquor business as a means to their end, in their strenuous effort to build up, control and manage political parties, will never save a soul, nor help an individual to repent from drinking or getting drunk. Humanity needs a lifting, and the preacher needs to live up to the Christ in order that all men may be drawn unto Him."—(Philadelphia "National Herald.")

HYSTERICAL LEGISLATION. "The surest way to drive this country on the rocks, to imperil its very existence and to undermine its economic strength is to strangle its commercial activity. Hysteria has swept Congress off its feet, and legislation impends at Washington that, if enacted into law, will wreck prosperity, ruin private business and prolong the war. Bedlam has supplanted reason and deliberation. Emotion and sentiment have stepped into the places of good judgment and right. Penalization of business, confiscation of personal property, destruction of employment in the holy cause of raising war revenue can have but one inevitable end, and that strangulation, panic, resentment, rebellion against a tyranny that savors far too greatly of the autocratic government this nation is pledged to dethrone."—(Cincinnati "Enquirer.")

Brewers "Doing Their Bit."

Here are a few of the thousands of instances showing how the American brewers are doing their duty as patriots in the present dreadful emergency. Those whose names are not mentioned are evidently not willing to pose in public, acting upon the biblical admonition: "Let not thy left hand know what thy right is doing."

S. Liebmans's Sons Brewing Co., Brooklyn, N. Y., have bought a \$50,000 Liberty Bond.

Gustav J. L. Doerschuck, President of the North American Brewing Co., Brooklyn, N. Y., subscribed \$200,000 to the Liberty Loan.

Adolph G. Hupfel, Jr., President of the Lager Beer Brewers' Board of Trade of New York and Vicinity sent in a subscription of \$2,000,000 to the Liberty Loan, the sum representing the aggregate individual takings of the members constituting the Board.

The Bartels Brewing Co., Wilkes-Barre, Pa., and every one of their employees have taken Liberty Bonds aggregating a large sum.

Every brewery at Worcester, Mass., and most of their employees and retail customers have subscribed to the Liberty Loan.

Large sums were subscribed to the Liberty Loan by the breweries in New Orleans, La.

The brewers of Milwaukee and their employees have taken about \$2,000,000 of the Liberty Loan Bonds, and aside from that the Jos. Schlitz Brewing Co., gave \$5,000 as their contribution toward equipping twelve ambulances and an officers' car for the use of the United States Army in France.

The family of the late Adolphus Busch, St. Louis, have subscribed \$500,000 to the Liberty Loan.

The members of the Buffalo Brewers' Exchange took Liberty Loan Bonds aggregating \$20,000.

The J. & P. Baltz Brewing Co., Philadelphia, subscribed \$25,000 to the Liberty Loan and their employees have taken \$2,500 of the bonds.

The Newark, Harrison and Orange, N. J., brewers took Liberty Loan Bonds as follows: Christian Feigenspan, Inc., \$165,000; P. Ballantine & Sons, \$100,000; Gottfried Krueger, \$25,000; G. Krueger Brewing Co., including C. Trefz, \$10,000; Peter Hauck & Co., \$25,000; Essex County Brewing Co., \$10,000; Home Brewing Co., \$10,000; George W. Wiedenmayer, Inc., \$5,000; Orange Brewery, \$5,000; Gottfried C. Krueger, \$500; Joseph Hensler Brewing Co., \$28,000; Eagle Brewing Co., \$500, and Union Brewing Co., \$500.

The breweries in Albany, N. Y., have liberally subscribed to the Liberty Loan, also the men employed there, those of the Dobler Brewing Co., Inc., taking \$5,000 of the bonds.

Subscriptions of brewers for the Red Cross have been liberal and large everywhere.

Col. Jacob Ruppert, New York, donated \$1,000 to the Red Cross Funds.

Throughout the country brewery employees were given a day off, with full pay, on June 5th, to enable them to register in the selective draft conscription for the United States Army.

Numerous brewers have offered their plants, equipment, motor car fleets, etc., to the United States Government for any use the war department may choose to make of them.

The retail trade throughout the country has been earnestly admonished by the brewers to comply with the law prohibiting the sale of intoxicants to uniformed members of the United States Army and Navy.

No Total Prohibition.

From the movement for war Prohibition beer should be omitted. Even if the change is limited to the prohibition of distilled liquors, the result will be demoralizing to great values. If beer also is prohibited, disastrous results will follow, for which the expected benefits cannot possibly compensate.

In the brewing industry in 1909, the last year for which we have official census figures, there were employed 62,363 persons, paid over \$64,000,000 in wages. Over \$670,000,000 capital was invested in the industry. Total Prohibition would not only do great harm to this capital and these men but would work a small revolution in real estate values.

The dependence of national and local bodies on liquor taxes for revenues is well known. Revenue to be derived from the manufacture and sale of liquor in the coming year, according to the taxes devised in the House, would total \$484,000,000. This includes State and local revenues from licenses. These license revenues in 1913 amounted to \$109,000,000. This is not the time when new sources of revenue are easily discovered.

The majority of the people in this country do not want malt liquors prohibited. The intellectuals have no right to force the measure upon the workingmen. Strong opposition to such forcing will develop in Congress. The working-man's fare is a dull one; beer adds a needed element of flavor and piquancy. It has a definite food value. It is so established in the working classes that its prohibition would work real hardship and cause real discontent.

The European belligerents, though much harder pressed for grain than we, have not stopped producing beer. There is no economic justification for beer Prohibition here. Against it are strong reasons of public finance and social justice. The world was not made in a year. Human nature cannot be changed over night. We can sometimes accomplish more by wisely directing it than by attempting to dam and thwart it.—(New York "Evening Mail.")

Beer for Europe—But Not for America?

NEW YORK "EVENING MAIL."

The total prohibitionists clamor to have the brewing of beer stopped in this country because we must not waste grain that might be sent to supply the food requirements of the Allies. But at the present time we are sending to the Allies grain for other purposes than food. We are sending a very large quantity of grain to them to be used in brewing beer. Is there any particular reason why our workmen should be deprived of a temperate beverage in order to supply beer and ale to the workmen of Great Britain?

Until total prohibition has appeared in all the countries of our Allies let us cease this talk of prohibiting the manufacture of beer in America, in order to furnish them with supplies. Even when that total prohibition occurs there, the same reason will not exist in America. England will have prohibition for the sole reason that she cannot get enough ocean tonnage both to carry on the war and continue the import of grain or malt for the breweries.

NO STRONG SENTIMENT FOR PROHIBITION. "No law is any stronger than the sentiment that supports it. There is no strong public sentiment in favor of Prohibition. There is a demand for clean, decent places of public resort in which people can be supplied with pure, wholesome beverages. None other than such places should be licensed."—("Current Thought.")

Trade Journals For Nation's Defense.

Representatives of ninety trade journals, among them THE BREWERS' JOURNAL, have held a meeting at the Council Chamber of the New York City Hall, and, after addresses by C. R. Clifford, of the Clifford & Lawton Publications; Theo. F. Cuno, of THE BREWERS' JOURNAL, and Henry L. West, Executive Secretary of the National Security League, adopted the following resolution:

Whereas, The Mayor's Defense Committee wishes to enlist the services of the business papers of the City of New York with a view to securing through them the cooperation of trade associations, factory owners and merchants for the purpose of disseminating direct to their employes a proper and intelligent understanding of war conditions and particularly the operation of the Draft Law; therefore be it

Resolved, That we, the representatives of the trade journals here assembled, indorse the object of this meeting and promise our editorial and personal influence with associations, factories, workshops and salesrooms that we may aid in establishing a broader understanding of the standards and responsibilities of American citizenship not only in this city, but throughout the United States.

Then a permanent organization was effected and committees have been appointed to carry out the sense of the resolution adopted.

The Brewery Worker—Give Him a Chance.

Incident to the American anti-liquor drive, which the governor recently vetoed out of Wisconsin as a State issue, so that its official resumption here within a few years must come, if at all, as a federal war measure, much has been said about compensating the manufacturers and dealers. That is a debatable subject the merits of which have been threshed out at considerable length, but so far as we have followed the discussion we have heard nothing of compensation for the employes. Take the brewery worker forty years of age, with a family dependent upon his wages. Outlaw the trade he has learned through years of experience and you make him an unskilled laborer, probably too old to learn a new trade, and thus dependent upon employment that pays the lowest scale of wages. This has no bearing whatever upon whether the liquor business is to stay or go, but it would seem that if the government is going to compensate anybody whose income suffers by prohibition, the working families should have fair consideration. Perhaps the government might give each head of a family a quarter section of land, with loan facilities that would enable him to get a start. Or the jobless brewery worker might be given the preference for government jobs paying fair wages. In one way or another, it would seem, Uncle Sam should absolve himself from responsibility for the predicament of laboring people, whose misfortune has grown out of his arbitrary dissolution of a partnership in which they have been encouraged to cast their lots by learning a trade the practice of which necessarily bounds their earning capacities.—(La Crosse [Wis.] "Tribune.")

THE RANTER. "For years the ranter, the man who declared that to take a drink necessarily made a drunkard, or, in other words, the deliberate liar, the wizzle-faced, side-whiskered, single-unit thinker, has been preaching Prohibition from a religious and moral standpoint and has gotten nowhere. As a matter of fact, the use of intoxicating liquors increased while he ranted."—(Charles E. Carpenter, president of E. F. Houghton & Co., Philadelphia.)

Substitute Lighter Drinks!

By H. L. MENCKEN.

The hired men of prohibition, with the traditional enterprise and impudence of professional Puritans, are trying to ram their peruna down the national gullet under cover of a great clatter for God and country. We must give up alcohol, they bellow, if we are ever to get out of the war on our legs; if we refuse, then the Germans will overrun us and enslave us, and make New York a rival Nineveh.

Congress is beset by the loudest, the dirtiest and the insanest lobby of them all, and it is using all the arts of obfuscation and intimidation to help its pious business. No argument is too absurd to be brought forward, and no device is too oblique to be employed in driving it home.

To be sure, drunkenness must be put down! We must husband our grain! We must avoid all waste of men and things! True enough. But let us accomplish these ends sanely, and not by orgy and cataclysm.

Let us find out how much alcohol we actually need, considering the normal uses of normal, sober men, and then let us produce it as economically as possible.

Our present system is enormously wasteful. We not only produce more alcohol than we need, at an extravagant cost for materials and marketing; we also produce various kinds of alcohol that no one needs—whiskey, gin, patent medicines and all that sort of thing.

The remedy is plain. On the one hand, whiskey is dangerous; it is too easy to get an overdose. On the other hand, we need the distilleries for making materials of war. Let us therefore stop making whiskey: there is enough on hand, as it is, to last four or five years. And let us, meanwhile, try to turn our whiskey drinkers into drinkers of milder stuff—light beers and wines. They will get all the alcohol they need, but they will get it in a form that won't hurt them, and out of use will grow habit.

In the midst of war we will thus deal calmly and intelligently with a problem that now threatens to immerse us in a bog of lunacy and hypocrisy. We won't come out of it a teetotaling nation, but we will at least come out of it a sober nation.

Absolute prohibition will not make us sober; it will merely make us jumpy and unhappy—and devilishly thirsty. Let the troops come home to beer and skittles, not to bootleggers and forty-rod.

OHIO BOTTLING CASE DECIDED. The Supreme Court of Ohio has affirmed the constitutionality of the act of 1915, providing that where an owner of bottles or containers marked them with a name or design, filed a copy of the mark with the Secretary of State and clerk of court, and gave notice in the newspapers, such owners should be deemed the proprietor of the mark.

THE MERCHANTS' ASSOCIATION OF NEW YORK has elected the following officers for the ensuing fiscal year: President, William Fellowes Morgan, President of the Brooklyn Bridge Freezing and Cold Storage Company; First Vice-President, Lewis E. Pierson, Chairman of the Board of Austin, Nichols & Co., Inc.; Second Vice-President, James G. White, President of J. G. White & Co., Inc.; Third Vice-President, William Hamlin Childs, President of the Barrett Company; Treasurer, Silas D. Webb, Chairman of the Board of the China and Japan Trading Company; Secretary, S. C. Mead. In thanking the members of the Board for the honor of reelection, Mr. Morgan congratulated them upon the service which the Merchants' Association has rendered and is rendering, not only to the city and to the Nation, but also to the cause of the Allies.

Answering Dr. Mayo's Tirade Against Alcohol.

In answer to Dr. Charles H. Mayo, who asserted at a meeting of the American Medical Association's convention held last month in New York that National Prohibition should be enforced as a war measure, and that alcohol in medicine had outlived its usefulness, Hugh F. Fox, Secretary of the United States Brewers' Association, has this to say:

"Dr. Mayo seems to put himself in conflict with many of the most eminent physiologists and medical practitioners in this country as well as abroad. In his recent address he pointed out that impure water was the greatest carrier or transmitter of disease and now that most communities have pure water in abundance he finds that the need of alcohol has passed.

"The soldier in the trenches in Europe may be comforted by the reflection that his town back home has a good water works, but that thought will scarcely protect him against the typhoid germs in the water which he can secure. He probably rejoices in the ration of light wine or beer which the army medical authorities insist upon serving him. The fact that the armies now in the field, with the possible exception of the Russian and Turkish forces, all serve regular rations of lighter alcoholic beverages would seem to show that the necessity for alcohol has not passed.

"The needs of the peaceful populations at home are in some ways different from those of the fighting men, but in respect to the lighter alcoholic beverages are practically identical. This is particularly true of those wage earners engaged in heavy, exhausting work. The European countries at war have placed the severest restrictions on the use of spirituous liquors, but brewing and wine making have not been discontinued."

And Dr. Beverley Robinson, the eminent Clinician, has declared that in a great many cases of pneumonia, diphtheria and typhoid fever he had seen cases which were considered hopeless take a favorable turn through the administration of good liquor. And he added:

"I am confident that many old and wise practitioners would indorse my views. If the French Government has found wine such a valuable agent to her soldiers in the field, is not the rôle of the dry-as-a-bone prohibitionist somewhat precarious? One of the most esteemed medical journals of the world is 'The Lancet' of London, in which appeared only recently a statement that the French Government had requisitioned for the purposes of the army a very substantial proportion of the vintage production. The writer went on to say that in France, therefore, wine had assumed a military importance, for no less than 200,000,000 gallons of wine from the country, together with 40,000,000 gallons from her Algerian colony, have been reserved for the use of the soldier. It would appear that each officer and man receives daily half a litre of wine, and 'The Lancet' authority points out: 'This allowance has been adopted since the war began, and the authorities are convinced that it has contributed to the health and efficiency of the troops through a campaign conducted under very trying circumstances. The reasonable consumption of the wine of the country (vin ordinaire) is evidently regarded as beneficial rather than demoralizing.'

"Frankly I cannot subscribe to prohibition, and yet I know and deplore the evil effects of alcoholism as much as any one. I also deplore the bad effects of overeating, bad cooking, ignorance as regards the preparation of food; but is that a reason why every one should be debarred from eating anything but what is scientifically (so-called) correct? Much of what science has tried to show to attend-

ing physicians in hospitals, in regard to the pernicious or useless effects of alcohol in the treatment of disease, has not convinced me.

"I believe that Dr. Jacobi would support me in this contention that, all the world over, humanity is liable to be overworked, temporarily weakened by shock; in fact, in a condition which calls aloud for a stimulant, and for some thing more palatable to the taste, more rapid in its restoration of vigor, than smelling salts, sal volatile, or even a cup of beef tea. I agree with Dr. Jacobi, who thinks that the time will hardly come when alcohol will no longer be used in illness. That time must never come. There are conditions which absolutely demand the use of alcohol.

"The lives of most men in the medical profession are spent in the endeavor to diminish suffering and eliminate the perils which beset humanity, and just now, of course, the question of the care of the wounded in Europe is one of the great problems of modern military surgery and of humanitarianism, in so far as that is left in man. I think soldiers should be permitted to carry good old whiskey or brandy with them into battle in what we in the Civil War used to call our canteens. If a poor chap had some tablets of strophanthus on his person they would also help in time of need. The whiskey or brandy should be with the soldier for use only in case of emergency along with the other first-aid treatments."

THE AMERICAN BOTTLERS' PROTECTIVE ASSOCIATION OF THE UNITED STATES will hold its annual convention in Detroit, Mich., October 9th to October 10th, 1917.

"HOORAY FOR HIM. A Siwash Indian may eat snakes. But he doesn't vote the Prohibition ticket and then keep corned on booze that is disguised as patent medicine. Another thing that you may have noticed is that Reform takes a vacation when the gate receipts begin to run low."—(Cincinnati "Enquirer.")

THE CALIFORNIA STATE BEER BOTTLERS' BOARD OF TRADE, with headquarters at 524 Gough Street, San Francisco, has elected the following Board of Directors: John G. Rapp, of John G. Rapp & Sons, bottlers of Rainier beer, San Francisco; C. F. Hansen, of the California Brewing Association, San Francisco; L. C. Brandt, of the Buffalo Brewing & Malting Co., San Francisco; H. Wicking, of the Blue and Gold Bottling Co., Oakland; A. Weil, of the Buffalo Brewing Company, Sacramento; W. J. Eilert, Bakersfield; Edward Zobel, of the Los Angeles Brewing & Malting Co., Los Angeles; Charles J. Vath, San Jose, and J. B. McCauley, Vallejo.

BEER AND MALT IN THE PHILIPPINES. The imports of bottled malt liquors in the Philippines have decreased since 1914 from 390,810 liters, valued at \$160,244, to 220,506 liters, valued at \$106,377, in 1916. In 1914 the imports of beer from the United States aggregated 125,794 liters, and this was reduced to 70,773 liters in 1916, while the imports from England shrank from 219,767 liters to 145,075 liters and the imports from Germany came down from 23,354 liters to 1581 liters. Beer in casks from the United States was imported in 1914 to the amount of 42,592 liters, reduced to nothing; from Germany, 568 liters, also reduced to nil. The imports of malt from the United States amounted in 1914 to 280,154, valued at \$50,318, and this was increased in 1916 to 1,383,500 kilos, valued at \$230,914. The malt imports from Germany aggregated in 1914 636,150 kilos and in 1916 German malt imports ceased entirely.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

NEW BREWERIES.

MAINE—PortlandThos. E. Malone.
 " —PortlandDaniel A. Kaler.

FIRM CHANGES.

CALIFORNIA—San Francisco...California Brewing Association (Acme Brewery) succeeds Acme Brewing Co.
 " —San Francisco...California Brewing Association (National Brewery) succeeds National Brewing Co.
 MARYLAND—BaltimoreStandard Brewing Co. succeeds Edward Duffy, Joseph M. Ulman and Albert J. Fleischman, Receivers of the Standard Brewery Co., of Baltimore.
 MASSACHUSETTS—Fall River...Bliss & Co. (a corporation) succeeds Old Colony Breweries Co., Inc. (Old Colony Branch).
 MISSOURI—St. LouisGriesedieck Bros. Brewery Co. succeeds Edward Wagner, Jr., Receiver of the Forest Park Brewing Co.
 PENNSYLVANIA—Washington.. Washington Brewery (Wray G. Zelt) succeeds Washington Brewery (Sam Garee).
 WISCONSIN—HudsonCasanova Brewing Co. (Christopher Casanova and Emma Casanova) succeeds Casanova Brewing Co. (Christopher Casanova and Joseph A. Casanova).

BREWERIES CLOSED.

CALIFORNIA—San Francisco...Broadway Brewing Co.
 KENTUCKY—LouisvilleCentral Consumers Co. (Frank Fehr Brewing Co., Branch No. 2).
 " —Middleborough ...New South Brewery & Ice Co.
 " —PaducahPaducah Brewery Co.
 MINNESOTA—Belle Plains.....Mathias Schmitt.
 NEW YORK—Troy.....Kennedy & Murphy Brewing & Malt-ing Co.
 OHIO—KentonThe Kenton Brewery (Jos. Waldeck).
 " —NewarkDaniel Dietrich.
 VIRGINIA—RoanokeVirginia Brewing Co.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1917 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, also in all other American countries where breweries exist, alphabetically arranged, with postal addresses, corrected to January 15, 1917.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, -1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries, firm changes and breweries closed recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

"THE HYPOCRISY OF CIVILIZATION has had its day in the old Bay State. For fifteen years—from 1885 to 1870—Massachusetts tried Prohibition, but after that experience our people found the law vain and injurious."—(James A. Gallivan, M. C., Mass.)

FEW TREATS FOR HIM. Old Lady (compassionately): "Poor fellow! I suppose your blindness is incurable.. Have you ever been treated?" Blind Man (sighing): "Yes, mum, but not often. 'Tain't many as likes to be seen going into a barroom with a blind beggar."

SOUTH AFRICAN BEER AND SPIRITS. The report of the Superintendent of Excise of the Union of South Africa for the year ended December 31st, 1916, shows that the collection of taxes on beer in that country amounted to \$691,978, as compared with \$636,450 collected in 1915. At the same time the taxes on spirits increased from \$1,747,038 to \$2,207,356.

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

24318. A commission merchant in Porto Rico would like to be placed in communication with American manufacturers and exporters of general merchandise and manufactured products, especially rice, etc.

24531.—A commission merchant in Morocco desires to represent American manufacturers and exporters of beer and liquors, alcohol 95 per cent., and other articles. References.

24619.—A commercial organization in Italy desires to purchase wooden barrel staves. Quotations should be made c. i. f. Leghorn or Genoa. Cash will be paid. Correspondence should be in Italian or French.

24621.—A commission merchant in Cuba wishes to be placed in communication with American manufacturers and exporters of corn, oats, hay, bran, rice, granulated yellow corn meal, and rosin. He desires to do business on a commission basis. References.

24568.—A man in Argentina wishes to represent American manufacturers and exporters of siphon bottles, soda water and beer bottles, bottle-washing machinery and equipment of all kinds for soda water and soft-drink manufacturers. References.

24616.—An exclusive agency is desired by a firm in Algeria for the sale of American whiskies, bitters, appetizers (confections), brandies, cordials of all kinds, liquors, and table drinks containing alcohol. Quotations are preferred c. i. f. destination. Goods should be strongly packed. Correspondence should be in French. References. Terms should be quoted in French currency and weights and measures in the metric system.

24648.—An agency is desired by a company in Italy for the sale of rosins. Correspondence may be in English. Reference.

24672.—An agency is desired by a merchant in Argentina for the sale of bottling, putting on stoppers and caps, siphons and bottles, and all machines connected with the liquor trade; and bottle caps. Correspondence should be in Spanish.

24,699. A firm in the United States with extensive connections throughout Latin America desires to be placed in communication with American manufacturers and exporters of bottlers' supplies. References.

24,708. A commission merchant in Greece wishes to buy beer bottles with a capacity of 0.06 centiliters nominal, but really 0.55 to 0.60 centiliters to the edge of the bottle neck. The color of the bottles should be light green and olive green, weighing 750 to 800 grams, and with a resistance to pasteurization of 65 degrees Reaumur. Quotations should be made f. o. b. New York. Payment will be made by cash against documents by confirmed credit in New York; 144 bottles should be packed to a sack. Correspondence should be in French. Reference.

24,727. A company in Finland wishes to purchase or secure an agency for the sale of corn and corn products. Payment will be made by cash against documents by bank in the United States. Correspondence may be in English.

24,743. A man in Algeria wishes to purchase or secure an agency for the sale of staves, barrel headings and hoops. Quotations should be made c. i. f. destination. Correspondence.

dence should be in French or Italian. References. These goods are desired as soon as possible.

24,744. An agency is desired by a trading association in Denmark for the sale of grain and mill products, maize starch and glucose. Quotations should be made c. i. f. destination, if possible; otherwise f. o. b. New York. Payment will be made by cash against documents. Correspondence may be in English. Reference.

EXPORT LICENSES. The Bureau of Foreign and Domestic Commerce considers it advisable for exporters at the present time when making contracts for export to state in the body of the contract that the sale is made subject to the seller's ability to secure an export permit, if one should be required. The Bureau of Foreign and Domestic Commerce issues this warning in view of the probability of Congress enacting legislation under which the export of certain commodities to certain countries may be controlled by the issuance of licenses. If this is done the exporter will save himself much annoyance and possible claims for damage if this clause is inserted in the bill of sale.

—Operations have been suspended in the plant of the Christ Brewing Co., Louisville, Ky., and the company's customers are temporarily supplied by the Frank Fehr Brewing Co.

—Last month the price of beer was raised in Detroit, Mich.; Toledo, Ohio; Havre, Mont.; Fort Wayne, Ind.; Los Angeles, Cal.; Canton, Ohio; Newport, R. I.; Elmira, N. Y.; Milwaukee, and many other cities in a number of States.

—The plant of the Anheuser-Busch Brewing Association, St. Louis, was visited on June 8th by about 200 delegates to the convention of the Associated Advertising Clubs of the World, the officials of the brewery taking them in automobiles to the plant, where they were royally entertained.

FIRES. The country home near St. Louis of Adolphus Busch 3rd, one of the vice-presidents of the Anheuser-Busch Brewing Association, St. Louis, and grandson of the late Adolphus Busch, was destroyed by fire May 31st; the damage done exceeds \$30,000.

Sparks from a passing locomotive set fire to the roof of the principal building of the Hygeia Brewing Co., Passaic, N. J., May 30th, partly destroying the plant; loss about \$50,000.

One of the barns of the Fred Miller Brewing Co., Milwaukee, was destroyed by fire, June 19th.

More than 2,000 barrels of beer, 10 valuable horses, 2 new \$20,000 ice machines and the large plant of the West Louisville Brewing Co., Louisville, Ky., were destroyed by a fire of undetermined origin early June 15th.

"REFORMERS—HUI! Great is the reformer, and the American people are his dupes. A notion comes, Heaven knows from where, and finds lodgment in the rather empty brain of some idle man or woman, and then the fat is all in the fire. The notion is sometimes a good one, more frequently perfectly deleterious, generally a matter of indifference. In the minds of most reformers it is a borrowed conception."—(Los Angeles, Cal., "Times Illustrated Weekly.")

THEY HATE TO SEE PEOPLE JOYFUL. "In this country prohibition of the liquor traffic means interference with the liberty of other people. Nine-tenths of the real dyed-in-the-wool Prohibitionists would also prohibit cards, dancing, tobacco, horse racing, Sunday golf, etc., and would make attendance at church compulsory. They just naturally hate to see other people enjoy themselves in ways to which Prohibitionists are not accustomed."—(New York "Commercial.")

Obituary.

William P. Baltz, vice-president of the J. & P. Baltz Brewing Co., Philadelphia, died on Wednesday, May 30th, at Devon, Pa., after an illness of four weeks, caused by hardening of the arteries. He was 54 years old and was born in Philadelphia. He was a member of the Union League, the University Club and the Merion Cricket Club. His town house is at 1813 Pine street, Philadelphia. Mr. Baltz was a man of sterling qualities of personal honor and usefulness, and the success with which he met was due to innate ability and force of character. He had long been an active factor in the management and supervision of the business of the J. & P. Baltz Brewing Co., of Thirty-first and Thompson streets, and always devoting his best efforts and energies towards the faithful discharge of the duties and responsibilities devolving upon him. He is survived by a daughter, Miss Bessie Baltz; a brother, Harry R. Baltz, and two sisters, Mrs. John S. Gustine and Mrs. Thomas J. Berry.

Theresa Bill, daughter of the late Nicholas Seitz, founder of the Seitz brewery on Maujer street, Brooklyn, N. Y., and widow of Francis X. Bill, a partner in that brewery, died at her home, 67 Bushwick avenue, Brooklyn, June 7th, survived by two sons.

William A. Birk, president of the Birk Bros. Brewing Co., Chicago, died there June 11th. He had been ill for some time. Mr. Birk was born in Chicago fifty-six years ago and entered upon his eminently successful career in the trade in 1882, when he joined the staff of the Wacker & Birk brewery, founded by his father and Frederick Wacker. In 1891 the Birks organized the Birk Bros. Brewing Co., of which the deceased was elected president in 1895. He was very active in furthering the interests of the brewing industry and at one time he served the Chicago Brewers' Protective Association as their treasurer. For his liberal donations to works of charity, Mr. Birk was beloved by his associates and thousands of his other fellow citizens, who now mourn his loss. His father, four sisters and three brothers are his survivors.

Otto Muench, son of the late Ferdinand Muench, founder of the Ferd. Muench Brewery, Brooklyn, N. Y., died of pneumonia at the Jamaica Hospital, Jamaica, L. I., June 19th, aged thirty-eight years. Mr. Muench was formerly secretary of the Muench Brewery and his home was in Lynbrook, L. I. He was born in Brooklyn and took an active part in Democratic politics. His survivors are his widow, his brother William and his two sisters, Mrs. William Kolle and Mrs. Emile Manneck.

David Rothschild, who formerly operated malt houses in Chicago, Davenport, Iowa, and in Peoria, Ill., his firm being known as the D. Rothschild Malt & Grain Co., died suddenly at his home in Chicago, June 19th. He had given up his own enterprises to join the Fleischman Malting Company, with which he was connected for a number of years.

Henry Torchiani, known throughout the trade, here and abroad, as a successful manufacturer of racking and pitching machinery, died in Chicago May 11th, after a lingering illness. He was born in Hamburg, Germany, July 19th, 1846, and came to the United States in 1864, engaging in various enterprises until he became connected with the Val. Blatz Brewing Co., Milwaukee, to then organize the firm of Torchiani, Kremer & Co., conducting its bottling department. Having sold out to his partners, Mr. Torchiani spent a number of years in Europe and, after his return in 1893, he founded his present business at 1530 North Halsted street, Chicago, widely known under the firm name of H. Torchiani. His widow, his daughter Bertha and his son,

Alfred Torchiani, who succeeds the father in his manufacturing business, survive him.

Peter Waldeck, Sr., founder of the Kenton Brewery, Kenton, Ohio, died there last month after having been a sufferer from a complication of diseases and gangrene in his right leg, which had to be amputated. He was a native of Germany, aged sixty-four years, and he came to the United States in his early youth, working at his trade in breweries at Cleveland and Columbus, Ohio, before he ventured in business for himself. His successor as head of the Kenton Brewery is his son, Joseph Waldeck.

Deaths in Foreign Countries.

E. J. Bagley, founder of the plant of Fitzgeralds' Brewing & Malting Co., Campbells Creek, near Castlemaine, Australia.

Major Thomas Hubert Barclay, son of the late Robert Barclay, of Barclay, Perkins & Co., Ltd., Southwark, London; drowned at sea, aged 33.

Fernand Canler, proprietor of brewery at Arques, Pas-de-Calais, France, lieutenant in the French army; died from wounds received at the front.

Charles Shirley Cole, partner in the late firm of Burrows & Cole, Twickenham Brewery, Middlesex, England, aged 60.

Hon. G. P. Fitzgerald, chairman of the Cascade Brewery Co., Ltd., Hobart, Tasmania, aged 74.

Major J. M. Heron, son of John Heron, and formerly brewer and chemist to James Hole & Co., Ltd., Castle Brewery, Newark, England, later connected with Free, Rodwell & Co., Ltd., Mistley, Essex, England; killed in action, aged 38.

Aimé Charles Jacquin, grandson of Charles Larivière, proprietor of a brewery at Evin-Mailmaison, Pas-de-Calais, France; killed in action.

Thomas Kent, partner in T. W. Kent & Son, Holywell Brewery, St. Albans, England, aged 79.

Captain John Marsden, brewer to the Brampton Brewery Co., Ltd., Brampton, Chesterfield, England; killed in action.

Lieutenant Colin Campbell Paterson, son of the late T. Y. Paterson, of T. Y. Paterson & Co., Pentland Brewery, Edinburgh, Scotland, has been reported wounded and missing, believed killed in battle.

Captain Charles A. W. Pope, son of Alfred Pope, chairman of Eldridge, Pope & Co., Ltd., Dorchester Brewery, Dorchester, England; probably drowned when the transport "Transylvania" was torpedoed.

W. Barwell Turner, formerly managing director of the Brunswick Brewery Co., Leeds, England, aged 71.

Lieutenant Francis George Truscott, M.C., son of Sir George W. Truscott, Bt., chairman of the City of London Brewery Co., Ltd., London, England, is reported missing and believed killed in an aerial battle in France.

T. H. Williamson, formerly railway manager for Bass, Ratcliff & Gretton, Ltd., Burton-on-Trent.

John Wotton, managing director of Tomson & Wotton, Ltd., The Brewery, Ramsgate, England, aged 60.

Malt liquors were exported from the Philippines in 1914 to Guam, China, East Indies, Siam, and Australia at a rate of 78,133 liters, and in 1916, of but 46,712 liters.

THEY ALL DO IT. "I know, and you all do, a city—and not a very large one—where saloons are prohibited by the constitution of the State, and yet where hundreds of them are as open as in New York or Chicago."—(Fred. H. Gillett, M. C., Mass.)

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

1,226,630. Albert Bie, Winterthur, Switzerland, assignor to Busch-Sulzer Bros., Diesel Engine Co., St. Louis, Mo.

1,226,726. Apparatus for pasteurizing bottled liquids. Simon Volz, Milwaukee, assignor to The Twentieth Century Machinery Co., Milwaukee, Wis.

1,226,814. Shipping-barrel. William J. Ruff, Quincy, Ill.

1,226,827. Dislodging-tool. Olaf N. Tevander, Chicago, Ill.

1,227,101. Method of pasteurizing liquids. Alfred H. Wehmiller, St. Louis, Mo., assignor to Barry-Wehmiller Machinery Co., St. Louis.

1,227,160. Process of making closures. Norbert M. La Porte, Baltimore, Md., assignor to the Crown Cork and Seal Company of Baltimore City, Baltimore, Md.

1,227,184. Process of making malt syrup. Henry T. Neidlinger, Oswego, N. Y.

1,227,244. Closing-machine. William C. Buhles, Alameda, Cal., assignor to Aluminium Seal Co., Pittsburgh, Pa.

1,227,628. Filling apparatus. Karl Kiefer, Cincinnati, Ohio.

1,227,807. Filling-machine. Frederick W. Letsch, Baltimore, Md., assignor to The Crown Cork and Seal Company of Baltimore City, Baltimore, Md.

1,227,982. Non-caking filter-press. Henry A. Vallez, Bay City, Mich.

1,227,983. Filter-press. Henry A. Vallez, Bay City, Mich.

1,228,207. Cooling-tower. Benjamin F. Hart, Jr., Hoboken, N. J.

1,229,656. Composition of beverages. Nathan Rosewater, Cleveland, Ohio.

1,230,138. Labeling-machine. Otto Eick, St. Louis, Mo.

1,230,178. Closure for containers. Truman T. Layng, Banff, Alberta, Canada.

1,230,550. Labeling-machine. Frank O. Woodland, Worcester, Mass., and administrators, to Economic Machinery Co., Worcester, Mass.

1,230,954. Sealing-disk for bottle-stoppers. John Neumann, Chicago, assignor to H. N. Claussen, Chicago.

1,230,751. Process of sterilizing liquids. Jean Mérie, Paris, France.

1,230,754. Refractometer. George Wilber Moffit, St. Louis County, Mo.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for the BREWERS' JOURNAL by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C., London, England, and 10 Gray's Inn Place, W. C., London, England.

Specifications Published

1916.

105,040. G. E. W. Henderson and D. Wickham Co., tap mechanism of bottle-filling machines.

105,282. E. Disdier. Process of musts, wines, brandies, alcohols, syrups, honey substitutes and jellies.

105,730. H. G. Ritchie and W. Lindsay. Cask-making machines.

105,799. T. Roberts. Machines for filling bottles, jars, cans and other receptacles with liquid or semi-liquid substances.

106,212. W. R. K. Gandell. Collapsible barrels, casks, tubs, cases and the like.

1917.

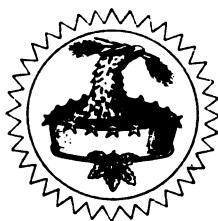
105,532. F. A. Mertz, non-refillable bottles.

For copies of published specifications of Foreign Patents (25 cents each), address Messrs. Redfern & Co., 15 South Street, Finsbury, E. C. London, England.

"SOBER MEN are no more made by legislation than are saints. Any attempt to legislate morals into men must fail, for the reason, fundamentally, that here the law of Caesar invades the realm of the law of God. Upstanding, self-respecting men will tolerate no interference with the principle of self-accountability, knowing well that no law of King or Commons can make a weak character strong or replace a bad character with a good one."—(E. A. Moffet.)

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 103,019. Evansville Brewing Assn., Evansville, Ind. Filed April 16, 1917.

Particular description of goods.—A Brewed Malt Non-Intoxicating Beverage.

Claims use since the year 1894.

Vivo

Ser. No. 101,657. Fred Miller Brewing Co., Milwaukee, Wis. Filed February 24, 1917.

Particular description of goods.—A Non-Intoxicating Cereal Beverage sold as a soft drink.

Claims use since November 6, 1905.

Bone-dry

Ser. No. 103,115. Houston Ice & Brewing Association, Houston, Tex. Filed April 19, 1917.

Particular description of goods.—A Non-Alcoholic Cereal Beverage sold as soft drinks.

Claims use since March 1, 1917.

The following Trade Marks have been definitely Registered:

116,686. Cereal beverages sold as soft drinks. The Peter Schoenhofen Brewing Company, Chicago, Ill. Filed December 3, 1915. Serial No. 91,143. Published January 25, 1916. Registration granted May 15th, 1917.

116,860. Lager-beer. The Salt Lake City Brewing Co., Salt Lake City, Utah. Filed February 23, 1917. Serial No. 101,623. Published March 27th, 1917. Registration granted May 29th, 1917.

116,900. Brewed malt beverages. Hinckel Brewery Company, Albany, N. Y. Filed December 14th, 1916. Serial No. 99,940. Published March 27th, 1917. Registration granted June 5th, 1917.

116,918. Soft drink or beverage. North Western Brewery, Chicago, Ill. Filed March 6th, 1917. Serial No. 101,936. Published April 3rd, 1917. Registration granted June 5th, 1917.

117,000. Beer. United Breweries Co., Chicago, Ill. Filed March 6th, 1917. Serial No. 101,945. Published April 3rd, 1917. Registration granted June 5th, 1917.

117,014. Non-intoxicating cereal beverage sold as a soft drink. Willow Springs Brewing Co., Omaha, Nebr. Filed February 23rd, 1917. Serial No. 101,632. Published April 3rd, 1917. Registration granted June 5th, 1917.

—The breweries in the Lehigh coal region of Pennsylvania have notified the retail trade selling their beer that henceforth beer must be paid for on delivery.

—Victor Oberling, Lawrenceburgh, Ind., has announced that he will suspend operations at his brewery, owing to high prices of materials, and also because Indiana is to go "dry" in April, 1918.

—Serious damage was done June 10th to the plants of the Eagle, West End and Gulf Brewing Companies, Utica, N. Y., when after an enormous downpour of rain parts of that city were flooded for nearly 24 hours.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,
NEW YORK, June 29th, 1917.

Barley. The Crop Reporting Board of the Bureau of Crop Estimates, United State Department of Agriculture, reported on June 8th that on that date the 1917 Barley crop would be 214,000,000 bushels, as compared with 181,000,000 bushels in 1916, and 197,000,000 bushels of the average crops in 1911 to 1915, the 1917 June condition being 89.3, as compared with the June condition in 1916 of 86.3. The acreage cultivated to Barley this year is given at 8,379,000 acres, or 109.2 per cent. of the 1916 acreage. The price of Barley on June 1st was \$1.19, as compared with 59.6 cents on June 1st, 1916.

The local market is very quiet and supplies are light. As soon as the Congressional situation has been clarified, trading on a large scale may be expected. The prospects of the new crop are splendid.

Quotations: Malting Barley, \$1.60@1.70, nominal f. o. b. New York.

CHICAGO, June 27th: "Offerings for the last month have continued light, with the quality averaging poor. Choice barley is offered only occasionally. Prices have worked lower, in sympathy with the general grain line, and we quote low grade at present at \$1.25 to \$1.30; fair-to-good, \$1.31 to \$1.36; good-to-choice, \$1.37 to \$1.45."

Malt. There is no malt market to speak of, brewers only buying in small lots. Prices are quoted as follows: Standard Malt, \$1.71@1.72; Bottle Beer Malt, \$1.78@1.80.

CHICAGO, June 27th: "Standard Malt is quoted here to-day at \$1.62@1.66; California Malt, \$1.55@1.57; Bottle Beer Malt, \$1.68@1.72; Fancy, \$1.75@1.77. Maltsters are not pressing sales and brewers only buy small quantities."

Corn Goods. Quoted: Grits, \$4.40; Meal, \$1.39; Corn Syrup, \$5.14; Corn Sugar, \$5.21.

CHICAGO, June 27th: "Early last week a brewer bought Grits at \$4.16, when the market was not much lower than it is now. The transaction is incomprehensible. To-day's quotations are: Grits, \$4.30; Meal, about \$4.28."

Hops. There is very little change to be reported in the Hop market, which is still very quiet, because brewers do not care to add to their holdings in consequence of the uncertainty at Washington, but after this is once settled, we believe that many will yet have to buy a certain quantity of hops, and the market may then advance. The only deal of any consequence was shortly after our last report, when 7,200 bales 1915 hops which were held by the Oregon Hop Growers' Association were sold to different dealers at what was considered a reasonable price. These hops were bought speculatively, and dealers will probably have to hold them one or two years, possibly longer, before they can dispose of them. The crop in Oregon and Washington is rather backward, in consequence of cold weather, but it is yet too early to say much about crop prospects in general. About 1,500 bales of hops were again exported to South America and European countries not in war the end of May and beginning of June, but the demand from there is also more or less curtailed the last week or two on account of exorbitant freight rates and scarcity of steamer room. We quote: 1916 Pacific coast hops, 10@12c.; 1916 N. Y. State hops, nominal, 32@36c.; 1915 N. Y. States and Pacifics, 7@8½c.; 1914 N. Y. States and Pacifics, 5@6½c.

No man can afford to ignore what is going on in his trade—technically, commercially, politically, socially. And this is why we have trade journals, and why THE BREWERS' JOURNAL can be found in almost every brewery in the United States, Canada, Mexico, most of the South American States and in a good many breweries in Europe, Africa, Australia and India.

"We do not think this is a situation where the Prohibition idea of confiscation of all intoxicants can be reasonably applied, or the cognate idea of destruction of plants making intoxicants. If the policy of Government is to have no grains used for liquors, the brewers may claim that they should be indemnified for what they are losing, simply as a matter of justice. Otherwise their forced contribution to the war needs of America would be grossly disproportionate. That seems to be a mathematical proposition capable of full demonstration."—(Brooklyn "Daily Eagle.")

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

New Office for Edwin H. Davidson:

Edwin H. Davidson, dealer in Brewers' and Bottlers' Materials and Supplies, has opened his new office at Room 512, 140 Nassau Street, New York City.

White Trucks.

The White Truck Book, just issued by the White Company, 806 East 79th Street, Cleveland, Ohio, comprising 225 pages, with 1,400 illustrations, is a graphic record of the enormous progress White Trucks are making throughout the world.

It is the largest and most comprehensive catalog of truck installations—virtually an official handbook of truck uses in all lines of industry and commerce.

The book will be sent gratis to any truck user if his request be made on his business letter head and signed by a responsible official.

Nachman Refinery's New Plant.

The S. J. Nachman Refinery has just opened a new plant at No. 312-314 Lafayette street, New York City, where high grade body sugars for employment in the brewing industry are being manufactured.

The Nachman products are of superior quality and they can be used for the production of beer, ale and porter as well as of temperance beers.

The Refinery's selling agents are Edwin H. Davidson & Co., No. 140 Nassau street, New York, who will furnish samples of these valuable and effective body sugars on brewers' request.

Announcement by Polack Tyre & Rubber Co.

The Polack Tyre & Rubber Company, originators and manufacturers of steel base construction ("wireless") solid motor truck tires, announce that they have moved their general and sales offices to new and much more commodious and pleasanter quarters on the second floor of the Motor Mart, 1876 Broadway, New York, in the same building where they have been heretofore. A rapidly expanding business with both truck users and truck manufacturers has made the expansion necessary.

The company also state that at points where new representatives have been appointed, the very best of service facilities are available.

Mr. G. H. Miller has been appointed Manager of Sales and Advertising, with headquarters at the New York office, 1876 Broadway, effective May 15th.

Mr. William Domnich has been appointed representative at Pittsburgh with office and service station at 2410 Penn Avenue.

Mr. H. J. Kenney has been appointed Manager of the New Haven Branch, with offices at No. 56 Ann Street.

Mr. Carl Theodore Goldenberg has been appointed representative in the Virginia territory, with headquarters at Lynchburgh, No. 412 Cabell Street.

Mr. Earl H. Pallett has been appointed Manager of the Boston Branch, No. 541 Tremont Street, and will also supervise the Providence territory.

Mr. C. W. Smith has been appointed Manager of the Washington territory, with office and service station at No. 34 Florida Ave., N. E.

York Manufacturing Co., York, Pa.

Since their last report the York Mfg. Co., York, Pa., have made 137 installations of their refrigerating and other machinery in factories, markets, hotels, private and public institutions, breweries, etc., among them these: John Morgan, Silverton, Colo., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; C. E. Scott Dairy Co., Merced, Cal., a half-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; General Necessities Corp. (Michigan Ave. Plant), Detroit, Mich., one 62-ton and a 25-ton horizontal double-acting belt driven refrigerating machines and condensing side, also a 60-ton York Coilless raw water

freezing system and 7,700 feet of 2-in. direct expansion piping for ice storage rooms; (Warren Ave. Plant), Detroit, Mich., 14,500 feet of 2-in. direct expansion piping for ice storage rooms, together with the necessary connections, traps, valves and insulation; (Boulevard Station Plant), Detroit, Mich., two 62-ton horizontal double-acting belt driven refrigerating machines and condensing side, also a 65-ton York Coilless raw water freezing system; (Fairview Station Plant), Detroit, Mich., one 62-ton and a 25-ton horizontal double-acting belt driven refrigerating machines and condensing side, also a 60-ton York Coilless raw water freezing system and 8,560 feet of 2-in. direct expansion piping for ice storage rooms; (Highland Park Station Plant), Detroit, Mich., one 62-ton and a 25-ton horizontal double-acting belt driven refrigerating machines and condensing side, also a 60-ton York Coilless raw water freezing system and 8,900 feet of 3-in. direct expansion piping for ice storage rooms; Detroit Creamery Co., Detroit, Mich., one 126-ton horizontal double-acting belt driven refrigerating machine and high pressure side complete; American Blower Co., Detroit, Mich., two 125-ton vertical single-acting refrigerating machines, each direct connected to a Corliss valve engine, and condensing side, including twelve "Shipley" Flooded double pipe ammonia condensers, also a flooded refrigerating system, including a 36-in. x 8 ft. accumulator and thirty Baudelot water coolers. This installation was made for the Ohio Match Co., Wadsworth, Ohio, and will be used for air conditioning; Putman Coal & Ice Co., Brooklyn, N. Y., a 150-ton vertical single-acting high speed belt driven enclosed type refrigerating machine and condensing side, including eight "Shipley" Flooded atmospheric ammonia condensers, also a 100-ton York improved raw water flooded freezing system and 1,000 feet of 2-in. direct expansion piping for storage room; Glendale Consumers Ice Co., Glendale, W. Va., one 70-ton vertical single-acting double cylinder high speed belt driven enclosed type refrigerating machine and condensing side, including three "Shipley" Flooded double pipe ammonia condensers, also a 40-ton York improved raw water flooded freezing system; Washington Market Co., Washington, D. C., a 175-ton vertical single-acting belt driven refrigerating machine and miscellaneous material, including a 36-in. x 12-ft. vertical ammonia accumulator and a 24-in. x 12-ft. ammonia receiver; Clinchfield Coal & Ice Co., Kingsport, Tenn., a 15-ton raw water flooded freezing system complete; Crescent Ice & Coal Co., Philadelphia, a 125-ton vertical single-acting belt driven refrigerating machine and condensing side, including ten "Shipley" Flooded atmospheric ammonia condensers, also a 75-ton raw water flooded freezing system and 1,850 feet of 2-in. direct expansion piping for ice storage rooms; Capital Ice & Storage Co., Oklahoma City, Okla., a 100-ton vertical single-acting double cylinder high speed refrigerating machine, direct connected to a uniflow poppet valve engine, and condensing side, also a 50-ton freezing system and 50-ton distilling system; Hiawatha Light, Power & Ice Co., Hiawatha, Kan., one 50-ton vertical single-acting double cylinder high speed belt driven enclosed type refrigerating machine and remodeling their freezing system to the York improved raw water system, including miscellaneous material; Supplee Milk Co., Atlantic City, N. J., one 50-ton vertical single-acting double cylinder high speed belt driven enclosed type refrigerating machine and condensing side complete, also a 25-ton and one 30-ton shell and tube brine coolers; Rock Hill Ice & Coal Co., Rock Hill, S. C., one 17-ton flooded freezing system complete; Cooperative Ice Co., Charlotte, N. C., one 40-ton vertical single-acting double cylinder high speed enclosed type refrigerating machine, direct connected to a uniflow poppet valve engine, and condensing side, also a 25-ton raw water flooded freezing system; A. M. Lee, Temple, Texas, a 10-ton raw water flooded freezing system, and miscellaneous material and apparatus, including one "Shipley" atmospheric flooded ammonia condenser, 20 ft. long, 12 pipes high, made of 2-in. pipe; Canton Ice & Laundry Co., Canton, N. C., one 35-ton vertical single-acting belt driven refrigerating machine, a 20-ton flooded freezing system complete and additions to their distilling system; Standard Ice Co., Chicago, Ill., one 75-ton vertical single-acting high speed belt driven refrigerating machine and condensing side, including seven "Shipley" Flooded atmospheric ammonia condensers, also a 60-ton raw water flooded freezing sys-

tem; C. E. Hamilton (Ice Manufacturer), Johnson City, Ill., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side complete, also a 30-ton raw water flooded freezing system, miscellaneous material, and seven "Shipley" Flooded atmospheric ammonia condensers; Seaman-East Grocer Co., Sulphur Springs, Texas, one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; S. F. Frerichs, Tracy, Cal., a 1-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; D. Dughi (Confectioner), Lewistown, Pa., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Burr Creamery Co., Los Angeles, Cal., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Jersey Farm Dairy, Fresno, Cal., one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Skelton Brothers (Meats), Rexburg, Idaho, one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; J. B. Faget & Co., Los Angeles, Cal., two 3-ton vertical single-acting belt driven enclosed type refrigerating machines and high pressure side complete (this installation was made in F. F. Pellissier's Dairy, Los Angeles, Cal.); Young Men's Christian Association, Central Branch, Rochester, N. Y., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Mammoth Copper Mining Co., Kennett, Cal., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; W. C. Gallaher, Hanford, Cal., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Felix L. Kalash, Lakefield, Minn., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; H. N. Hansen, Truman, Minn., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Geo. W. King, Waterford, Mich., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Peoples Cash Market, John Stenberg, Prop., Fargo, N. D., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Divide County Creamery Co., Noonan, N. D., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Union Electric Light & Power Co. (Cooling Drinking Water), St. Louis, Mo., one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Dawson Produce Co., Muskogee, Okla., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Dawson Produce Co., Shawnee, Okla., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Goodale Ice Cream Co., Centralia, Ill., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Hanover National Bank, New York, N. Y., a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Installations made in breweries are mentioned elsewhere in these columns.

New Electrical Effects on the Great White Way.

The Hinde and Dauch Paper Company of Sandusky, Ohio, has arranged for some far-reaching publicity in connection with the big electric display which overlooks Times Square, New York City. It is said to be the most wonderful display in the world, producing marvelous electrical effects in a manner and on a scale never before accomplished.

This display is one of the latest activities of the Rice Leaders of the World Association, of which the Hinde and Dauch Paper Company is a member. When the switches are thrown in, this display is illuminated by thousands of many-colored lamps making a picture of surpassing beauty.

A distinguished feature of the display is a large reproduction of the association emblem, which is composed of beautiful symbols representing Honor, Quality, Strength and Service, which constitute the qualifications of membership. The names of the members then appear on the display in brilliantly illuminated letters with their individual announcements and messages, interspersed in a unique and effective manner with general publicity announcements designed to stimulate high business standards.

Crown Bottle Capping Machines.

The users and prospective purchasers of Crown Bottle Capping Machines are herewith advised to read a United States Court Decision regarding a suit instituted by the Adriance Machine Works, Inc., 254 Van Brunt Street, Brooklyn, N. Y., with the intention of

protecting their patent rights against all users of their machines. The company ask for an injunction against the use of a Brewing Company operating a Bottle Capping or Crowning Machine known as the Triumph Bottle Capping Machine.

Correspondence.

*** Our readers will clearly understand that we do not hold ourselves responsible for the opinions of our correspondents, nor for the language in which they are expressed.

CORRESPONDENTS are respectfully requested to send their communications so as to arrive at our office one week in advance of the date of publication. This is the only means by which insertion can be insured in the next number of the JOURNAL.

NEW YORK, June 16th, 1917.

Editor, THE BREWERS' JOURNAL.

Dear Sir:—I herewith beg to hand you the copy of a communication received by me this day from Messrs. Aronson & Salant, my attorneys, in the suit with Messrs. Hirsh & Schofield, Inc. I would greatly appreciate your kindly printing a copy of this letter in the trade notices of your next issue. Hoping you will give this matter your usual prompt attention, I am,

Yours very truly,

A. GUSMER.

June 15th, 1917.

Mr. A. Gusmer, 213 E. 94th Street, New York City.

Dear Sir:—We are pleased to inform you that the judgment obtained by Hirsh & Schofield, Inc., against you enjoining you from selling "Mammut" or advertising yourself as the agent for the sale of "Mammut," has been unanimously reversed by the Appellate Division of the Supreme Court of the State of New York, which Court consists of five judges. The victory obtained by you is a most sweeping one. For not only has the judgment in question been reversed, but Hirsh & Schofield's suit has been dismissed and they have been turned out of Court. The Court has further ordered that Hirsh & Schofield, Inc., pay the costs of the litigation. You are at liberty to refer any one who may inquire regarding the reversal of the judgment, to us at the above address, for further information.

Yours very truly,

(Signed) ARONSON & SALANT.

P.S.—In view of the final establishment of your right to sell "Mammut" you are now at liberty to prosecute the manufacture and sale of any infringing substitutes and imitations.

Yours very truly,

ARONSON & SALANT.

"TO GET DOWN TO THE BED ROCK CAUSE of the drink evil requires time, patience and study. It is folly to work solely with effects; moreover, it is superficial and heartless in the light of the knowledge now extant on this question." —(Manufacturers' and Merchants' Association of New Jersey.)

FINE ARGUMENT! You are told that by falling in line with the "reformers" you would redeem the "sinner" by depriving him of his opportunity to take an occasional drink. A fine argument, indeed! Is the jailed thief not a thief because he cannot steal? Prohibition does not make saints out of us and statistics show that Prohibition does not prohibit. Considering the economic side: One thing is certain, you destroy an industry employing hundreds of millions of capital and millions of people, while, what you get in return is doubtful.—(The Trade's Agitation Literature.)

CLASSIFIED ADVERTISEMENTS.

Wanted.

25 or 30 second-hand beer barrels. Metzger Bush or no bush preferred. Address:

P. O. Box 547,
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Brewery for Sale or Rent.

In eastern Pennsylvania. Capacity, 15,000 bbls. Ice Plant. Artesian Well. Price and terms on application. Address:

M. E. 1039, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

Established in 1876 by A. E. J. TOVEY, Honorary Member of the United States Brewers' Association.

Grand Prize, Paris Exposition, 1900.

Medal and Diploma, Antwerp Exposition, 1889.

Honorable Mention, Paris Exposition, 1878.

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} GERMANY: Saarbach's News Exchange, 1 Clara Street, MAYENCE.

SPECIAL CORRESPONDENTS IN ALL THE BREWING CENTRES THROUGHOUT THE WORLD.

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REMINDER TO PRESIDENT WILSON:

To suddenly suspend, if not to destroy, the American Brewing Industry under the false pretense that such arbitrary action is "necessary" to enable the people to obtain enough bread, would be a crime as hideous as the destruction of the thousands of breweries in Belgium and France by shot and shell and spoliation!

Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....
November	4,386,268	4,474,950	88,682	.....
December	4,299,591	4,487,910	188,319	.....
	1916.	1917.	Increase.	Decrease
January	3,591,781	4,009,066	417,285	.....
February	3,730,615	3,675,243	.....	55,372
March	4,368,682	4,581,782	213,100	.....
April	4,513,512	4,627,221	113,709	.....
May	5,594,277	4,861,199	.....	733,078
Total	52,509,623	55,046,342	3,474,998	938,279

Net increase for the first eleven months of the fiscal year 1916-19172,536,719

"OFFICIAL HOSPITAL AND POLICE FIGURES in all the prohibition States from Maine to Kansas and beyond show conclusively that notwithstanding that those States have had prohibition for many years, yet inebriety, alcoholism and the psychoses resultant in whole or in part from them have not alone not been banished, but in many instances have been increased."—(Oscar W. Ehrhorn, Professor of Medical Jurisprudence, N. Y. Medical College and Hospital for Women.)

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

Yeast.

Paper published in the "Communications" of the Master Brewers' Association.

By JAMES A. BAIN, Brewmaster of the J. & P. Baltz Brewing Co., Philadelphia.

From the beginning of the world, so we are told, man drank liquids from many sources, which had the effect of stimulating his spirits and producing in him what we know as intoxication. The fact that it did so is remarked upon in the Old Testament, but again we read therein that some old sage took wine for his stomach's sake. It is only necessary to remark that alcoholic beverages have been used since the beginning of time, and of course that they were fermented goes without saying. More than likely all these fermented liquids were produced by spontaneous fermentation, in fact in the hot climates even to-day all the native fermented drinks are produced by spontaneous fermentation, and upon this I will touch later on. Spontaneous fermentation means yeast production in some form or other, but the results are ever the same. The hardy Norsemen of old, the Persians and Egyptians all drank a fermented beverage called "Mead" in some form or other, strong or mild, according to taste. Its production was brought about by exposure to the late sun of the evening and warm nights, when fermentation set in, violent or slow, just as climate and conditions presented themselves.

But we are not much interested in this type of fermentation but rather in the well-known form as produced by the true beer yeast, the *Sac Cerevisiae*. This form of the *Saccharomyces* is the one which we practical brewers best know, and it is, or should be, our desire to know it in all its various activities, for it can sometimes act very strangely, and when least expected. Every one of us have at times noticed our fermentations take on peculiar aspects; they may refuse to ferment as low as we wish, or they may run away, even though under strict control of the attemperator. They may produce a peculiar flavor which we know our beers should not have, and we are, I fear, far too prone to ascribe the trouble to everything but our yeast. We first make the discovery in the trade most probably, and we taste and test each one of our chip casks, and yet it is there. If we are sure now that something in the yeast is at fault, or even suspect it, the wise thing to do is to change our pitching yeast, and change it quickly. Get it from the best source procurable. In the larger percentage of breweries the beer has a particular character all its own, and in most cases the yeast in time, no matter how pure it may show up under the microscope, will produce a beer with that particular character to it, and again this yeast if planted in another brewery, no matter how remote, will carry this character with it, but may or may not retain it, according to conditions. Some of the well-known yeasts of Europe, for instance the Carlsberg types, 1 and 2, retain their characteristics wherever planted, and it was the finding out of this fact which turned my attention to the study of this aspect in pitching yeast.

I first came across this peculiarity in a large Norwegian brewery twenty years ago, and not long thereafter I found

it in a newly built brewery in Stockholm, Sweden, in both of which cities I was actively engaged in brewing. I may add that one of the good Scandinavians was trying to produce a Pilsener beer with a Carlsberg dark beer yeast. A change to a yeast from the Böhmisches Bräuhaus in Berlin put him right. But do not misunderstand me as meaning that yeast from dark beer will not make good Pilsener, for the breweries of Pilsen produce all their beers from Muenchener yeast, supplies of which they get bi-weekly. It is the inherent character in some yeasts to which I particularly refer, the character which remains wherever the yeast may be planted. The pitching yeast of the Rotterdam and Amsterdam brewers I also cite as comparable with the Carlsberg yeast.

There are various beers in Europe which are solely produced by spontaneous fermentation, and these are indigenous to their respective localities. I will only mention two: one because it is sold as beer, while the other is sold as a tonic, both being well known. The first is the well-known Belgian beer, the Gauze Lambic of Brussels and vicinity. This beer is generally brewed on the infusion system, and after cooling is run directly in to the trade package, where in a few days fermentation starts without the aid of pitching yeast. The product is well fermented, but is exceedingly acid, and is only a beverage for the man who has been brought up with it. I may add that I could not learn to like it when other more palatable beers were in sight. But just as some can't drink ale, and do not like it, so the natives of Belgium prefer this spontaneously fermented beer to beers of lager type.

The other beer I have spoken of is the well-known Danziger Spruce, or Joppen Beer of Danzig and district. I had the opportunity to pass several months in the best-known Joppen beer brewery there, namely, that of Richard Fischer in Neufahrwasser, and through the illness of the brewer I was asked to take entire charge of the plant which I gladly did for a time. Joppen beer is mashed on the decoction system, and is lightly hopped. After the entire worts are collected the kettle is kept boiling till the concentration reaches anyway from 35 to 45 Balling. Kettle samples are diluted with water to procure a reading of the saccharometer. The wort is run over a gently sloping copper cooler and then into the fermenters. Fermenters are eight feet deep and only two feet of wort run into each. Around each tub on the floor are pans into which the beer foam falls as it froths over, and old men and women are employed night and day to return this settled foam back to the tubs. Fermentation according to the weather lasts four to eight days, and when finished the apparent attenuation does not exceed 8 to 10 per cent. Naturally this is a very thick liquid and is ripe in about a year. It keeps well and is shipped mostly to northern Scotland and Scandinavia, where it is used by whale fishermen who go to the Arctic in pursuit of their calling; so I was told at least. Unfortunately I did not have my microscope along so had no opportunity to examine the yeast, but the master brewer informed me that it looked exactly like true yeast. A peculiarity too is that fermentation only sets in in late spring

and early summer. I am inclined to believe, however, that there are more kinds of yeasts than the true *Sac. Cerevisiae* which help to produce this peculiar type of spontaneous fermentation, but will not venture to guess at which, because this type of fermentation can scarcely ever be pure, as we from our standpoint understand it, though there may be some exceptions. The nearest exception which I personally know of is that of the little-known Kaffir yeast of the natives of South Africa, and this is an extraordinary yeast in every sense of the word.

When I was in that country brewing after the Boer war it was the absolute impossibility to procure lager beer yeast in any shape or form whatsoever, which led my brother and myself to investigate the fermentation properties and ability of Kaffir yeast. Speaking the native language my brother set about studying the production of Kaffir beer right on the ground and to this end he pitched his camp with a friendly head man, whose wives were the maltsters and brewers. The "modus operandi" is crudely as follows: Firstly, the malt has to be made and this is gone about by taking ordinary sacks one-fourth filled with Kaffir corn and soaking them thirty hours or so in water in the dark. The sacks are then laid on the floor of an empty kai or hut for germination, and at intervals known best to these women are rolled over and over, just as we do with malt in the drum system of malting. When the proper root has advanced sufficiently the contents of the bag are spread out in the sun for as long as the sun shines, and it becomes as dry as on any kiln. That is their malt, and I need not add that the diastatic power of the same is very high indeed. This is ground to a fine flour, sprouts and all ready for mashing. Now comes the other part which is equivalent to our cooker mash, and this consists of 60 per cent. mealies or Indian corn. It is simply ground like the "Mabela" or malt, between two stones. While this is in preparation the yeast has been in process of production, and is as follows: A woman takes some Kaffir bread, and works into it about 15 per cent. of wild bee honey, and heats the whole to 70 deg. F. or so, and hangs it out in the shade in a small bag. Fermentation sets in rapidly, and when ready, is pitched into the unboiled mash. Returning to the mashing, first the raw grain is boiled just as we do, then cooled down to the lowest temperature they can get by the addition of cold water, then the 40 per cent. of infused malt is added, stirred and left to stand. In the evening the yeast is added and fermentation proceeds. In this warm climate this lasts but 24 to 36 hours, when the liquid is drawn off into large gourds, and is set aside to complete the secondary fermentation that we took and made our experiment with. Making a Pasteur flask test first, we found very rapid fermentation of this wort which was brewed from 60 per cent. Hungarian malt and 40 rice, pitched at 50 deg. F. and held in cool room to 68 deg. F. From this root or stamm yeast we proceeded to cultivate successive pitchings till we had enough yeast for a 150-barrel brewing. In the meantime we had made tests to see what power to resist infection this yeast had. To this end we inoculated wort pitched with this yeast, with the sediment of Bass ale bottles; this sediment being simply swarming with all kinds of infection, chiefly, however, *sarcina*, *saccharo bacillus pasteurianus*, and the acetic ferment. Examining this settling under the microscope showed probably 20 to 35 bacteria to every yeast cell. Planting the outcrop showed a wonderful reduction of the infection, while the outcrop of yeast from the fourth planting showed an entire absence of any infection at all, or was at least as near to a pure culture as one can get outside of a yeast propagation apparatus. This result certainly astounded us, but more so the resulting

beer, which tasted absolutely clean, carried a magnificent foam and altogether was entirely satisfactory. The dark beer produced thereby could have been mistaken by nine or ten brewers for genuine Muenchener beer. I communicated our findings to the late Dr. Francis Wyatt of the National Brewers' Academy, in which he was deeply interested. I had intended bringing all my notes on the subject for his inspection, but they were all lost on the way back to Europe.

There is one other yeast in South Africa which is produced by the Malabela tribe, which has its head camp at Machudi, and the drink Kodi produced thereby is so potent that Linchwe, the paramount chief, completely forbade its use while I was there. I never saw the product, but I had a piece of the root or pitch which is used to create the yeast, but not knowing the secret process could not procure any yeast or fermentation at all, and of course the native will not pass the secret on. The foregoing therefore shows that fermentation is known even in the most inaccessible parts of the globe, and proves to us that nature placed it there for some good purpose, one of which surely was for man's good use. Let the prohibitionist try to disprove this, and I feel sure his attempt would be utterly futile.

I have presented a few of the peculiarities of yeast to you, and hope that by having done so, you all will have a higher veneration for our good friend the *Sac. Cerevisiae* than we have hitherto had. I have purposely not touched upon such beverages as that of Brazil and Peru, the Sake of Japan, and the yeast which produces them, as descriptions may be found in the various studies on fermentation, but what I have said has been my own personal observations, and I have laid them before you as a few rather interesting experiences.

COLLOIDAL BODIES IN BEER. There can be little doubt that the colloidal bodies in beer have great influence both on the palate and the head-retaining capacity of beer, and some method of measuring these bodies should yield valuable information. We recollect one method devised by Spring in which a powerful cone of light was directed through the beer, and on the principle of the sunbeam through a dark room showing up minute particles suspended in the air, so this cone was cloudy to an extent depending on the colloids present in the beer but not in true solution. But this method of Spring's does not appear to have been taken up by any research workers, and in other respects has been superseded by the ultra-microscope. Marc has devised a method of measuring colloids which will doubtless be more appreciated by the chemist, since it does not require a powerful arc light. Marc's method consists in adsorbing the colloids by an insoluble crystalline powder and determining by the help of a Zeiss interferometer the index of refraction of the liquid before and after the adsorption. The difference indicates the quantity of colloids in the liquid. As adsorbant material the author uses barium sulphate in the case of beer; barium carbonate is not so good because it enters into combination with some of the beer constituents. From a number of tests made by the author it seems that pale beers generally contain less colloids than dark beers. But these latter are richer in extract and their index of refraction is always higher than that of pale beers, so that when the colloidal content is determined by the index of refraction the differences between the two kinds of beer is effaced. It must also be noted that the differences obtained between results made on the same beer are often greater than those between different samples of beer. Samples left in open beakers for some time before filtering con-

tain less colloids than samples of fresh beer. This method only permits of determining the total colloids of a beer and gives no information as to their quality; but considering that the different colloids of beer are adsorbed by barium sulphate at very unequal speeds the possibility of fractional adsorption exists.—(London "Brewing Trade Review.")

Monthly Report from the Laboratories of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

June 15th—July 15th.

The total number of samples examined during this period is classified as follows:

Malts	163
Malt Adjuncts.....	53
Colorants	15
Hops	6
Grains (Mash Tun Residue).....	7
Waters	7
Worts	53
Yeasts	189
Beers and Ales.....	273
Temperance Beverages.....	53
Fuels	18
Miscellaneous	34

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Malts.

Of the 163 samples of Malt received, 133 were Western Malts and 29 Pacific Coast Malts; there was also analyzed one sample of Caramel Malt. The percentage of moisture found in almost all samples remains high, and is even higher than last month, the average for the Pacific Coast Malts being 5.55 per cent., while for the Western Malts it was 5.42 per cent. The yields of extract were correspondingly lower, the average being, for the Pacific Coast Malts, 70.2 per cent. on air dry malt, and 74.2 per cent. calculated on dry substance, whereas the Western Malts show 67.66 per cent. and 71.53 per cent. respectively. There is an increasing number of Malts containing large amounts of foreign seeds, chiefly oats, and many samples showed that they had been malted from very lean barleys.

Malt Adjuncts.

The number of samples received during the month was 53, consisting of raw and prepared cereals and cereal products, classified as follows:

Corn Grits.....	14
Corn Meal.....	15
Corn Flakes.....	2
Refined Grits.....	16
Rice	5
Brewers' Syrup.....	1

With the exception of too much moisture and oil in two samples of coarse grits, these materials were all of satisfactory quality and normal brewing value.

Colorants.

Fifteen samples of various Colorants, including sugar colors, malt colors and portantine, were examined as to their coloring power and brilliancy under varying conditions of

temperature and over varying test periods. All samples were found satisfactory for their respective purposes.

Hops.

The Hops submitted consisted of Pacific Coast Hops of 1916 crop and one sample of 1916 New York State Hops. Two of the Pacific Hops were in excellent condition and superior brewing value, while three samples showed an incipient deterioration by mould growth. The New York State Hops appeared to be considerably damaged during picking and baling.

Grains.

Of the 6 samples of Mash Tun Residue analyzed, 4 were considered unsatisfactory, showing an incomplete conversion or improper and faulty sparging operations. One sample of Dried Grains examined as to its cattle feeding value was found normal and satisfactory in its general composition, complying with the regulations of the State laws in question.

Waters.

Seven samples of water from various sources were examined as to their biological condition and their suitability for cleaning and washing purposes. A complete chemical analysis was made of two samples in order to determine their mineral constituents and their fitness for boiler feeding purposes.

Worts.

A complete chemical analysis was made of 48 samples of lager beer wort and 4 samples of ale wort. Four samples of lager beer wort were also examined biologically in order to exercise a careful control of the sanitary conditions of the cooling apparatus and all pipe line connections. One sample of wort brewed for the production of a low-alcoholic beer was found to be normal and satisfactory in its general composition and character, as well as its ratio of fermentable to non-fermentable extract.

Yeasts.

Fifty samples of ale yeast were examined, three of which contained an excessive amount of lactic acid ferments; the remaining 47 samples were in a satisfactory condition generally. Sixteen samples of lager beer yeast were infected above the permissible limit, chiefly by *Sarcina* and *Saccharobacillus Pastorianus*. Four samples from our Pure Yeast Department were free from any infection and in an excellent state of health and purity. One hundred and nineteen samples of brewery yeasts were in satisfactory condition.

Beers and Ales.

One hundred and thirty-two samples of Ale and one hundred and forty-one samples of Lager Beer from various stages of their manufacture as well as from the Bottling Department were examined in the Chemical as well as Biological Laboratories, in order to control their general composition as well as their stability. The average composition of the Ales and Lager Beers were as follows:

Ales.

Original Gravity.....	13.2 deg. B.
Alcohol by weight.....	4.28 per cent.

Lager Beers.

Original Gravity.....	11.7 deg. B.
Alcohol by weight.....	3.18 per cent.

Temperance Beverages.

A continued increase is noticed in the number of samples and inquiries concerning the nature, composition and manufacture of beverages of this character. Fifty-three samples were analyzed, showing the following average composition:

Original Gravity.....	5.8 deg. B.
Alcohol by weight.....	0.36 per cent.
Alcohol by volume.....	0.45 per cent.

Among these samples were also two Sweet Ciders, having the following chemical composition:

	A	B
Present Specific Gravity...	1.0354	1.0337
Absolute Alcohol (by volume per cent.).....	0.90	1.27
Absolute Alcohol (by weight per cent.).....	0.69	0.98
Total Unfermented Extract.	9.11 per cent.	8.80 per cent.
Volatile Acidity.....	0.019 per cent.	0.018 per cent.
Fixed Acidity.....	0.30 per cent.	0.18 per cent.
Reducing Sugars.....	5.87 per cent.	5.85 per cent.

Fuels.

Of 18 Coal samples received, 12 were considered of satisfactory fuel value, while 5 samples contained too much ash and one sample an excessive amount of sulphur. The highest amount of ash was 33.72 per cent.; the highest amount of sulphur 3.69 per cent., and the lowest calorific value 8,713 B. T. U.

Miscellaneous.

Thirty-four samples comprising mainly cleansers, lubricants, soaking solutions, filtermass material, pitch and varnishes are classified under this heading. All of them were subjected to complete chemical examination with a view to establish their composition and relative value in practice.

CAST-IRON TILES. With respect to the cast-iron tiles, the air-space is about the same as the best earthenware, but one maker claims that the holes are more evenly distributed over the surface of the tile; also that they are more lasting, easier and cheaper to fix, and while the price of a tile is rather higher than the earthenware article, the risk of fracture is considerably less, so that the ultimate cost may be reduced below that for earthenware when the cost of renewals is taken into account. These points are freely admitted after a close examination of a sample tile; while the method of laying these could scarcely be improved on. With ordinary care in stoking, there should be no difficulty in either drying or curing malt satisfactorily on these tiles. In an old work on malting, referred to in a previous issue as having been published some ninety years back, there is a reference to kiln floors being laid with earthenware and iron tiles, and also wire floors, the latter probably being of woven variety, so that, as far as materials are concerned, there has been no great change since then; nevertheless the methods of manufacture, especially as regards the number and shape of the holes, have shown great improvement, and the maltster of to-day has much less trouble in drying his malt than the maltsters of many years ago. Some of the earthenware tiles that have come to one's notice in very old kiln floors would not have more than $2\frac{1}{2}$ per cent. of air-space at the utmost. In laying or relaying a kiln floor, one important point should be kept in mind—that is, there should be no dead surface. These surfaces are frequently met with in otherwise good kilns, the first and last rows of tiles having one edge quite void of air-space. To remedy this, the first and last bearers should be either put in a rebate in the wall, or the surface of the wall should have a coating of cement sufficiently thick to cover up the dead surface. Where the kilns of malt are stripped into hoppers below the floor through iron shoots, the top of these shoots for a depth of six inches should be perforated with small holes to enable the hot air to penetrate, and the iron tile and lid should also have holes in them, otherwise the malt on these does not get either dried or cured in a satisfactory manner.—(London "Brewers' Journal.")

Extracts.*

By C. RICHET and H. CARDOT.

The question of the extract yield obtainable from malt or other materials during mashing has at all times been an important one. Owing to high prices, restricted output and decreasing margin of profit, the question attracts even greater attention at the present time. Although it is desirable to obtain the maximum extract from malt, it must not be supposed that the quantity of extract merely is the only essential, or that its obtainment overshadows every other consideration, and particularly that of quality. But given any material of a certain grade, whether high-class, medium or indifferent, it is logical to assume that it will not be a disadvantage to secure the highest possible extract from it. Much has been done during the past few years to increase the yield by improved grinding, and, in particular, by a system of grinding whereby the hard ends of the malt are reground, whilst spargers, drainage plates and drawing-off accessories have been improved to the advantage of the mash-tun system. In the mash-tun one is limited in any attempt to secure additional extract; the grinding of malt must not be so fine as to interfere with drainage, since if a definite degree of fineness is exceeded no increase of extract is obtained. In fact, owing to less buoyancy of the goods and drainage troubles, the yield may be less. With a mash filter in operation, fine grinding is essential, and the washing of the goods can be accomplished much more completely and with a shorter length than with a mash-tun, and, besides this, there is undoubted proof that the extraction by the mash filter method results in less albuminous matters. Although it was at one time believed that it was undesirable to obtain the whole from the malt, very little proof has been put forward to substantiate the belief. On the contrary, the improvements in recent years, which have undoubtedly had the effect of raising the yield, have not proved to be detrimental in the brewing of beer.

Whether the process be considered simple or difficult, the majority of brewers realize nowadays that the objects to be secured in the mash-tun are manifold. In their achievement many factors are involved having an influence not only upon the yield of extract from materials, but also upon the course of fermentation, nourishment of the yeast, deportment and stability of the beer. Moreover, every brewer knows that the modern mash-tun, even in its most approved form with up-to-date accessory appliances, has its limitation; and the experienced and skillful worker seeks to minimize the effect of these by employing suitable malts and the adoption of rational methods of working to suit the exigencies of the particular case.

Among the factors concerned in the obtainment of a suitable wort and a satisfactory yield from malt during mashing, the question of temperature is undoubtedly of primary importance. It is over fifty years ago since O'Sullivan published his classical researches on the action of malt extract on starch, in which the importance of temperature in controlling the proportions of maltose and dextrin was first outlined and established. Later, further investigations by Brown and Heron, Morris and others, elaborated the fundamental theory without altering its basic principles. Since, innumerable researches bearing upon the diastatic conversion of starch have been published. These have had for their object the further elucidation of the problem of the constitution of the starch molecule and of mash-tun reactions. Although important from a scientific standpoint, many of the results and theories, which have excited much

*"Comptes rendu," through *Brewers' Gazette*."

polemical controversy, have an academical rather than a practical bearing upon mash-tun operations. All, however, confirm the general theory of the influence of temperature upon the proportions of the carbo-hydrate constituents of the wort. To briefly state the elemental principles which guide the modern brewer in his every-day working: The starch of malt, when mashed at 140 deg. F., yields maltose and dextrin in the proportion (approximately) of 4 to 1; whilst at 155-6 deg. F., to keep within the range of mashing heats ordinarily adopted, approximately equal proportions of maltose and dextrin are formed. That is to say, with increments of temperature above 140 deg. F., the proportion of maltose becomes less and a corresponding increase of dextrin is formed, this variation having an influence upon attenuation during fermentation. In addition to free maltose and dextrin, one or two bodies of a well-defined character, known as maltodextrins, are undoubtedly formed, and these, not being directly fermentable during primary fermentation, exert an important influence upon the conditioning of the beer by secondary fermentation in cask. These general rules controlling the conversion of starch are well understood by every brewer, for by insistent repetition the main principles of starch conversion dominate the thoughts of most practical men. It is open to question, however, whether subservience to carbohydrate ratio has not been carried too far. It is sometimes suggested that the action of temperature on mash-tun conversion operates with mathematical accuracy, and that the corresponding influence on attenuation is in accordance with an invariable law—a standpoint which is fallacious and oftentimes untenable in view of the results frequently obtained in the course of practical observation and experience. It must not be imagined, however, that in making a mash it is not necessary to give proper attention to mashing heats and their effect upon carbohydrate ratios and the course of attenuation. On the contrary, no one can dispute the general laws of diastatic conversion laid down by eminent authorities for guidance in practical operations. It is, however, certain that in some cases marked improvement could be secured in certain directions if the brewer in charge did not so rigidly adhere to definite temperatures fixed by his text-book knowledge of carbohydrate ratios. In such cases, starch and starch conversion by diastase is the alpha and omega of the mashing operation, if not of the whole brewing process, and no elasticity is allowed in order to make the mash-tun perform certain other functions which are equally important. Among these the influence of temperature upon proteolytic action and the obtainment of increased extract should always be considered. Although the range of mashing heats commonly employed, viz., 140-156 deg. F., is higher than the optimum temperature for proteolytic action, it is certain that at 140 deg. F., and even up to the higher point in the range stated, considerable modification of the albuminoids of the malt takes place during the standing on of the mash. It is well known, of course, that the proportion of albuminoids dissolved out from the malt varies according to the temperature of the mash, and that the amount increases as the stand is prolonged. But in addition to this there is evidence that the proteids dissolved undergo alteration during mash-tun digestion, and that the extent of these changes is all-important from the viewpoint of successful fermentations, healthy yeast crops and beer stability. It may be argued the modification of malt on the floor and on the kiln has a greater influence in determining the amount of aliment provided for the nourishment of the yeast. Broadly speaking, this is undoubtedly the case, but the same argu-

ment might also be used in the case of carbohydrate conversion; for it is well known that restriction of diastase on the kiln has a greater determining influence on carbohydrate ratio than regulation of heats in the mash-tun. Nevertheless, the influence of temperature on both starch and albuminoid conversion should be borne in mind, and the heats adjusted to give the best results in either case if success in brewing is to be secured. For the obtainment of good extract yields the question of temperatures to be employed must also be carefully reviewed, especially if other and well-modified material is used. If the malt is of good quality and tender, and the grinding machinery satisfactory, little difficulty is experienced in converting the whole of the starch into soluble extract, which is easily washed from the goods by an efficient sparge. This applies equally to mild ale malts mashed at 142-146 deg. F., and to pale ale malts mashed at 148-155 deg. F. But with imperfectly modified material, either steely or containing steely-backed or hard-ended corns, there is frequently a real need to raise the temperature of the mash considerably above the initial temperature. This is generally attempted by the use of an underlet, but the addition of a further quantity of liquor at a high temperature, whilst serving a useful purpose in raising the heat of the mash, is seldom sufficient to give the increase necessary to make any real difference in the yield. The small range of temperature through which it is possible to raise the heat of the mash after it is all in, constitutes one of the limitations of the modern mash-tun. This limitation militates greatly against improvement in the direction of securing increased proteolytic action and larger extract yields when these are indicated as advisable in the brewery procedure.

The influence of brief exposures to high temperatures on lactic acid fermentation was studied; the progress of the fermentation was judged by the acidity of the solution, the acidity of a fermentation mixture under normal conditions being taken as 100. On exposure for five minutes at 57 deg. to 58 deg. C. there was a reduction of 53 per cent. in the acidity of the solution, and this was maintained during the whole fermentation. Small increases in the length of time for which the raised temperature was applied, had a progressive retarding effect on the fermentation. Thus, in the case of a vigorously fermenting mixture, after an exposure of one minute at 58 deg. C. the acidity was 93 per cent., after 1½ minutes 74 per cent., after two minutes 72 per cent., after 2½ minutes 57 per cent., and so on up to five minutes, when the acidity was only 5 per cent. At a lower temperature, 54 deg. C., applied at the beginning of the fermentation, after an exposure of ½-1 minute the acidity was 86.5 per cent., 1-2 minutes 81.7 per cent., 2-3 minutes 78 per cent., 7-8 minutes 65.8 per cent. Repeated exposure of the same fermentation to the elevated temperature caused almost a complete stoppage of the action. Thus, at 54 deg. C., tubes heated once for five minutes had an acidity of 77 per cent. after 62 hours' fermentation, while tubes heated five times during that period had an acidity of only 9 per cent. The human skin, which is the most sensitive part of the body, can bear a temperature of 54 deg. C. for a half-minute, and the experiments indicate that the treatment of wounds with water at 54 deg. to 58 deg. C. would delay or prevent pathogenic fermentation.

INTEMPERATE AND UNREASONABLE. "The greatest difficulty encountered in the effort to solve the great problem is the intemperance of the prohibitionist and his unwillingness to listen to reason."—(Hon. W. W. Osborne, Savannah, Ga.)

Fungicidal Properties of Certain Spray Fluids.*

By J. V. EYRE and E. S. SALMON.

Experiments were made on the action of various alkaline and sulphide spraying agents towards "powdery mildews" on the leaves of growing hops, and also on gooseberry bushes. The liquid agents were applied as a fine spray, sufficient to wet thoroughly the patches of mildew, and to effect this it was found necessary to add to the liquids a small quantity (usually 1 per cent.) of soft soap, or, in some cases, commercial saponin (0.25 per cent.), to increase their "wetting power."

Sodium carbonate and sodium thiosulphate, at concentrations of 0.3 and 1 per cent. respectively, were found to have no fungicidal action. Solutions of caustic soda or ammonia were only effective at concentrations which injured the leaves. Solutions of "liver of sulphur," of the strength recommended by authors generally (0.2—0.4 per cent.) for use against "powdery mildews," were found to be not fungicidal against the growing mycelium. When the concentration was increased to 0.6—0.8 per cent. fungicidal action began to be shown, but in some cases the leaves were somewhat scorched.

Much more satisfactory results were obtained with yellow ammonium sulphide. The stock solution was prepared as follows: 200 c.c. of a 10 per cent. solution of ammonia in water at 17 C. was saturated with sulphuretted hydrogen, and then mixed with 400 c.c. of 10 per cent. ammonia solution and 1000 c.c. of water. To this solution 24 grams of flowers of sulphur were added, which dissolved completely, forming a clear solution. The specific gravity of the liquid was 1.001 at 15 C.; it contained 3.7 per cent. of total sulphur, of which 2.2 per cent. was present as sulphide-sulphur (estimated by titration with a standard ammoniacal solution of zinc, using nickel sulphate solution as outside indicator). This stock solution was diluted as required before use. In some of the experiments liquids containing 0.06, 0.08 and 0.16 per cent. of sulphide-sulphur were uniformly efficacious in rendering the mildew permanently sterile, and usually in reducing it to a dead or dying condition by the fifth or eighth day after spraying. In other experiments solutions containing 0.08 per cent. of sulphide-sulphur were in some cases effective, but solutions containing 0.13 per cent. were invariably so. Patches of mildew treated with ammonium sulphide at fungicidal strength remained white and but little altered in appearance; they remained persistently sterile until they passed into a dying condition. The use of this agent has the distinct advantage that, unlike lime-sulphur, it leaves no visible deposit, and solutions of definite fungicidal strength have no scorching effect on the foliage.

Spraying experiments with solutions of sulphuretted hydrogen, ammonium hydrosulphide and colorless ammonium sulphide, showed that these substances have little or no fungicidal action. In tests with lime-sulphur, Berger's brand was used and diluted to a specific gravity of 1.01 and 1.005. At the former concentration the amount of sulphide-sulphur present was found to be 1.43 per cent., and the agent was almost invariably fungicidal.

Iron sulphide, which has previously been favorably reported upon in field experiments, proved on close observation to have, at a concentration of 0.6 per cent., a remarkably rapid fungicidal action on the hop-mildew. When made by a method which leaves a trace of ammonium sulphide present, it proved to be quite harmless to foliage and

is in a condition which enables it to be applied as a fine spray. This method is to add a dilute solution of yellow ammonium sulphide to a solution of ferrous sulphate, drop by drop, until the formation of iron sulphide seems complete.

On the theoretical side the authors conclude that the fungicidal action of alkaline sulphide solutions is not due to the presence of free alkali, nor is the proportion of sulphide-sulphur an index of the fungicidal value. It appears that the polysulphides contained in a solution of yellow ammonium sulphide act fungicidally as such, and not by virtue of the sulphur which is deposited when these compounds decompose.

Waste Steam of the Brewery for Heating Rooms.

By W. GOSLICH in "Wochensch. Brau."

In many breweries there is an excess of waste steam not utilized at present, which in some cases might be applied to the heating of rooms in the brewery itself and in the house occupied by the brewer, etc., even where the latter is situated at some distance from the brewery. Such a method of using waste steam appears particularly feasible where a brewery is equipped with plant for drying spent grains by means of waste steam; for in the winter months, when the requirements of living-rooms would be greatest, the grains drying plant would be least essential, the grains commanding a good price in the wet state. The author gives particulars of a plant installed at a distillery, for using waste steam indirectly for heating a thirty-roomed dwelling house nearly 90 yards from the distillery itself. The actual heating was effected by means of warm water heated by waste steam from the engine. The reservoir for the water, with a capacity of about 6 cubic yards, was situated in a convenient position in the distillery, and the waste steam was passed through a coil in the tank exposing an area of about 28 square yards. Well-insulated pipes conducted the warm water underground to and from the dwelling house, the circulation being maintained by means of a small steam pump working day and night. As the same water was used over and over again, no deposit was formed in the pipes. The maximum requirements of the house (30 rooms) when the outside temperature was -20°C . (-4°F .) amounted to 95,000 Calories per hour. After the distillery work had ceased and the accumulators had been charged, a temperature of 95°C . (203°F .) was, as a rule, attained in the reservoir. Water at this temperature returned from the house at about 40°C . (104°F .), so that the content of useful heat of the reservoir at 95°C . was $5,000 (95-40) = 275,000$ Calories; this quantity sufficed for 9 hours' heating at night, when most of the radiators were cut out of circulation. The fall of temperature during the passage of the water to the house from the distillery was, as a rule, only about 1°F ., the pipes being well insulated. When the heat in the reservoir had been expended, as occurred at week-ends and holidays, high-pressure steam from the boiler was passed through the coil, and for this the boiler had to be fired to some extent on these days. A few shovels of coal every 4—5 hours were found sufficient.

UNREASONABLE RATE FOR TRANSPORTING EMPTY BARRELS. The Interstate Commerce Commission has ruled that the Michigan Central's sixth class rate of 6.3 cents a hundred pounds charged the United States Brewing Co., Chicago, for the transportation of empty containers from Gary, Ind., to Chicago, is unreasonable, and has awarded reparation to the brewing company.

* "Journal of Agricultural Science."

Infection.*

By MATTHEW J. CANNON, F.C.S.

It is general knowledge that aerial infection, or more properly termed air-borne infection, is a very variable and uncertain factor in practical brewing. Many firms, fortunate in not experiencing this trouble in acute form, have not had need for special arrangements for prevention. Others, however, have been subjected to continual difficulty from this cause, and have had to put up special plant for the elimination of the source of the trouble. Sometimes the solution of the problem which causes frequent difficulty and endless trouble lies in the adoption of some very simple method of cutting off the supply of air-borne organisms. The currents of air flowing from the direction of malthouses, mills, stables, etc., in the rooms of the brewery in which the operations of cooling, refrigeration and fermentation are carried on, are invariably germ-laden. Sometimes the offending department can be isolated, and the fault eradicated by the proper sealing-up of a door, the significance of which has escaped the notice of all from the architect to the brewer. In certain cases the only cure is the adoption of a system based upon complete isolation of the rooms in which cooling, refrigeration and fermentation are carried on. This involves cutting off, as far as possible, ordinary means of ventilation, with its danger of infection and the ample supply of purified air.

There has always been a tendency on the part of some brewers to regard air infection as a kind of theoretical myth, no doubt on account of its irregularities and vagaries. It is, however, a point to which the closest attention should be given during the coming season. At all times, the lower gravity beers were always more prone to succumb to the insidious danger of air-borne germs. At the present day, when lower gravity beers are the rule, the question of air-purity is of greater importance than ever, and it behooves every brewer to give the closest attention to the subject if he desires to reduce to a minimum the difficulties and trials of the coming season.

The extent of infection in any brewery is exceedingly variable. Apart from careless oversight within the brewery, the brewer is subject to the dangers of infection from outside sources. This evil is more difficult to provide against or control. Such influences as atmospheric humidity and temperature have a considerable bearing upon the degree of infection, and during the summer months the maximum results of the aerial dust nuisance are experienced. The main portion of the aerial dust consists of disintegrated particles of mineral and vegetable matters kept in suspension in the atmosphere by the continual movements or currents; in addition, the dust contains a varied assortment of "germs," or living cells, capable of development and reproduction to an enormous extent in suitable nutrient environment such as beer.

This aerial dust with intermingled germs may be separated in various ways. The following methods have a practical significance:—1. By sedimentation. 2. By passing the supply of air through red-hot tubes. 3. By washing with water in various ways, as was adopted in the Galland malting process, and since used in pneumatic drains, ordinary maltings and breweries. 4. By direct filtration through beds of cotton-wool, or other material soaked with water or other medium.

The extent of possible aerial infection varies within wide limits, and is generally more prevalent in country districts, especially in those breweries which are situate in the neighborhood of orchards, etc. Although there is more smut

and dirt in towns, it has yet to be demonstrated that infection is more rife or the results more dangerous than in the country. One's experience seems to point to the infection of a town brewery being either within the brewery itself or localized to its immediate vicinity. In the country, where dusty roads exist, and particularly since the wonderful development of the motor traffic, the excessive disturbance of the atmosphere and its potential danger depends to a large extent upon the sedimentation which will occur before the air currents carry it to the brewery. The sweetness of the air after a shower or heavy rain indicates how readily the suspended matters are washed from a dust-laden atmosphere. The condition of the air gaining access to the brewing rooms largely accounts for the various disease changes which are so perplexing and troublesome to the brewer, whether it takes the form of turbidity, haziness, acidity, ropiness, or some detrimental change of flavor.

A "PENTOSASE" IN MALT. By J. L. Baker and H. E. Hulton in "Journal of the Chemical Society." These authors discuss the existence in malt of an enzyme capable of hydrolyzing the furfuroids of barley. The term "furfuroid" was originally adopted by Cross and Bevan as meaning any substance yielding considerable quantities of furfural on distillation with hydrochloric acid, so includes all the pentosans, both soluble and insoluble and probably other bodies existing in barley and classed as gums, amylans, etc. As regards the distribution of furfuroids, the authors found that the furfuroid content of the embryo is appreciably lower whilst the rootlets and husks of the malt are much higher than in the entire barley, and estimations of the furfural yielded by barley and malt made from the barley gave evidence of a small but distinct production of furfuroid from non-furfuroid matter during the malting process. Embryos excised from barley and grown in the dark on cane sugar solution increased both in weight and furfuroid content. When barley embryos were grown in the natural state attached to their own endosperms they showed on subsequent excision an increase in furfuroid content corresponding with the loss of the same material sustained by the residual endosperms. This is suggestive of enzyme action on insoluble furfuroids corresponding to the action of diastase on the starch of the endosperm and the conveyance of the soluble bodies to the embryos. As a quantitative measure of the activity of such a "pentosase" the authors measured the furfuroid matter passing into solution from barley when acted upon by green malt, that is malt at a time when the enzymes are presumably in a state of greatest activity. Control experiments of the green malt and barley separately were made alongside the mixture, and in each case (with an Oregon and a Californian barley) there was an appreciable increase in the amount of soluble furfuroid matter obtained from barley in the presence of green malt as compared with that dissolved by water alone. Again, mash-tun grains were thoroughly extracted with diastase and, in the cold, with acid and alkali, and then acted on at 30 deg. C. with an aqueous solution of the enzymes precipitated by alcohol from a green malt solution. In this case about 10 per cent. of the furfuroids in the grains were rendered soluble. Finally an aqueous extract of green malt, which had been ten days on the floor, was prepared and allowed to act on brewers' grains, purified as described, in varying quantities, and the reducing sugars obtained were proportionate in amount to the volume of malt extract employed. The authors are to be congratulated on bringing to light a new physiological reaction in the malting process which may yet prove to have a definite place in determining the quality of the malt.

* "Brewers' Gazette."

Ready Formed Soluble Carbohydrates and Diastase.*

Most maltsters rightly aim at keeping the ready formed sugars as low as possible consistent with satisfactory modification, as they have a shrewd suspicion that a high percentage of cold water soluble matter affords proof of a correspondingly high rate of wastage of dry matter during the malting process. Now it is pretty well established that, other things being equal, barleys of high nitrogen content tend to make malt of high enzymic activity. Whether this can be controlled to any appreciable extent by variations of the flooring or of the kilning process is more open to query. Those who have studied the question most would, we think, probably say the control of the diastatic activity of malt possible—with barleys of high nitrogen content and malted for their diastase and not their extract—was very small. In other words if we are malting for diastase the selection of barleys is of incomparably greater importance than any modification of the flooring process. But with regard to ready formed soluble carbohydrates we are on another different ground. The former is qualitative, the latter quantitative, and with the latter it is a question of going on growing the malt till most of the starch has been turned into soluble carbohydrate. Of course no one does this in practice, because as far as one knows there has never been any demand for malt with the highest possible amount of matter soluble in cold water, while there is a steady demand for diastase malt. As far as brewers are concerned, the demand is rather for malt with minimum formation of soluble carbohydrates compatible with sufficient modification.

The whole question is complicated by drying and curing. During drying a tremendous influence is exerted on the percentage of the soluble carbohydrate matter, according to the method adopted, and the construction of the kiln. That is, if we choose to dry very slowly and with the minimum of draught it is possible to raise the percentage of cold water soluble matter to a very great extent. But if we can dry fast it is possible to get the water expelled with a comparatively small increase of the proportion formed during the flooring process. And as most malt is made for brewers who do not want high proportions of cold water soluble matter by maltsters who realize that these are formed at the expense of weight of dry matter in malt, the tendency is to dry as fast as possible. So the proportion of ready formed soluble carbohydrates formed in any malt can be increased by suitable manipulation of flooring and drying, but cannot be affected by curing unless we deliberately caramelize the malt. But diastatic activity, while it is possibly susceptible of some slight regulation during flooring and drying, is extremely susceptible to the effect of heat during the curing process and could probably be regulated in any malt without much difficulty were it not for the demand of many brewers of malts of fairly low tint.

We do not mean to say that the soluble plant food formed can be kept to a low percentage by weight if the resulting malt is to be well modified, but that by certain methods of flooring and drying we can greatly increase that percentage.

The sort of barley which yields malt of high diastatic power seems to yield malts with high proportions of soluble carbohydrate matter.

Most maltsters have probably had experience of barleys from foreign countries which it is impossible to make into tender malt. These often form malts of high diastatic activity, and in the effort to make them into tender malt high percentage of ready formed soluble carbohydrates

are formed. Luckily we can probably adapt the malting process to insure very useful malt from our home barleys this year. This adaptation will probably consist in short and cool flooring, quick drying, and prolonged curing, and it should result not only in producing suitable malt, but also in curtailing malting loss very considerably.

Marketing a Quality Product.

By GEORGE P. BLAISE, Manager Bottling Department
American Brewing Co., New Orleans, La.

Brewing a "Quality" beer is a most important function of the brewmaster, but marketing it in these days of competition and keen selling efforts also requires the superlative degree of foresight and judgment.

To make a success of bottled "quality" beer the brewer must first acquire a prestige in his own city that will equal the prestige the nationally advertised beers enjoy there. Take for example, a brewery whose business has been largely confined to the keg delivery of a high grade beer. It has been decided to bottle the beer, distribute it locally and make the selling drive on a basis of "quality brew."

How shall the brewery go about it?

My experience has been that even prior to the erection of its new bottling plant, an extensive advertising campaign should be planned, featuring the beer as "quality" from start to finish and emphasizing the name of the brand and trade mark previously established.

During the first year the daily local papers should carry appeals direct to the public for their home trade.

Next, a model bottling plant should be built—the more accessible to the public, the better—typical of the most modern construction with sanitary arrangements carried to the extreme limit. This would occasion considerable comment and the frequently expressed opinion that the elaborate and expensive plant was an extravagance on the part of the brewery.

But this kind of talk is just what should be aroused, for it would naturally lead to the belief that the beer bottled there was much better than the average bottled beer.

New auto delivery trucks—distinctively and attractively painted, with chauffeurs dressed in white duck uniforms to follow out the thought of cleanliness at every stage—should be provided for delivering the bottled beer to the home trade.

Liberal display of signs throughout the city should feature the delivery truck with the uniformed driver, together with the sanitary fibre packing cases used.

As in the case of advertising our "Regal Beer," the campaign should exploit the model plant in the course of construction and the public invited to visit it.

Upon completion of our new building there were hundreds of visitors—from curiosity, if for nothing else. The white tiled walls, the great bottle washing and sterilizing machines, the model crowning and labeling apparatus, the employes in their neat white duck suits, and the spotless interior of our entire bottling plant created a most favorable impression upon the people. Everything moved along smoothly and in the light and cheery atmosphere the visitors watched the automatic conveyors rapidly handling a continuous stream of cases and bottles. In less time than thought possible the empties were washed, refilled with the "quality" beer, the bottles crowned, labeled and loaded in our auto delivery trucks for city delivery.

An advertising campaign as outlined will do the trick; the family trade, so important to the success of any brewery, will be gained and the "quality" beer soon become a rapid seller.—(The "Crown.")

* London "Brewing Trade Review."

Water the Chief Factor in the Development of Living Organisms.

The absolute necessity for water in the human organism is obvious to us all, but we may cite one small illustration of its effect on the development of human energies. As London expanded it first took the line of the gravel formations where shallow wells would readily yield a water supply; hence the older suburbs such as Kensington. But when water companies had got properly to work on a national or Government basis, the north and north-east of London, Tottenham and those districts which are on solid clay, at once began to spring up full of factories and houses, supporting a population far in excess of what the rainfall of the district might normally be expected to support.

As with the higher organisms so with the lower, only with plant life, dependent mainly on rainfall, there is another competitor always present in the soil itself. Soil has a strong affinity for water, and this water absorbed by it is not free nor at the disposal of living organisms; it is only when the affinity of the earth is satisfied and there is excess of moisture that the plant-cell can be nourished and reproduce itself. Where excess of water does not exist animal and vegetable life is suspended, as is observable in the vast wastes of the continents. Muntz mentions that this property of soils of fixing a certain amount of water leads to curious results, and gives as an instance a hectare of land sown with wheat; the land may contain half a million liters of water without the grain being able to take from this enormous quantity the mere 20 or 30 liters necessary to start germination.

This property of attracting water is shared by nearly all solid materials up to a point, the extent of surface exposed being one of the chief factors in this respect. A large lump of lead ore, for instance, may contain only about, say, a $\frac{1}{2}$ per cent. of moisture, but when ground up to powder will gradually absorb moisture from the air up to $2\frac{1}{2}$ per cent. With some of the common food materials, the cereals, the moisture absorption is much higher, and the chief point in connection with this is that until their minimum requirements are satisfied micro-organisms cannot grow on them. A sufficiently dry cereal will not go mouldy or "heat," that is, support bacterial growth, yet there may be 8 or 9 per cent. of water present. When, however, the moisture exceeds a certain point, and there is, say, 19 or 20 per cent. present, although the cereal may feel superficially dry, yet there may be just that excess which will permit of micro-organic development. Thus brewers' grains will keep well when properly dried, but if the moisture has not been sufficiently reduced, say, under 12 per cent., they may become the prey of bacteria and so become rotten or mouldy or even charred with heating.

The actual amount of moisture which is fixed by different food products so that they remain sound is not known, and in any case probably varies with what may be called the attacking organism. The pull of the latter at the water contained by the substance may be great or its requirements may be small. It is surprising how mould will find a foothold on apparently dry places, although further inspection will sometimes show that moisture supply is occasionally heavy but intermittent, *e. g.*, in the case of sweating walls. Also in the case of a gilly flower or a garden wall the moisture supply seems very minute. Yet in this case also there is sometimes a reason to be found in the enormous length of the root; some ordinary roots are capable of penetrating 14 or 15 feet in their search for moisture.

This competition for moisture is probably the explanation of a phenomenon which must have been observed by many scientific brewers. When ordinary plate cultures are made on Petri dishes the number of colonies developing will vary greatly according to conditions. Taking two average-sized Petri dishes of $3\frac{1}{4}$ inches diameter, and supposing one has 20 colonies on it and the other 250 colonies, then it is observable that the colonies which are numerous and much closer together are always smaller than where there are few colonies with plenty of room; this is the case although the colonies are from one growth of an organism. We are referring here more particularly to yeasts and non-liquefying bacteria. Of course with liquefying bacteria it is not possible to keep colonies apart, and in the case of moulds their spores are carried comparatively high into the air, and the branching takes place in the air also. But this fact that when colonies are numerous and close together they cannot grow big is in all probability due to the want of water. Not only does the gelatine cling to some, but there is also a certain amount of evaporation from the surface of each colony and possibly it cannot drag more water from the gelatine than sufficient to keep itself moist.

So far as the brewer is concerned the obvious lesson to be learnt from all this is that dryness reduces chances of infection. Dry floors, dry walls, dry plant when not in use, dry materials are all indicated; and general dryness is most easily attained by the circulation of plenty of fresh air. By all means protect worts from infected air, but good ventilation throughout the brewery makes for soundness by keeping walls and floors dry.—(London "Brewing Trade Review.")

DR. SIMON BARUCH, consultant to the Knickerbocker, Montefiore, Sea View, Tuberculosis, Bellevue and allied hospitals, New York, says: "The most active, energetic, and spirited members of the human race are addicted to the use of coffee, tea, cocoa, tobacco and other mild stimulants or sedatives as well as of alcohol, and the increasing use of drinks produced by fermentation and containing small quantities of alcohol, diluted, appears to offer an avenue of escape from the menace of distilled intoxicants." And he adds a word "in favor of the encouragement of the production of beer of low alcoholic percentage as a promising substitute for the manufacture and consumption of the dangerous products of distillation and the sale of such beer in places that would offer attractions not existing in the saloons of the day."

GLYCEROL YIELD IN ALCOHOLIC FERMENTATION, INCLUDING SEVERAL OBSERVATIONS ON "FAT-YEAST" AND "ALBUMIN-YEAST." By A. Kussowicz, in "Oestr. Chem. Ztg." The kind of yeast, nutrient salt, and sugar as well as the temperature and length of fermentation affect the glycerol yield in the alcoholic fermentation of sugar by yeast. Aeration, removal of alcohol and carbon dioxide, and the presence of free acids increase the yield. Use was made of fruit and vegetable refuse from kitchen and farm in the place of sugar. Several mold fungi produced a high fat per cent. of the mycelium when grown in 40 per cent. sugar solution with addition of $\text{Na}_2\text{S}_2\text{O}_8$. Characteristic drops of fat can be distinguished microscopically in the yeast itself. The author found that only when yeast was present in large quantity would it produce "yeast albumin" in a sugar solution containing ammonia salts. If mold fungi or mycoderma are mixed with the yeast its power of growth and fermentation are greatly increased. Traces of complex organic nitrogen compounds (beer wort) added to the nutrient solution have the same effect.

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

F. N. C. The question is rather too involved to be answered satisfactorily in the limited space at our command in these columns. It is not possible for us to state either a maximum or a minimum amount of glycerine formed during the fermentation of lager beer wort. Some experiments have shown (but we have not been able to verify their findings) that when the fermentation is at its height, there is a maximum formation of glycerine. We do not deny this hypothesis, but we think that it has no connection with the development of alcohol, and do not believe glycerine can be regarded as a direct fermentation product. It is more probably a transformation product of the yeast; and our own experiments have shown that the quantities produced in lager beer and ale wort vary with the character and vitality of the yeast used.

B. N. W. We have very carefully compared the two samples of hops and we are of the opinion that they may be fairly regarded as identical, allowance being made for deterioration by frequent handling of the sample marked "A." We believe them to be Pacific hops of 1916 crop, and while we cannot pronounce them "choice," there are no justifiable grounds for rejecting the delivery, which represents a perfectly satisfactory brewing material; well picked, well packed, free from moulds and parasites, with plenty of lupuline of good quality.

F. E. B. The sample of flaked material which you have sent to us marked "Sol" is apparently the brewing material called "Mazam." It contains a little less than 6 per cent. of moisture and yields nearly 98 per cent. of extract when mashed directly with malt at a temperature of 155 deg. F. It contains no protein and practically no fat. The sample marked "M. T." is ordinary Flaked Maize. It contains about 10 per cent. of moisture and yields 80.7 per cent. of extract when mashed with malt. It contains about 10 per cent. of insoluble albuminous matter and approximately 0.7 per cent. of fat. It is an entirely satisfactory brewing material and may be used in the mash tub direct without previous conversion.

W. F. B. There is no reason why you should boil the material so long, as we know of very many first-class brewers who boil it for only five minutes and then allow the mash to run down into the malt mash tun. The yields you are obtaining are not satisfactory. You ought to get at least 65 per cent. out of your malt, if it is like the sample you sent to us, and at least 91 per cent. out of the material used in the converter. Perhaps you are making your first mash too thick, and perhaps there is some defect in your method of sparging. The fault certainly does not lie with the material.

A. C. B. It seems very probable that by means of the apparatus you mention, the wort may be entirely collected in the aeration tub in about thirty minutes. The washing out of the hops is a matter of no difficulty, and we do not doubt the statement that at least one per cent. more beer will be collected in the fermenting tun than you are able to collect with your present methods. We have no precise information about the cost of the apparatus, but you may readily obtain it by writing to the manufacturer.

D. F. T. So far as we are informed, there are no developments in the regulations of the Federal Pure Food Act of 1906 which can in any way conflict with your present adjustment of brewing materials. No "standards" have yet been adopted or promulgated by the Secretary of Agriculture or by the Federal food authorities in charge of the execution of the Pure Food Law. Brewers are at perfect liberty to use with their barley malt any convenient proportion of other malted or unmalted or prepared cereals or cereal products. All that the Pure Food Law requires from brewers is that they make pure and wholesome beer. The use of preservatives is, of course, forbidden.

W. O. We have made a very careful examination of the two analyses of malts which you sent to us marked Nos. 1 and 2. We can see no reason why you should have any difficulty with the worts derived from these malts, unless your mashing temperatures are too high. The amount of ready-formed sugars in American malts is generally very considerably higher than given in your analyses. If we were working with these malts, we should use a conversion temperature not higher than 149 deg. to 150 deg. F., maintained for about 20 minutes. We might raise the temperature at the end of this time to about 154 deg. or 155 deg. F., and we should rest the mash at the final temperature for approximately one hour. We should sparge at 156 deg. to 158 deg. F.

A. M. E. The sample of water marked "A" is of satisfactory purity, from the chemical as well as from the biological standpoints, and you may use it without hesitation for all purposes in and about the brewery. The sample marked "B" is grossly contaminated by foreign organisms (wild yeasts and bacteria), which readily develop in beer wort and in finished beer. We strongly urge upon you not to use it for any of the purposes you mention, especially not for rinsing your trade packages.

R. R. V. We suggest that you call the attention of your architect to the desirability of removing all the ammonia coils from the ceiling of your fermenting room. We advised you to do this in the Spring of last year, but you appear to have ignored our suggestion. We also called your attention to the desirability of arranging for more perfect insulation, and to make some attempt at ventilation, which at the present time is entirely lacking. As to the most appropriate capacity for fermenting tuns there are no fixed rules, but in your particular case we should give preference to a capacity from 150 to 200 barrels.

A. F. Y. We have read your statement very carefully and have no criticism to make of your mashing process. Your fermentations as you describe them appear to us abnormal, especially in the rapid rise of temperature. Under proper conditions, if your fermenting room is kept uniformly at 3 deg. R., the temperature of the fermentation ought not to rise at any greater average speed than 0.7 deg. R. every 12 hours. Your beers should not be in the fermenting room for a longer period than 10 days. We advise you to consult with a brewers' laboratory.

F. W. A. We cannot see any rational cause for your complaint; the two samples marked "C" and "K" are practically the same as the sample marked "C. M." If, therefore, the last-named is the sample upon which your malt was purchased, and if the other two samples represent the last two deliveries on your contract, you have no ground for rejection. The moisture in the malts, given in the order already named, are: 3.86 per cent., 3.94 per cent., 4.01 per cent. The extracts are: 67.42 per cent., 67.60 per cent., 67.41 per cent. The color of the wort, according to Lovibond's Tintometer, $\frac{1}{2}$ inch cell, is 1.7 in all samples. The time for conversion is slightly less than 5 minutes in each case.

— THE —

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AND

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Who's Going to Starve?

The Government's crop estimate, published in Washington July 9th, shows that we are to have a surplus of 815,400,000 bushels of grain this year, as compared with the crop of 1916. The following table gives the official figures in detail:

	July, 1917. Bushels.	July, 1916. Bushels.
Wheat	678,000,000	640,000,000
Corn	3,124,000,000	2,583,000,000
Barley	214,000,000	181,000,000
Rye	56,100,000	47,400,000
Rice	34,400,000	40,700,000
Oats	1,453,000,000	1,252,000,000
Total	5,559,500,000	4,744,100,000

Of the 1916 crop a total of 349,415,508 bushels was exported, plus 120,695,213 pounds of rice and, as one bushel of rice weighs about 55 pounds, the grand total of exported grains amounted to 2,194,458 bushels.

The exports of the various grains in 1916 were:

Wheat	173,274,015
Corn	38,217,012
Rye	14,532,437
Barley	27,473,160
Oats	95,918,884
Rice	2,194,458

According to these figures, and keeping in mind that our surplus this year amounts to 815,400,000 bushels, we may export more than 1,200,000,000 bushels of grain without in any way endangering the standard of life of the American people, who were not starving in 1916, when we exported about 360,000,000 bushels of grain.

Why, then, should the people be starving in this country in 1917 if we retain for their nutrition as large a quantity of grain as in 1916? Particularly when the fact is considered that this year's potato crop, as the Government states, will be 452,000,000 bushels, against 285,000,000 bushels in 1916, while the 1917 crop of sweet potatoes is to be 82,200,000 bushels, as compared with 71,000,000 bushels in 1916, a total surplus of white and sweet potatoes of 178,200,000 bushels! We could export that enormous surplus, to which may be added 4,017,760 bushels exported in 1916, without reducing the daily ration of potatoes consumed by our people by a single ounce.

It must also be remembered that a large part of the food exports from the United States have been sold in neutral countries to feed the people and their armies in enemy countries. This is to be stopped and the many millions of bushels of grain thus saved may go to England, France, Italy and Russia—if the latter needs any of it all.

We have more than enough to eat and we can send our surplus to our friends. That will give them all they need.

The 60,000,000 to 70,000,000 bushels required by the American brewing industry in 1917-1918 are an altogether negligible quantity in solving the problem of feeding the nations now at war to make the world safe for democracy and to protect us and our descendants from the ravages of war in all future times.

To destroy the breweries of this country and to deprive the masses of the working American people of their accustomed national beverage, even temporarily, under the false pretense that there is not enough grain to make bread for them, would be the most atrocious economic crime ever perpetrated by any government in history!

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

"Some Hundreds of Telegrams."

Congressman Charles H. Randall of California, professional Prohibition politician, has submitted to the House of Representatives "Some Hundreds of Telegrams" he procured from a few men in almost every State of the Union, everyone of them advocating Prohibition during the war.

Analyzing the list of names submitted we find that these telegrams were signed by:

Governors and other politicians of Prohibition States.

College Professors.

Bank Presidents.

Presidents of Trusts and Manufacturing Concerns.

Grape Juice and Soda Water Manufacturers.

Professional agitators, among them a sprinkling of Socialists, Women Suffragists, Food Faddists and some other Cranks and Dreamers.

The principal officers of the Morgan Money Trust.

John D. Rockefeller, Jr.

Editors of Prohibition Papers.

Managers of Factories, Railroads, Mines, etc.

Owners of a few large Farms.

Parsons.

And with the telegrams from these few hundred men Mr. Randall sought to impress the House in favor of Nation-wide Prohibition. May be he has succeeded. The men in Congress can be easily impressed with anything if they see that, acting upon the effect of the intended impression, they may thereby gain a personal advantage.

But this we can tell them: The masses of the American people do not consider bankers, speculators, Morgans, Rockefellers, college professors, trust managers, and the other representatives of private interests paraded by Mr. Randall, to be the representatives of the wishes, needs and opinions of the American people, the producers of the wealth and power of this Nation. The Nation does *not* want Prohibition. It is opposed to it!

The only great country where prosperity will abound after the war is the United States and prosperity will, as it has always done, boom the brewing and wine industries as they have never been boomed before.

Prof. Irving Fisher, of Yale University, has discovered that, "Our health ideals are low, far lower than those of Germany, Japan, Switzerland or Sweden, and still lower than those of ancient Greece." In fact, "99 per cent. of our population is below par."

The learned professor must evidently be classified among those 99 deplorable per cent., for he is an avowed Prohibitionist and if his alleged statistics are reliable, the health ideals of Germany, Japan, Switzerland, Sweden and ancient Greece should be followed in this country by stopping all Prohibition agitation, the nations named by the Professor having undoubtedly attained their health ideals by drinking plenty of good wine, beer and other alcoholic beverages.

Incompetent and Unfit.

There is not a business man anywhere, here or abroad, who, for one moment, would tolerate in his employ a person who, by his daily action, would demonstrate that he or she cannot, or will not, perform the task for which such person had been engaged. Business, to be successful, requires competent employes.

The business of the United States Government has never been carried on successfully, when measured by the scientific and practical standard of private business. We see this exemplified every day. Legislative, administrative and judicial officials not only blunder, but deliberately do what should not be done by them. Waste, corruption, delay, procrastination and thousands of other evils are the natural result, not considering the hundreds of thousands of unnecessary and detrimental "laws" which are constantly made by incompetent, unfit and mercenary politicians in State Legislatures and Congress.

And, worst of it all: our Legislatures, State, national and municipal, swarm with lawyers, men of whom one might expect that they know the business for which they have been educated. We constantly witness the fact that laws, fresh from the legislative mills, are declared to be unconstitutional by the courts and, therefore, null and void.

But the most glaring example of this kind was perpetrated last month when fifty-two lawyers in the United States Senate voted for an amendment to the food control bill by which it was intended to empower the President to take over private property valued at hundreds of millions of dollars without just compensation, although such stupid and arbitrary action has been condemned by the courts ever since this Government has been founded, the constitution of the United States forbidding it in terms unmistakable.

And it was not until one levelheaded member of the Senate pointed out to his colleagues what every child that has committed to memory the fundamental law of this country knows, that property shall not be taken from any of us without just compensation, to be determined by legal process in the courts of the land.

That the idiotic step taken was at once retraced does not alter the case. The men who voted for that brutal amendment are incompetent and unfit for the business for which the people have elected them.

Of course it is for the people to thoroughly reform the system which makes a condition like this possible. The people must educate themselves politically. They must do away with the scandalous machinery by means of which incompetent and unfit politicians succeed in perpetuating themselves in public office.

It is to be hoped that this war and the horrid conditions it has created will materially accelerate the process of political education among the American people.

The experience through which the trade has gone during the last two months will surely cement and invigorate its organization until it has attained the political and economic power to which its vast interests entitle it.

Hysterical Exaggeration.

How is it that some people in Washington appear to believe that it is necessary to stimulate patriotism and a warlike spirit among the masses of the American people by telling them all sorts of ghost stories, if glaring falsehoods deserve that mild description of the thing?

Here we have Mr. Creel, a clever newspaper man who has been appointed as public censor of news, to prevent the enemy from learning military secrets. That is all right as far as it goes. But it is all wrong when Mr. Creel, elaborating upon a skeleton dispatch from a naval commander reporting that American troops have been safely landed in France, concocts a gruesome story according to which the warships convoying our transports were engaged in a furious and, of course, victorious battle with enemy submarines. The representative of the Associated Press, who accompanied the expedition, reports that he has not heard a shot being fired while he was on board, and the whole matter is now being sifted as to its actual facts by Congressional investigation.

Another instance of a systematic attempt to precipitate a mental and moral panic among the American people is exhibited, day after day, by Mr. Hoover, who was to be our food controller while we are at war. He has told us, time and again, that we are at the point of starvation and that we are surely going to starve unless Congress does his, Mr. Hoover's, bidding in regard to passing food control legislation.

Is the United States a kindergarten? Are we to be frightened into doing our duty by being told bugaboo stories?

This thing should be stopped at once. Men, occupying public position made necessary to carry on the business of war, should not be permitted to imitate the baneful example of Prohibition agitators who live by telling people ghost stories about the alleged evil influence produced upon the human body by the moderate consumption of alcoholic beverages.

The Liberty Loan was largely over-subscribed in every "wet" State and under-subscribed in most of the Prohibition territory. The same condition prevails in regard to recruiting for volunteers for the U. S. Army and Navy. Prohibition blights everything!

The political cowardice of Congressmen and U. S. Senators who voted for tacking Prohibition to the food control bill is best illustrated by the fact that the Prohibition vote in the United States has exceeded 250,000 during the last 41 years but three times by a few thousand votes.

Of the 687,000 soldiers drafted for the first conscript U. S. Army, about 190,000 are to be furnished by the so-called "dry" States, leaving nearly half a million as the quota for the "wet" ones, which not only represent the majority of the American people, but also its collective intelligence, progress, industry and wealth.

Why do Britons, Frenchmen, Belgians, Germans, Austrians, and Italians continue brewing beer and fermenting wine, although they have but very scant supplies of grains for feeding the masses living in their countries? Because their soldiers and sailors would not fight without their daily drinks, and the civilians at home would rebel if their countries were made "dry" by fool parsons and peanut politicians.

Days of Deliverance.

July 14th we celebrated, with the French, their 128th anniversary of storming the Bastille, where autocracy had immured the free thinkers and rebels that had been showing their countrymen the way to Liberty, Fraternity and Equality. And we shall continue celebrating that eternal fête-day of deliverance from the yoke of feudal slavery, just as we are to forever celebrate our own Fourth of July in remembrance of the fact that American men and women on that day declared that "all men are born equal" and that they are entitled to the "inalienable rights to life, liberty and the pursuit of happiness."

Still, these celebrations are only the forerunners of the day when the American people, tormented and tantalized by a small number of pestiferous insects, calling themselves "theologians," who are aided in their attempt to compel us to return to mediaeval conditions by unscrupulous and greedy politicians, will rise in their might and sweep from the soil of the United States forever the disgusting brood which has no right of existence in this enlightened era of civilization and progress.

The day of deliverance from Prohibition may come sooner or later—but come it will!

Skilled White Labor Needed in the South.—Headline.

Certainly! Prohibition driving the blacks from the region to which they are best adapted, they will not return until they know that they are to be really free. But will the whites be foolish enough to go where the blacks find conditions to be intolerable for any human beings, be they white, black, brown, yellow or red?

The barbarous slaughter of Southern negroes at East St. Louis—who is morally responsible for it? These poor beings were driven North by the stupidity and brutality of Southern politicians, who robbed the colored man of not only his economic and political liberty, but capped the climax by compelling him to live under the bestiality of drink Prohibition.

Prohibition pastors and Prohibition peanut politicians care not a continental for patriotism when it comes to opening their purses and fighting for political ideals. Their only care is their pocketbook which, made slender by progress and enlightenment, they hope to fill when they, as they foolishly hope, shall have conquered the power of the nation by inducing ignorami to vote for Prohibition.

So the American soldiers in France drank wine, champagne and other liquors given them by the French Government to celebrate Bastille Day. General Pershing, who gracefully accepted the gift, is a soldier and not a fool, who would blindly obey the commands of Prohibition schemers and their cowardly abettors in Congress. Soldiers need stimulants when in the trenches, and Pershing knows it. He acts for the best of his men, and his country—"law" or no "law."

The Postmaster General of the United States now wants to exclude newspapers from the mails which contain restaurant and hotel announcements that they serve table-d'hôte dinners with wine! Can boneheadedness in high public places of the "land of the free and the home of the brave" not go a little step further and also prohibit sending through the mails the Bible, and all the great works of literature praising wine and beer as the solace prepared by the gods for us weary travelers on this terrestrial sphere?

Prohibition Lobby Tricks Exposed.

The means and ways with which the Prohibitionists have been trying to accomplish their dastardly ends in the Capitol at Washington have at last been exposed, and when the tricks of their impudent and unscrupulous lobby had been dragged to the light, the "Reverends" and their corrupt political tools were summarily expelled from the floor and committee rooms of the House as well as the Senate.

One of their shameless deceptions which came to light in the investigation of that lobby consisted in forging petitions, letters and telegrams from alleged church congregations, the agents of the "Reverends," as is customary with individuals of that despicable business, generally multiplying themselves thousands of times, being in the habit of pestering not only members of Congress but also the President by writing or telegraphing them bulldozing threats unless they should do the bidding of these schemers. They always wrote their threatening messages pretending that they had been authorized to do so by congregations counting thousands of members.

It was high time that these pious frauds should have been driven out of business!

Depopulating "Dry" States.

The latest official estimates made by the United States Census Bureau show that the Prohibition States are rapidly decreasing in population.

Alabama's population is estimated to be 180,000 less than in 1910, Georgia 130,000 less, Kansas 60,000 less, Kentucky 260,000 less, South Carolina 130,000 less, Maine 90,000 less, Mississippi 297,000 less, North Carolina 50,000 less, Tennessee 160,000 less, Virginia 110,000 less. Every one of these States is suffering under the baneful yoke of Prohibition.

On the other hand, most extraordinary increases are reported. New York is credited with a 2,000,000 increase in the seven years, Pennsylvania with a growth of 1,300,000, Illinois with 1,500,000, Ohio with 1,200,000, Connecticut with 650,000, or a 60 per cent. increase. These are all "wet" States.

As we have not had a very large immigration from Europe during the greater part of the last seven years, it is reasonable to assume that the people who no longer found conditions of life tolerable in the "dry" States, have moved to the "wet" ones where they are at least permitted to enjoy life free from parson-led oppression.

Another species of lawlessness and evasion has been added to those already created by Prohibition, and that is that in "dry" States where citizens may import limited quantities of alcoholic beverages for personal use, young men under 21 will swear that they are of voting age so that they may get what they want. And when these very same boys had to register for conscription in the army, they swore that they are not yet 21, the consequence being that many of them have been corralled for perjury, and now they may thank their "pastors" and peanut politicians, who made these ridiculous State laws, for the nice fix in which they find themselves.

REPUDIATED BY LABOR'S LOFTY POSITION. "The man of labor has long since realized that he can never embrace the theory of Anti-Saloon legislation without an utter repudiation of those economic principles upon which organized labor is founded and in support of which organized labor advanced to its lofty position among the causes of humanity."—(J. Elmer Pfriem.)

Brewers "Doing Their Bit."

Belated reports show what brewers have done in helping the Government to carry on the war against the Imperial Government of Germany.

Liberty Bonds have been taken by:

The People's Brewing Co., Trenton, N. J.—\$1,000.

Anheuser-Busch Brewing Association, St. Louis—\$1,000,000.

Geo. Muehlebach Brewing Co., Kansas City, Mo.—\$2,000.

John Hauck Brewing Co., Cincinnati, Ohio—\$2,500.

Windisch-Muehlhauser Brewing Co., Cincinnati, Ohio—\$2,500.

Cleveland & Sandusky Brewing Co., Cleveland, Ohio—\$1,000.

Muskegon Brewing Co., Muskegon, Mich., employés—\$193.

New Orleans Brewing Co., New Orleans, La., stockholders and employés—\$105,400.

Dallas Brewery, Dallas, Tex.—\$10,000.

The employés of the Buckeye Brewing Co., Toledo, Ohio, have subscribed a large sum to the Liberty Loan, and the company's general manager, Herbert R. Wilson, and his wife together took \$55,000 worth of the bonds.

To the Red Cross Fund were contributed, by The Brewers' Protective Association, San Francisco—\$2,500.

August A. Busch, president of the Anheuser-Busch Brewing Association, has contributed \$100,000 to the Fund of the Red Cross.

The General Executive Board of the United Brewery Workers' International Unions has instructed its affiliated local unions, comprising over 100,000 members, "to issue withdrawal cards free of charge to such members who enlist in the service of the Government during the time of the present war, and whose membership books are in good standing at the time they leave their occupation in the industry." Local unions having sick and death benefits in connection with their local treasury, are advised to make some provision, so that they will not be obligated to pay sick or death benefits to anyone injured or killed during the present war, in order to avoid possible litigation in the future.

Analyzing the principal characteristic of slackers, who refuse to fight for their country or otherwise to "do their bit" in this war, one finds that they are exhibited almost exclusively by enemy foreigners, mentally unbalanced pacifists, pro-enemy Socialists and Anarchists, conscientious and "religious" objectors to killing, and, more than the rest of these, by scheming political pastors and political outcasts who consider the triumph of drink Prohibition of far greater importance than to make the world safe for democracy, protect Liberty from the aggressions of tyranny and uphold the Constitution of the United States.

"FALSE MORALITY, quack science and manufactured economics are the weapons in the hand of the enemy. We are little disposed at present to enumerate the fallacies of Prohibition and little know how others may view the question, but as for us, we would rather live in poverty, as free men, at liberty to choose our own diet, than dwell in tapestried halls as slaves to another's palate. Such is our stand, and such we believe is the stand of nearly one hundred million Americans; and we are of the firm conviction that we will never descend to the depths of Prohibition slavery as long as man is endowed with the power of 'eternal vigilance.'"—("The Other Side.")

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

Washington, D. C. Another month has gone by and Congress is still dillydallying with Prohibition and other amendments to the Food Control bill which, in all probability, will delay its passage for another week, or still more. So the trade will not know what the immediate future is to bring to it—disaster, or relief. The procrastination is becoming intolerable, but we may hope that all will still be well.

After nearly five weeks of bitter wrangling and acrimonious debate, the Senate, on Saturday, July 21st, passed the food control bill by a vote of 81 to 6, and at the time this report is written the measure is in the hands of the Senate and House conferees. As there are many points of difference between the two bodies there is every prospect that both sides will have to make material concessions before the bill is acceptable to both houses.

The bill as passed by the Senate gives the President authority over foods, feeds and fuel. It provides for a food board of three members instead of one. It authorizes federal fixing of coal prices, and provides a minimum guaranteed price of not less than \$2 a bushel for the best grade of wheat at primary markets.

The Senate section prohibiting the manufacture of distilled liquors during the war and directing the President to buy all distilled spirits at present in bond was substituted for the House "bone dry" provision, and is expected to be the chief subject of difficulty in conference.

According to Chairman Lever, of the House Committee on Agriculture, the hardest fight is bound to come on the prohibition amendment. Representative Webb, author of the House amendment, declares that he will insist on the adoption of the House provision in preference to the Senate amendment.

The prohibition matter will be ironed out in conference if at all possible; but there is still a chance that the agreement reached in conference might not be agreeable to one of the two houses, in which case a prolonged fight over this feature will be sure to result.

The bill as passed by the Senate forbids the use of foodstuffs in the distilling of alcoholic liquors and provides for the purchase by the Government of all bonded liquors. The Senate bill struck out the prohibition against beers and wines which was contained in the measure as it passed the House.

Submission to the States of a national prohibition amendment is looming up as a serious possibility at this session of Congress. Senator Sheppard, in charge of the amendment, expects to get an agreement for a vote on either August 2 or 3. If this is obtained Senator Sheppard and other dry leaders in the Senate predict that two-thirds of the Senators will vote for submission. Moreover, if the Senate votes for submission the dry forces in the House assert that they can carry it through that body, although the situation there is very close. For some days it has been apparent that the wet leaders in the Senate were getting ready to consent to a vote on the Sheppard measure. Senator Penrose intimated it strongly when the food control bill was under discussion. At a conference, July 24, of the anti-prohibition leaders it was decided not to offer further objections to fixing a time

for voting. This is considered "good politics," and the reasons which impelled these leaders to this decision are simple. In a word, they fear "bone dry" legislation as a war measure, and they believe that if a proposed amendment is submitted it will tend to satisfy many of the "dry" forces, and thus tend to defer and perhaps prevent "bone dry" legislation. On the other hand, it would take three-fourths of the States to ratify a prohibition amendment.

The vote on the Nation-wide Prohibition resolution is to be taken by the Senate August 1st, with the understanding that if both Houses pass it, the States are not to act upon it within the next six years.

The wet forces will undoubtedly be able indefinitely to prevent thirteen States from voting "dry," and so long as they can do this they can block national prohibition. In any event, ratification would require two or three years at the least, because some of the legislatures will not meet again until 1919.

The Sheppard amendment prohibits the manufacture and sale of liquors anywhere in the United States or its subdivisions. Twenty-three States have already gone "dry." For control of the thirteen more States needed to make up the thirty-six required for ratification there would be a tremendous struggle.

The President has issued an order, under the draft law, providing that no liquor may be sold within five miles of a military camp, except where the limits of an incorporated town or city are within five miles of such a camp, in which case the regulations shall not apply to any part of that town or city distant more than half a mile from the camp. Since there are many military camps either within the District of Columbia limits or in close proximity to the District line, a special ruling will be made for Washington, as it will be necessary to decide whether the Navy Yard, Marine Barracks, Washington Barracks, and other posts are "military camps" within the meaning of the law.

It is a question whether the District of Columbia is affected by the Reed "bone dry" amendment which became effective July 1st. The amendment unquestionably applies to shipments of liquor from Washington to "dry" States. But it is not clear that persons shipping liquor into Washington after November 1st next are liable to the law. In fact, lawyers generally agree that the language of the law, reading "any State or territory," does not apply to the District of Columbia, which is neither a State or a territory.

The District of Columbia prohibition bill does not prohibit the bringing of liquor into the District for personal use, and during the debates in Congress and discussion before committees it was generally admitted that the District is not to be "bone dry" after November 1st. The Reed amendment might have made the District bone dry by mentioning the national capitol specifically, but this was not done.

The investigation of the Anti-Saloon League's scandalous lobbying has revealed that it is not a sincere institution, but one owned and controlled by a few men who have high salaries and other advantages. Although working in the name of prohibition, it is declared to be opposed to straight-out prohibition; that it is an agent of the Standard

Oil Company in opposition to organized labor; that it maintains a system for the purpose of influencing men and conditions in both church and State; that it used the housewives of the nation and children in starting boycotts of trade in order to swing influential business men to support the immediate proposition it has in hand to work out in the community, State or Nation; that it fakes petitions to legislators and Congressmen, and that it makes threats to force prospective legislative officials to "bind themselves by secret pledges" to support the measures it undertakes.

Indianapolis, Ind. The bill to call a constitutional convention, recently passed by the Legislature of Indiana, has been declared by the Supreme Court of this State to be unconstitutional, the Legislature not having been authorized by a popular vote to pass a bill of that kind.

Des Moines, Iowa. There is a movement aiming at petitioning the Iowa Legislature to exempt beer and wine from Prohibition in this State.

Boston, Mass. The constitutional convention committee on liquor traffic has voted, 9 to 6, to recommend the adoption of a "bone dry" amendment to the constitution of Massachusetts providing for State-wide prohibition on and after May 1st, 1918.

Trenton, N. J. Governor Edge has announced that he was not back of the proposition of Senator Emerson L. Richards of Atlantic County for a State-wide vote on the local option question.

Harrisburg, Pa. The Committee on Law and Order of the lower house of the Pennsylvania Legislature has reported favorably a bill to so amend the Brooks license law that liquor licenses "may" be granted only by the Court of Quarter Sessions of the proper county, the number of licenses not to exceed in cities of the first class one to each 1,000 inhabitants; in cities of the second class, one for each 750 inhabitants; in cities of the third class, one for each 500 inhabitants; in boroughs, towns and townships, one for the first 500 inhabitants or any fractional part thereof, and one for each subsequent 500 inhabitants. The number of licenses above provided for shall be ascertained and determined in each instance from the last preceding decennial census of the United States. A guarantee to license holders of a continuance of their license is given in the following paragraph, which reads: "In the year 1918 and every year thereafter all licenses then in existence shall be renewable as of course by the issuance of a new license by the clerk of the courts upon the filing of a petition and bond, as hereinafter provided, in the case of new licenses, and upon the payment of the annual license fee as now provided by law. It is further provided that in all cities, boroughs, towns and townships where the number of licenses now exceeds the number herein provided for all licenses therein shall be renewable, but no licenses shall be granted to applicants for new places until the number of existing licenses shall be reduced to a number less than herein provided."

The bill prohibiting free lunches or the giving of "anything of value as a premium or present to induce the purchase of liquor or for any other purpose whatsoever in connection with the purchase of liquor" was passed in both houses.

Madison, Wis. By a vote of 37 to 34 the Assembly of the Wisconsin Legislature has engrossed the bill providing that breweries located in "dry" territory of this State be permitted to produce beer for sale in "wet" places.

Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc., Action by Civic Bodies and Others For or Against Prohibition.

Alabama. The Supreme Court of Alabama has ruled that it is legal for any person to load an automobile with

liquor, cross the State line into Alabama and continue into another State.

Akansas. It has been decided that the Arkansas Prohibition law will not be violated if a man who carries "liquor" in his suitcase, satchel or carpet bag bulletins the fact plainly on the outside of the receptacle. For instance, visitors to this State who take their liquid refreshments along with them are to mark their baggage "Handle With Care—Wine," or "Ten Qts. Beer Inside," or "Four Gal. Old Rye—Please Do Not Disturb," or in some such way.

California. For the purpose of preventing the sale of liquor to soldiers near the Presidio, the police of San Francisco have taken a census to find out which of the grocers, delicatessen people, etc., are selling liquor within the prohibited zone, and the City Council has passed an ordinance which limits the hours when the respective stores may be open to from 6 a. m. to 7 p. m., except Saturday nights, when they can remain open until 9 p. m. All must be closed Sunday. One provision of the ordinance is objected to by the grocers, as it provides that aliens shall not be granted licenses to sell sealed alcoholic goods. It does not, however, interfere with aliens who now possess permits from the Police Commissioners. The ordinance merely provides that, in the future, aliens shall not engage in the business of selling whiskey and other ardent spirits by the package.

The Vallejo saloonists have agreed to close from 6 p. m. on Sunday night to 8 o'clock Monday morning, and from midnight on week days to 8 each morning. They also desire that the early hours apply to road houses in that vicinity.

Florida. Under the new Florida law it now requires a petition for the sale of liquor in a precinct to be signed by a majority of negroes and a majority of white citizens in the precinct, whereas, heretofore, only a majority of the registered voters has been necessary. The law's constitutionality is being tested in the courts by an applicant in Jacksonville to whom a license has been refused because his petition was not signed by a majority of the negroes in his precinct.

Georgia. It is not easy for the police in Savannah to enforce the Prohibition law of this State since Recorder Schwarz has dismissed charges against a woman who had barricaded herself in her home and shot at policemen who were about to search her place for liquor, the Recorder holding that the woman had an inalienable right to resist would-be intruders.

About 20,000 gallons of wine left to the University of Georgia by the will of the late Judson L. Hand is causing the trustees quite a bit of worry. Under the "bone-dry" law of this State it is unlawful to keep the wine, and it is equally unlawful to sell it. It is too much to drink, and it is a misdemeanor to give it away. To complicate the situation, the university needs the \$40,000 the wine would bring. The trustees are trying to solve the problem, but it is likely the Legislature will be asked to enact a special law to govern the case.

Illinois. Many of the cities in the "dry" territory of Illinois are compelled to raise their tax-rate, as they are no longer able to pay the expenses of their respective municipal governments.

After two years of prohibition Lebanon has again licensed saloons. The court threw out the "dry" petition after it was too late to file another.

Fifty Kenosha saloonkeepers have announced that they will refuse to pay license fees unless the city council promises to rebate fees if Congress votes the nation "bone-dry."

August A. Busch, president of the Anheuser-Busch Brewing Association, St. Louis, has written to Attorney General

Brundage of Illinois, that his association is ready at all times to aid in the enforcement of laws in Illinois which relate to the closing of saloons on Sunday.

Indiana. The politicians who, by trickery, succeeded in having Prohibition saddled upon Indiana by legislative action have been beaten in their attempt to give women the right to vote for delegates to the constitutional convention which, they hoped, would be overwhelmingly in favor of Prohibition if women were to have the suffrage. The Supreme Court has said that, so far, women cannot be permitted to vote in this State.

The local option election by which Wheatfield was to be made "dry" has been declared null and void because women were allowed to go to the polls.

Iowa. Mayor George Freeman, of McGregor, was recently convicted of having smuggled whiskey into Iowa; he had to pay a fine of \$400 and also resign from his office.

Searching a farm house for stolen property, Sheriff Cremer of Wapello county recently unearthed an illicit distillery in the cellar at the home of William Custer, three miles north of Ottumwa. Custer was sent to jail, but he refused to explain the presence of the still in his possession.

Kentucky. William J. Bryan is stumping Kentucky for Prohibition under the auspices of an unsavory clique calling themselves "The Democratic Forward League."

Charles J. Cronan, candidate for Mayor of Louisville, is an outspoken opponent of Prohibition, saying that Louisville could not pay its corporate expenses if saloons were no longer licensed in the city.

Louisiana. Over the question of using policemen in civilian clothes for the enforcement of the Sunday closing of saloons in New Orleans, Mayor Behrman and Commissioner Newman have quarreled, with the result that Newman resigned from his office. The Mayor insists that he will enforce the law, but not with officers not wearing their uniforms.

Maine. Instead of paying a fine, anyone violating the Maine Prohibition law is henceforth to be sent to jail, as the new enforcement law, operative since July 7th, provides. But are there jails enough in this jolly State—and enough policemen, willing to enforce the new fool law?

Michigan. Retailers in Detroit and other Michigan cities have of late been arrested charged with having sold "near beer" containing alcohol.

Minnesota. An organized effort is being made by the brewers of Minnesota to assist the State Public Safety Commission in enforcing the law against the illegal sale of liquor. The committee engaged in this task consists of William Hamm, St. Paul, chairman; Jacob Kunz and John Gluek, Minneapolis; Fred Schuster, Rochester; John Hoch, Duluth; John Dietz, Winona; Otto Memer, St. Paul; Albert Bierbauer, Mankato; L. J. Peters, Cold Springs; Charles Hauenstein, New Ulm, and Robert Seng, St. Paul. Most of the breweries in the State are now delivering only a limited quantity of beer to customers for the sake of saving grain for food purposes.

It has also been agreed by the organized trade to stop all shipments of "liquor" to International Falls, Puposky, Nebish, Bemidji and Kelliher.

Missouri. When it first became known in this State that Congress was to make the nation "dry" by manipulating the Food Control bill, there was general indignation, particularly in St. Louis, where members of the trade stated publicly that, if their business and the existence of several hundred thousand persons in Missouri were thus destroyed, there would be a social revolution.

In St. Louis there are now only 1,990 saloons, while their

number in February last was 2,188, licensees finding that their business is growing less profitable all the time.

The Supreme Court of the United States, in refusing to review proceedings growing out of indictments on charges of shipping beer to fictitious persons, upheld the ruling of the Missouri Federal Courts that the Webb-Kenyon law has not repealed the Federal statute, which makes it a punishable offense to ship liquors in interstate commerce to a fictitious person. The defendants will, therefore, be required to stand trial in the Missouri Federal Court.

Nebraska. The investigation of "near-beer" sold in Nebraska, which has been made by State Chemist Frisbee, has disclosed that among about forty samples none so far have run over the one-half of 1 per cent. limit set by the new law for alcoholic strength. One or two samples came close to the mark, but so far none of the drinks manufactured in the State have exceeded the limit on alcohol.

New Jersey. Hoboken saloon men, army orders, municipality and brewers were in a mixup last month over the question when to close at night. The army commander wanted 10 o'clock to be the closing hour, the brewers said eleven o'clock and the Hoboken City Commission adopted an ordinance providing that saloons may be opened at 6 A. M. and closed at midnight. What the army authorities are now going to do remains to be seen; they have threatened to close the saloons peremptorily unless their order be obeyed. The whole trouble is due to the fact that the German steamship piers are now a "military reserve."

Arrests of hotelkeepers are almost a daily occurrence in Asbury Park, where "blind pigs" abound in spite of Prohibition that does not prohibit.

New York. Local option is responsible for a decrease in the State's revenue, according to the report of State Comptroller Travis, for the fiscal year ending June 30th. The excise receipts the past year were \$12,685,228.22, compared with \$12,721,695.52 the preceding year, a decrease of \$36,467.30. Of the 932 towns in the counties of New York, subject to the operation of the local option law during the past year, more than 500 are now "dry," and about 300 have full license. The increase in "dry" territory has resulted in the falling off of excise revenue to the State.

The National Investor's Protective League, 90 Nassau Street, New York, has issued a memorial to Congress declaring that Prohibition tacked onto the Food Control bill will divide the country into two hostile camps, the "wets" and the "drys," and this at a time when absolute unity of sentiment and action is necessary for success. It will destroy many billions of invested capital for which no adequate compensation is to be made, thus creating bitterness and loss of faith in our institutions. It will cause the loss of at least a half billion dollars of revenue: (a) In taxes. (b) In loss of personal and corporate income tax. (c) In State revenue now collected in form of licenses. (d) In county revenue now collected in form of personal taxes of corporations and individuals. To this must be added loss in assessed valuation of real estate used in the various liquor industries and allied businesses. It will disarrange business conditions, reduce rental values of real estate, which loss in turn will fall on the shoulders of the poor by increasing the rents of their homes. It will burden all other industries with the tax lost through this law. It will stir up disloyalty in those who look upon the operation of this law as confiscation. It will put the Prohibitionists on the defensive to explain why they limited the use of food and fodder grain to alcoholic beverages, when non-alcoholic beverages made from the same materials will consume as much, if not more, food and fodder grain. It will cause the export of our grain to England, there to be used in the manufacture of alco-

holic beverages, and these in turn will be imported by us for home consumption, but at a cost at least twenty times higher than the domestic article would have cost; and the tariff which the Government will collect on the importations will not offset the direct revenue loss to the country. It will produce a reaction when the war is over which will make drink conditions worse than those which the Prohibitionists are trying to remedy. It will create doubt in the minds of our people as to the justice and right of our Democracy. It will bring the country to the verge of economic ruin, and at a time when we need every ounce of economic strength. It will make us the only prohibition country engaged in this world war. None of our allies have prohibition. It will not make for better soldiers, for the best soldiers—or as good as any—the Germans, are furnished with beer, as are the English, while France supplies its soldiers with wine. Any good which prohibition will cause by bettering social conditions through enforced abstinence, will be more than offset by the untold mischief the law will cause in our social and economic conditions.

Samuel Gompers, president of the American Federation of Labor, who was in New York on business connected with strikes in that city, when interviewed in regard to the question whether he favored beer and wine to be exempted from the provisions of the Food Control bill as passed by the House of Representatives, replied: "I am opposed to prohibiting beer and wine for several reasons. First there are one million or more men now employed in the beer and light wine industries. They are men generally beyond the military age. They cannot acquire new trades at their time of life. They have some fair conditions for employment, and many of them have equities in their homes. In time they might make a living in some other occupation, such as common labor, but during the mean time everything they have would be lost. Then, we have ten millions of our people of German birth or extraction whose regular habits of life involve a drink of beer. It is our purpose to try to placate these people, even if their sympathies are with the fatherland with which we are at war. Imagine the disruption of their social life this would bring. The third reason is a large part of the American people indulge in a glass of beer. It is the workman's drink at the noon hour with the rough sandwich he brings from his home. It may not do him any good, but you cannot make a total abstainer out of him by law in a day. To raise the prohibition question at this time is ill advised. These fanatics are taking advantage of the crisis to impress their fad, be it good or bad, on an unwilling nation. The idea of suggesting it at this time when we want the good will of these classes! They may abolish whiskey and spirits. It is probably a good thing, but let them put the prohibition or modification of the use of beers and light wines in the hands of the President. I deny the right of anybody to assume the functions properly belonging to the working people. The working people have their right to beer and light wines. The working people should stand united in defense of their rights. The labor leaders of this country should be on tip-toe so that they may not be put out of business."

At a special meeting of the Brooklyn Chamber of Commerce, Henry L. Liebmann, vice-president of Obermeyer & Liebmann, made a strong appeal to the members to use their influence to secure the defeat of the "bone-dry" rider on the food control bill. "If President Wilson or Mr. Hoover should decide that it would be to the best interests of the country to stop the manufacture of beer, I would close my brewery at a moment's notice," he asserted. "If the Government loses the \$750,000,000 annual revenue which it obtains out of beer and liquor, it has to be gotten some other

way. It would necessitate a tripling of the income tax to secure this vast sum. I want prohibition to stand on its own merits, and not attempt to slip through as a rider on the national food bill."

Many retailers continue violating the law prohibiting the sale of intoxicants to soldiers and sailors in uniform and arrests are almost a daily occurrence in many cities, detectives in army and navy uniforms visiting saloons and ordering drinks.

The organized saloonmen of New York and Brooklyn have agreed to abolish free lunches.

The management of the Yonkers Brewery, Yonkers, has asked its friends to write to the U. S. Senators of this State and to the Congressmen from Westchester County, protesting against Prohibition legislation in Congress. The brewery states that the "dry" cause injected into the Food Control bill is designated to put it out of business.

State Health Commissioner Dr. Herbert M. Biggs again makes himself ridiculous by publishing exaggerated "statistics," intended to show that alcohol "increases crime," and advising that "everything should be done to make the consumption of intoxicants as difficult as possible."

North Dakota. The North Dakota "bone-dry" law and partial enfranchisement for women became operative in this State on the first of last month.

Carrying liquor into "dry" States, though intended only for personal consumption and not for sale, is interstate commerce and a violation of the Federal "bone-dry" law, according to an opinion handed down by United States Judge Charles F. Amidon, said to be the first dealing with the subject.

Ohio. County and city authorities in Ohio are opposed to sudden Prohibition through the Food Control bill, as it would disarrange financial, social and economic conditions here and in all other States.

Ohio brewers and brewmasters are making arrangements for the manufacture of "near beer," which is to be produced in the present breweries, should Congress vote for nationwide Prohibition. In Cleveland and Cincinnati temporary brewers' schools have been established where lectures upon making "near beer" are being given.

Pennsylvania. The Philadelphia Chamber of Commerce has adopted resolutions declaring that "national necessities growing out of the war should not be made a pretext for promoting special measures which are not in conformity with public demands and the wisdom of which must be regarded as debatable; that no advantage will result from prohibitory legislation, except in so far as it is supported by public opinion; that industries which have been long legalized by the government and which represent a trade which has been especially licensed by the government, should not be destroyed or practically confiscated, without compensation for the resulting losses; that the consideration of measures relating or prohibiting the sale of beverages should be as far as possible removed from that of emergency measures growing out of the war; that no excise legislation should be enacted which does not consider carefully and provide a solution for the loss of employment of a great number of workmen, the injury to real estate values and the placing of new burdens of national, state and municipal taxation which may result therefrom."

Porto Rico. On July 17th about 100,000 votes were cast for Prohibition, and about 62,000 against. Fifty-one municipalities voted for the prohibition measure as compared with twenty-one opposed to it. San Juan's vote for prohibition was 5,117 for and 2,255 against, and all the other large cities were strongly on the dry side.

South Dakota. This State became dry last month under

its most drastic Prohibition law. Liquor may now be brought into South Dakota only for scientific, medicinal and sacramental purposes, the penalties for violators ranging from a maximum fine of \$1,000 and six months in jail for first offenders, to two years in the penitentiary and a fine of \$2,000 for those who err two or more times. This is the second time that South Dakota has been dry. When admitted to the Union, in 1889, the State constitution carried a prohibition section. This was repealed seven years later, but last November the voters approved its reinsertion and the 1917 Legislature enacted the laws for its enforcement.

Texas. The organized saloonmen of San Antonio have pledged themselves to strictly uphold all Federal, State and local "liquor" laws.

Washington. Policemen have demolished the renovated cabaret and dance hall of the Cecil Hotel at Seattle, after a detective had induced a waiter to sell him a bottle of whiskey.

West Virginia. This State will not be "bone dry" under provisions of the Reed constitutional amendment, if enforcement of the federal statute is left to State prohibition officials. State Prohibition Commissioner Hallahan on receipt of word that the Department of Justice had construed the Reed amendment as operating to render void the so-called "quart-a-month" law enacted by the last West Virginia legislature has declared: "The legislature has defined the prohibition policy of this State—that is, to permit the bringing into the State for personal use as much as one quart of intoxicating liquor within a period of thirty days," said Hallahan. "The State prohibition department will co-operate actively with the federal authorities in every particular where there has been violation of our State law. As to the enforcement of the Reed amendment, which has been held to bar the importation of one quart a month, that duty should seem to lie wholly with federal agents."

West Virginia. Mail order houses in "wet" States are shipping plenty of whiskey, etc., into West Virginia, always labeled: "For medicinal, scientific or sacramental use."

Wisconsin. Answering questions regarding the sale of liquor in Ft. Atkinson, which, like Madison, went into the "dry" column on July 1st, Assistant Attorney General Messerschmidt has held that "a brewery is not authorized to sell beer within the municipality in which it is located to consumers without a license. Regarding the warehouse proposition Mr. Messerschmidt held: "If the brewery located in your city has a warehouse station in some town or village which is wet, and if a license has been secured for the warehouse station, then liquor may be sold from said station, lawfully, provided that the title to the liquor passes from the seller to the purchaser at the warehouse station, for which a license is held. Under the law of sales, the sale must take place at the license station." Mr. Messerschmidt gave the above answer to the question as to whether the Fort Atkinson brewery can ship beer out of the city to a warehouse station and sell from there directly to the consumer. To the question as to whether the brewery can manufacture beer within the city of Fort Atkinson after July 1st Mr. Messerschmidt gave the following reply: "There is no law prohibiting the manufacture of beer in a dry city and this question must be answered in the affirmative." The assistant attorney general answered in the negative the question as to whether the brewery can sell directly to the consumer within the city. "A brewery is not authorized to sell beer within the municipality in which it is located to consumers without a license."

The Wisconsin Manufacturer's Association has adopted a protest against Prohibition to be saddled upon the country through the Food Control bill, stating: "Concurrence in the

house amendment to the Food Control bill prohibiting the use of grain in the brewing of malt beverages by the Senate bill will prove destructive of the malting and brewing industry of this State. Its serious effect upon the finances of municipalities of the State is apparent. It will throw thousands out of employment on a moment's notice and render idle and unproductive millions of capital. The loss nationally and locally will far exceed any gain in food values, as much of the grains used are returned to farmers and used by them in furthering the dairy industry. The barley used is of little value for human food."

Mexico. By a decree which became effective July 8th the manufacture and sale of intoxicating liquor in the State of Chihuahua is forbidden under severe penalties. The decree was issued under orders from President Carranza and is considered a war measure to stamp out banditry and revolution in the border States. On July 9th the decree was modified to the effect that saloons must close at half-past six in the evening on Sundays and holidays.

The Treasury Department of Mexico has issued a decree fixing a stamp tax on closed bottles containing alcoholic beverages. Some of the taxes prescribed are as follows: Domestic manufacture—Quart bottles of alcoholic drinks, 10 centavos per bottle; quart bottles of wine, 5 centavos; quart bottles of beer, 5 centavos. Imported—quart bottles of alcoholic drinks, 20 centavos per bottle; quart bottles of wines, 10 centavos; quart bottles of sparkling wines, 30 centavos; quart bottles of beer, 10 centavos. The stamps are to be placed on the domestic product by the manufacturer or dealer who bottles the product, and on the imported product by the dealer making the importation.

WHERE DID IT GO? Switzerland, in 1914, imported from the United States Barley valued at \$398, in 1915, at \$1,101,750; Malt, in 1914, none; in 1915, for \$114,965.

WHAT IS MORE IMPORTANT THAN PROHIBITION. "As a representative of labor on this floor, I am proud to stand in unison with my old associate and co-worker, Samuel Gompers, of the American Federation of Labor, and state with added emphasis that it would be far better, far more wise, more moral, and a thousand times more desirable to take the position of organized labor on this Prohibition question and insist on: (a) Increasing wages; (b) Shorter hours of work; (c) More leisure."—(Michael J. Gill, M. C., Missouri.)

"A SCAB - ENCOURAGING INSTITUTION. Anti-Saloon League spell-binders seldom allow a chance to pass without advising their auditors that the Anti-Saloon League is so much in love with the workingmen of America that they want to save them from their alleged dire effects of the open legalized saloon. We have often wondered why "The Church in Action" never took a day off and endeavored to influence the Methodist Book Concern to unionize its printing plant, which has been for years a scab-encouraging institution?"—(Baltimore "Labor Leader.")

"PROHIBITION IS NOT THE PANACEA for all social ailments. As long as some men can think of good, there will be twice as many to think of evil. If we never had rum or beer to get drunk on, someone would have found something just as good, or bad, and if we don't have alcohol to get drunk on in this age of paramount science, someone will discover a concoction that will produce a like effect, and ninety-nine chances out of a hundred are that it will be more deleterious to the health of this generation and every one to follow. Stimulants are as inseparable from this age of frenzied living as food is from sustenance."—(Daniel A. Levy.)

Press Comment Upon the Proposed Outrage.

From the mass of editorials in the newspapers of this country upon the action of Congressmen and Senators in regard to depriving the American people of their beer and wine under the false pretense that this would be necessary to win the war for Democracy and Liberty, we submit to our readers the following few selected at random to show that public opinion appears to be thoroughly aroused:

New York World:

In rough political fights such as we have here to consider, which some of the well-financed buttonholers engaged in the Prohibition movement like to call "moral conflicts," millions of industrious and virtuous people whose elementary liberties are assailed are never heard from. If Congress timidly abandons its true representative functions and listens only to the voice of self-proclaimed righteousness, up to its ears in politics, and dirty politics, we are on the road to a mastery such as no republic can survive. If the time ever comes when morality in the United States must depend upon the work at Washington of a pretentious lobby, pious and paid, the Declaration and the Constitution will have been written in vain.

War compels Governments to employ power arbitrarily at times, but never justifiably except for national defense. To misuse this sovereign authority for the promotion of a social reform never agreed upon would be national betrayal.

Religious, ethical and social forces, long at variance in many ways, are in harmony to-day, in most cases, in support of national rights and interests. Only the Prohibitionists insist that everything else must stop until their particular demands are granted.

The lobby responsible for this shocking diversion of energy at a critical time makes many pretensions to morality, but it is as truly in the service of the Kaiser as any of his helmeted battalions. If food is to win this war, the men who hinder the production, conservation and distribution of food by provoking dissension have much to answer for. The millions secretly expended in the United States by Prussian propagandists brought no such return as this.

Taking all the circumstances into consideration—the war, the sacrifice it entails, the state of public opinion, the responsibilities of the Government and the crisis that confronts free institutions—we doubt if Congress ever gave serious consideration to any other measure so iniquitous and shameful as this prohibition rider.

New York Times:

So the prohibitionists now refuse to listen to reason. In mad exultation over their success in the House, they resolve that the Food Administration bill shall carry the prohibition amendment through the Senate. They are deaf to every appeal, to every remonstrance, yet their insistence delays and perhaps endangers the enactment of a measure that the Administration and the people feel to be essential for the prosecution of the war. They have embarked upon this adventure in the spirit customarily exhibited by radicals; their own cause is all-important, they put it above everything else, they convict themselves of being indifferent to what happens to the nation in the war if only they can force prohibition upon the country.

The amendment to the Food Administration bill in the shape it assumed Saturday evening is a monstrous and shameful excrescence on a measure originally designed only to conserve the food supply of the United States in the period of war. It cannot stand.

New York Herald:

While the Senate has not finally disposed of the prohibi-

tion feature of the Food Control bill, the vote by which the Myers amendment was defeated would seem decisive enough to save beers and light wines from the fate of distilled spirits. The country is not yet "bone dry." It has not been determined, however, whether Congress will lay down a hard and fast law for the milder beverages which make for temperance in drink or will leave their fate in the hands of the President.

At a time when one of the greatest problems confronting the government is that of revenue, there is neither wisdom nor patriotism in ruthlessly confiscating property and destroying revenue. There is good ground for the fear expressed by Senator Underwood that legislation which shows such disregard for property rights and so little respect for the country's needs may plunge the country into financial panic. It is unwise, uncalled for and, therefore, wholly unjustified.

The Food bill already has been delayed too long by a Congress that seems afraid to tell the prohibitionists that even a moral issue can be fought in an unmoral way. By continuing their fight they may eventually keep liquor away from the rapidly decreasing army of drinkers, but the Kaiser himself could devise no better means of handicapping millions of Americans than by depriving them of proper sustenance and so breeding strikes, food riots and other disturbances.

Brooklyn Citizen:

Hardly anything, indeed, could be less in accordance with the dictates of good sense than to do, at a time like the present, what the Prohibitionists proposed. Not only the requirements of revenue, but the requirements of both social and military life forbade any such change as was demanded.

New York Evening Mail:

Those who are fighting for prohibiting the manufacture of wine and beer exaggerate both the drain which they cause upon our grain supply and the harm which comes from their use. France is a land of wine; Germany is a land of beer. Neither is a land of drunkards. It is the whiskey drinking land and the whiskey drinking people who supply drunkards.

The prohibition of the use of beer among the working classes would cause the country far more real hardship and discontent than would be brought about by abolishing the importation of tea and coffee.

New York Morning Telegraph:

There is entirely too much talk going on about prohibition. One would think by the way some persons rave in language vociferous and sometimes incoherent that it is the only matter worth discussing during the preparations going on for the war against the pirates of Europe.

Some say too much grain is used in the manufacture of beer and liquor, while others declare too many men are employed in the manufacture of whiskey and beer and wine.

No harm is done to the nation as a whole by the liquor that is drunk. Laws may be passed, manufacture and sale of liquors of all description may be prohibited; but the consumption of beer and hard liquors still will go on. "The wild asses quench their thirst," says the Psalmist.

New York Globe:

It is obvious that the injection of the prohibition question has further postponed the passage of the bill. It is difficult, in view of the pronounced difference of opinion and the fact that the country has given no mandate for national prohibition, to expect so momentous a change to

be made without stubborn opposition. Taking all things into consideration, it would seem as if those who are behind the "dry" amendment, although pretending to put the war first, are putting something else first and are taking advantage of the situation to seek to do indirectly that which should be done directly, after the people, in the good old democratic way, have declared their will.

Washington, D. C., Post:

This Prohibition amendment means that in many important industries there will be made necessary a great and disturbing change in the personal habits of workmen who are accustomed to the daily use of a temperate beverage and who have become accustomed to rely upon their supply of beer as a part of their daily food and source of energy.

It means that with the discontinuance of the manufacture of beer those accustomed to use a temperate beverage of small alcoholic content will have no other choice than the use of distilled liquors, whiskey, brandy and rum, of which there is a storehouse stock of three hundred million gallons, or enough to last more than three years under normal consumption.

Buffalo, N. Y., Commercial:

Prohibition must stand by itself. To bring it about by incorporating a tricky amendment in a measure of quite a different character is imposing upon the people something that they have not demanded in any fair and above-board campaign.

Boston, Mass., Journal:

Prohibition and food control are as distinct as suffrage and the migratory bird law. People who are not deceived by the propaganda of professional prohibitionists well know that the amount of foodstuffs used in the manufacture of liquor is insignificant. Food control is a subject for legislation; prohibition is a subject for legislation; but they are distinct subjects and should be so treated.

New York Journal of Commerce:

Those men in Congress and out of it who are seeking to bring the terrible exigencies of the time caused by the war to bear in order to force upon this country a policy of prohibiting and preventing all production and sale of what are called alcoholic beverages, are exhibiting in the political world a spirit of intolerance such as prevailed in the religious world in the dark ages.

Philadelphia Public Ledger:

This project of legislation is illtimed and out of place, because it raises a bitterly controversial question at a moment when the utmost unity should prevail, and because it is certain to delay action which has already been too long delayed. The passage of a "bone-dry" prohibition law at this moment, either as a rider to the food control bill or as an independent project of legislation, would create new difficulties for the government, already put to extremity to find the revenues for the conduct of a war the magnitude of which has no parallel in history. It would intensify a feeling of resentment among that large section of the population who look upon prohibitory legislation as an infringement of their liberty, and would almost certainly be made the pretext for the instigation of sedition among people now disposed to be loyal to the United States.

St. Louis Globe-Democrat:

The President is right in the position he is reported to have taken in relation to the prohibition rider put on the food bill by the House. It is as it stands a dangerous and therefore an essentially unpatriotic measure. It would, if passed, be a serious disturbance to business and to industry, but more dangerous than all would be the antagonisms it

would arouse against the government at a time when national solidarity is a matter of the utmost importance.

Chicago Tribune:

The people of this country are willing to support any proper war legislation. But they are likely to become vexed and irritated if all sorts of reforms are foisted on them under the guise of being war measures.

Springfield, Mass., Union:

None of the nations at war has adopted the policy of absolute prohibition. No attempt has been made, not even in autocratic Germany, to enforce total abstinence in the guise of a war measure. In Great Britain the hours within which liquors may be sold have been curtailed, and the barrelage of the breweries has been quite materially reduced. In France the sale of spirituous liquors in cafés and saloons have been forbidden, except during the meal hours. For nearly three years the great nations of Europe have been at war and during the greater part of that time the food situation with all of them has been more or less acute. The United States has been technically at war for two months, yet a group of fanatical prohibitionists, whose zeal is worthy of better direction, are insistent that this nation must be bone dry by official edict in order that the people may avert starvation for themselves and their allies.

Hartford, Conn., Courant:

It is a fact of ominous significance that the motives behind the drastic proposals of the prohibitionist element in Congress are not those born in any consuming desire to win the war, or to preserve the nation. They reside solely in the determination of men beset with one idea to compel others who differ with them to conform to their notions, habits and artificial code of morals. In the propaganda for the suspension of great industries and the consequent disturbance of business and curtailment of Federal revenues, not a word is offered in behalf of any theory that this is the way to win the battle for world democracy. Not a hint is given as to how the disastrous effect upon business and the perilous division of the American people into rancorous and hateful factions are to be repaired.

Bonfort's Circular:

The people will remember the cowardly attempt on the part of the prohibitionists to divide the sentiment of the country at this crucial time. The prohibitionists have taken an unfair advantage at a critical period and Representatives and Senators are lacking in courage for they are looking to their political fortunes rather than the best interest of the Nation when they attempt to prohibit beer. The people will remember it.

The Inside American:

The cowardice of Congress in the face of the drive for bone-dry prohibition afforded the President an opportunity to protect the people from hasty and untimely legislation full of peril for the nation, and that opportunity he quickly seized. In so doing he sustained at every point the position which Senator Lodge took with characteristic courage and farsightedness.

The course of the Prohibitionists in the premises is not an example, but a warning for the future. They tried to secure the enactment of legislation for which they have long been fighting by holding up a war measure and attempting as a condition precedent to the bill's passage to affix to it their pet scheme. Were this practice resorted to by other groups of citizens who have long been crusading for various measures, the difficulty of war preparation would be greatly increased. Happily, however, no group so lacking in sane and practical patriotism as the advocates of the

bone-dry amendment has yet appeared. The President's lineup against them should go far toward discouraging future attempts at legislative holdups of war measures from any quarter. These crazed Prohibitionists of the single-track minds haven't enough real patriotism to wad a gun.

The Bache Review, New York:

Prohibition has been unwisely attached to food conservation measures, with the result that the principal and most important object of food legislation is being annoyingly held up. The probabilities that the anti-liquor section, as amended, would, by defeat of collection of revenue and addition of expense in purchasing distilled spirits in bond, add to the Government's deficit, around \$1,000,000,000, has called a halt in the passage of the bill in the Senate. The fact is that prohibition, as a war measure, should have been considered as an absolutely separate subject, and the pros and cons as related to the expedition of the war, would then have received careful and just consideration.

Cincinnati Times-Star:

We have no great opinion of the patriotism of those dry leaders who are trying to saddle the food control bill with Prohibition amendments. National Prohibition is one thing; food control is another. Many Americans who believe in the vital necessity of food control during the war do not believe that Prohibition is necessary as a war measure.

Government by divine right has raised its head in Washington, and by a coincidence that is at last significant, it proposes to help that exponent of divine right in Europe, the Kaiser.

The Prohibition forces in Congress, fighting from behind the barricade of food control, are seeking to attach to the administration measure an amendment prohibiting, throughout the nation, the manufacture of alcoholic liquors.

Every American citizen should stand by the President in this grave hour. To wipe out a great business, because of "fanaticism," is not helping the President. It is making his task more difficult and is giving aid and comfort to the enemy.

East St. Louis Journal:

Prohibition, if it is to be established, should come open and above board, and not covertly under a plea to subserve something else that is popular. We think that the beer and light wines manufacture should be left to the discretion of the President, who can be relied upon to do the right and necessary thing.

Milwaukee Free Press:

Does not the war itself demoralize business enough? Must we deliberately add to the unrest of the times? President Wilson says "no." He is on record as opposed to nation-wide prohibition as a war measure. Whatever may be his opinion on the subject is a matter for debate and disposition at normal times.

American Economist:

In the Senate, as in the House, there was a fierce fight for the "bone dry" prohibition of the use of American grains and fruits as a feature of the Food Control bill, and a drastic form of prohibition in this respect seemed certain to go through. But no such drasticity extended to imports of alcoholic beverages. There was not a word in the bill which interfered with the admission of French brandy, of Scotch whiskey, of Holland gin, of Russian vodka, of Chinese sake, of Mexican pulque, of foreign wines, or of foreign beers. There was nothing to prevent Argentina distillers from converting unlimited quantities of Argentina corn into whiskey and exporting the whiskey to the American

market. But not an American distiller, wine maker or brewer could do business. Foreigners would wax fat, while American producers would be ruined. It is a queer story.

National Herald:

We warn our beloved nation against the unprecedented despotism of the prohibition propaganda in the halls of Congress to-day. It is fraught with serious danger. It savors of a kind of tyranny that has too often led to revolution.

When Congress permits itself to be nosed by the prohibition propaganda on so-called moral issues, under the claim that the Government is the direct agent of the organized Protestant moral society, it loses the respect of millions of citizens.

Hotel Gazette:

Beyond repeating the truth that national prohibition enacted by act of Congress is a violation of personal liberty, to reassert the arguments against prohibition is futile in the present situation at Washington. It is very evident that a powerful lobby, parading under the disguise of religion, is spending its huge sums to make capital out of a genuine national emergency and force the nation, if it would get enough to eat during the war, to forego liquor. The move which it is by way of making is just as much blackmail as any other form of that crime; to extract reluctant votes for prohibition by threatening to hand the food supply over to speculators is essentially criminal.

Louisville, Ky., Courier-Journal:

The estimate of the devastation that the Cummins amendment to the Food Control bill would work is no exaggeration. It is based on official figures and is below rather than above the mark. The losses in property, the losses in revenues, the increase in taxation, would amount fully to five billion dollars, and this would not include the loss of employment to the army of people who would be thrown out of work. Five billion dollars! If the Kaiser could collect that tribute of us he would, indeed, be the world-autocrat he dreamed of being when he set out for France in the summer of 1914.

And thus it is to-day that our own menaced land, our trusting allies beyond the sea, our envious and envenomed enemies at their throats, behold—it must be with amazement on the one side and amazement and glee on the other—the spectacle of our National Legislature in the grip of those who subordinate their sacred duty to our army, our navy, our militant citizenry, to the blackmailing opportunity to promote the intolerant purposes of fanaticism and of those politicians who would play to fanaticism.

It is, in shocking truth, as if the Senate of the United States—is the House of Representatives less amenable to the charge?—had surrendered unconditionally to those for whom a reverend prohibitionist spoke the other day when he wrote: "If you are fighting Germany and the Kaiser, go ahead and don't bother with us. We are fighting hell and the devil, and have no time for your puny little wars."

Birmingham, Ala., News:

The effect of Senator Cummins' amendment would be calamitous in a business way. It would lock up over 200,000,000 gallons of distilled liquors already made and in bond, so that they could not be withdrawn and sold. This amounts to virtual confiscation of many million of dollars in property.

It would involve financial ruin to the distillers who manufactured and stored that liquor under the safeguards of existing law.

It would entail great losses upon the banks of the country which have advanced money on that liquor as collateral.

It would endanger the integrity of the great bonding concerns, which have issued financial guarantees to the distillers.

It would cut the United States Treasury out of over \$250,000,000 of internal revenue, at the very time when Congress is taxing the people in unprecedented ways for the revenues necessary for the war.

Bangor, Me., Commercial:

The question of national prohibition is one that should stand or fall on its own merits and should be decided only after the most careful consideration. To push such a decision along, as an amendment to a bill of altogether different tenor by taking a technical advantage is a snap judgment that is entirely wrong. This is not legislation but plain bull-doing.

Berryville, Va., Carrier:

The prohibition plank has no place in the food control bill. No one seriously thinks the grain consumed in making beer or of distilled liquors is large enough to affect the food supply materially.

It is the same old prohibition measure which has been tacked onto nearly every bill before the present war Congress. From the espionage to the war revenue bill somewhere along its legislative course an attempt has been made to tack on a prohibition amendment.

Telegraph, Colorado Springs, Col.:

It is unfortunate that so many side issues have been allowed to enter into the consideration of the food legislation. The question of prohibition for instance, has a bearing on the main problem of conserving grain for milling, and as such has an influence on the curtailment of the traffic. As a moral issue it is separate and distinct and should be settled on its own merits.

The question of the hour is simple. It is whether or not the United States can produce food supplies for the world for months to come. Let us not forget that morals, religion and politics are quite beside the point, however important they may be for consideration at the proper time.

Food Conservation.

By F. VULLMAHN in "Current Thought."

In a spirit to make food conservation the first and foremost consideration, placing it above all other interests.

* * *

The exaggerated statements of the requirements of grain by the brewing and distilling interests of this country have been refuted and have doubtless come to the notice of most of our readers. The real facts of the matter, however, may not have come to their notice. They are these: The entire requirements of grain for both industries during the last fiscal year, reported by the Government, amounted to not to exceed 100 to 106 million bushels of barley, wheat, corn, rye and rice, or less than two per cent. of the entire grain crop of the United States. Whether or not the Government may decide that no grain shall be used for distilling purposes during the coming crop year, excepting for mechanical, medicinal and munitions of war purposes, it stands to reason that no sane distiller will manufacture whiskey from grain at present (or anywhere near present) market prices, put in bond, hold it for a number of years, and then perhaps sell it on the basis of very much lower grain prices. It is estimated that there are 300 million gallons of whiskey on hand, in bond and otherwise, in the United States, and that would seem ample for a matter of three years' supply

providing, however, that the brewing industry may remain undisturbed so that whiskey will not take the place of beer, besides providing those who are using whiskey under present conditions.

To supply the brewing industry of the United States, assuming that beer sales will approximate 60 million barrels per annum, would require in the neighborhood of say 55 million bushels of barley and the equivalent of 11 million bushels of corn, having in mind that in the manufacture of grits that which does not go into that commodity goes back for feed. The residue of the material used in the brewing process is 25 to 30 per cent. of the materials used, and when dried is known by the name of "dried grains," which are being used in mixtures for balanced rations in most important feeds for milch cows. The same is true of malt sprouts obtained during the malting process of barley—about five per cent. of the malt produced. In other words, 30 to 35 per cent. of the material entering into the brewing process is returned in dried grains, producing feed principally adapted for milch cows. Dried grains and malt sprouts contain 23 per cent. of protein, whereas the raw material (barley, corn, etc.) contains but 11 per cent. of protein. Since the protein and carbohydrates are the milk producers and since the amount of milk that a cow can produce is based upon the percentage of protein that she will receive in her feed, it is evident that if the "grains" had no other effect upon feeding excepting the above named constituents, the equivalent of a matter of 60 per cent. of the material used in brewing is returned to the cow. Experts, however, tell us that because of the digestibility of balanced rations, in which brewers' grains play the important part, it may be said without exaggeration that from 60 to 75 per cent. of the feed value originally contained in brewing material is returned to the dairyman. Furthermore, it is acknowledged that while there are substitutes, such as oil cake, alfalfa, etc., there is not a sufficient production of these ingredients of balanced rations to replace the brewers' grains, so that the absence of brewers' grains would spell a material reduction in the production of milk. It is asserted that only about 25 per cent. of the milk cows in the United States are being fed on balanced rations, largely because feeds of high protein content are not available and will not be available until farmers succeed in the production of far more alfalfa than they seem to be able to produce now. In other words, to replace in some other manner the necessary protein required for an equal production of milk, the cow would have to be so overfed on raw grain that her digestive organs would not be able to take care of all the feed and the starch contained in the feed would be wasted to a large extent, excepting that it may be said that it might put a little flesh on her back.

Desiring to treat this question strictly from a food conservation point of view, we will not speak of the nutriment contained in beer, its good qualities, the internal revenue to the Government, etc.

BEER NECESSARY FOR BAKERS. "My work as chemist brings me into contact with the baking industry to a considerable extent, and it is my conviction that bakers are benefited by the moderate drinking of beer during their working hours. You understand, of course, that much of their work is done at night and usually in a very highly heated atmosphere. Almost without exception they drink a pint or so of beer in the course of the night's work and the effect of it, so far as I have been able to judge, is to speed them up physically and preserve a cheerful, normal mental attitude toward their work."—(Robert M. French, Analytical Chemist, New York.)

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building
Randolph and 5th Avenue.

CHICAGO, July 28th, 1917.

The consumption of beer in Chicago during the month of June amounted to 460,286 barrels, for which \$690,429.37 was paid by brewers as beer-tax to the Collector of Internal Revenue, a decrease of 58,982 barrels, as compared with June, 1916.

Discussion upon what is going on in Washington in regard to the Food Control bill by which the enemies of liberty would saddle Prohibition upon the people of the United States has overshadowed all talk upon any other subject, even the name of our unspeakable Mayor, who has disgraced this city by his wilfulness, social perversity and un-Americanism, has hardly been mentioned by those interested in the general welfare of his country. Chicago's loss would exceed \$50,000,000 in brewery property alone if Prohibition were to be decreed by Congress and approved by President Wilson, and the loss in rentals, wages and innumerable other items directly and indirectly connected with the trade would still be more staggering. No wonder that people were excited during this entire month. The representatives of the Chicago Brewers' Protective Association are still at Washington, assisting the officers of the United States Brewers' Association in battling for the interests of this great and necessary industry, and from this city tens of thousands of protests have been wired and mailed. Everything has been done that could be imagined to convince timid Congressmen that the people of Chicago are united in their fight against an insignificant number of intriguers and fakers who would plunge the nation into chaos while fighting the sinister powers of autocracy who, if they were successful in Europe, would attempt to drown liberty-loving America in an avalanche of blood.

At the same time the local "drys" are as defiant and bold as ever. Among others, Philip Yarrow, superintendent of the Dry Chicago Federation, has declared that, though Congress may not banish beer, the fight against it will not be ended until every brewery in the United States has been thrown upon the scrap heap, because "beer," as Yarrow bellows, "is the chief cause of all misery and disease; it stupefies and brutalizes, and the most eminent scientists of Europe have denounced it as one of the greatest curses of the race."

The lies and exaggerations of the blatant frauds calling themselves the Anti-Saloon League were exposed by the Manufacturers' and Dealers' Association of America, whose business manager, A. P. Daniels, last month made inquiries in London regarding the claim of the Antis that a booklet entitled "Defeat or Victory," published by them, had been suppressed in England because it revealed "the truth." D. Millar, secretary of the Beer, Spirit and Wine Trade National Defense League, replying to Mr. Daniels's letter, says:

"Dear Sir:—I beg leave to thank you for your letter of 29th May, and for the newspaper cutting enclosed therewith. The booklet referred to is merely a reproduction of

the absurd advertisements which have been appearing in the leading newspapers here. Its circulation abroad has, it is understood, been prohibited by the Government. The whole agitation is really too ludicrous for serious notice. You will find a reference to it and to other matters in the copy of the Annual Report of this league which I enclose."

And W. Geo. Robinson, General Secretary and Parliamentary Agent of the Licensed Victuallers' Defense League of England and Wales, wrote:

"In reply to your request, all that it is necessary for me to say is this—the circulation of the document in question was not permitted because it ignored every honest principle of freedom of individual action and sought by the imposition of fanatical ideas and the propagation of untruths—manifest to the British public—to mislead American opinion. The author of the document might reasonably be described as a monomaniac. Prohibition is impossible to Britain. The document is the violent screech of despair. If it were suppressed, it was because it was 'an evil and unclean thing.'"

Mr. Daniels also states, referring to the Anti-Saloon League's tricks: "They made a great play on claiming that the book had been suppressed in England, then enclosed letter explains why, and from other sources we have learned that it was an attempt by the prohibition enemies of the Allies to create an impression throughout the world that England was a drunken nation and not fit to fight—that seems to be the sole ambition of the so-called Anti-Saloon League in this country. In their conservation of food excuse they show 'that they are not attempting to use their proposals in order to win the war. They are attempting to use the war in order to win their proposals.'" The so-called Anti-Saloon League is not incorporated in any State, not even in Ohio in which the home office is located (Westerly). The Anti-Saloon League of America was incorporated in 1909 in Ohio, but was dissolved in a very mysterious way in 1916. It shows that they dare not be incorporated, if they did they would have to have officers and directors, also a membership, which would never do, as a membership would carry a vote in regard to the management and disbursement of funds. They do not want members, you cannot join if you want to, if you think you can, try it. It is a tight copartnership owned and controlled by about five men. A great deal of publicity should be given the fact that they are only a collecting agency for their personal upkeep—they are frauds, they have no prestige or strength, their only assets are gall, misrepresentation and bunc, and it is purely and simple a 'blue sky proposition.'"

City Comptroller Eugene R. Pike has recently declared that only a Special Session of the Illinois Legislature can save Chicago from bankruptcy, because the recent closing of 383 saloons alone would cause an annual loss of \$383,000 in revenue, to say nothing of the awful disaster which would follow if Congress were to destroy all of the beverages industries.

In the fight against undesirable saloons and evil resorts the organized brewers of Chicago are assisting the authorities in every way possible and they also insist upon Sunday closing. This statement has been made to State's Attorney

Hoyne by the brewers' committee composed of Edward Landsberg, president of the United States Brewing Co.; Peter Theurer, president of the Peter Schoenhofen Brewing Co.; William Legner, president of the Conrad Seipp Brewing Co., the West Side Brewery Co. and president of the Chicago Brewers' Protective Association, and Austin J. Doyle, business manager of the association.

The City Council's Anti-Free Lunch ordinance became operative on July 5th, and one of the consequences has been that saloonmen have stopped selling beer in pails or pitchers and beer glasses are much smaller than heretofore.

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

San Francisco, July 21st, 1917.

Joseph Kraus, president of the Anchor Brewing Co., shot and probably fatally wounded one of two bandits who last night held up a crowd in a saloon at 2200 Bryant street. When the two masked men entered the saloon with an order to "Throw up your hands," Kraus pulled his revolver and fired a shot which took effect in the tall robber's shoulder, but failed to stop the man who returned the fire. Crouching behind the bar, Kraus fired a second shot which penetrated the thug's abdomen. The second robber grabbed his partner and attempted to escape during the confusion. The wounded man was too heavy and was abandoned near the scene of the shooting while the other made his escape. The wounded man was taken to the Emergency hospital where it is said he will probably die. He refused to talk and there is no clew on his person as to his identity. Last night's shooting was the culmination of a series of twenty-four saloon robberies, by bandits, within the last few weeks. The same pair had attempted to hold up a saloon in the same neighborhood earlier in the evening. Kraus went to the detective headquarters and told his story and was released.

The weather continues warm here and the beer business is good, although the trade feels the effect of the argument freely used that if soldiers are not allowed a glass of beer others should do without it.

Everything is waiting on what may be done at Washington, even the Grape Growers' Protective Association postponed their meeting until after such time as the particulars of the food conservation bill should be settled. In the meantime the wholesalers are selling only for cash and the brewers are doing the same. And brewers refuse to advance money for saloon licenses. About one-fourth of the saloons in San Francisco up to date have not renewed their licenses.

With the high price of liquors and the new order which is cash with the delivery of goods, the saloonmen who were doing business on someone else's capital are being forced out of business. In Los Angeles the saloons have all raised the price of drinks, and it is expected that the San Francisco saloons will do the same. This will mean that the so-called high-priced houses will get more business and the less attractive saloons less. Take it all in all it looks as if the business was cleaning itself and soon there would be nothing for the prohibitionist to kick about.

Billy Sunday is due in Los Angeles the second of September for a protracted stay, and Los Angeles expects a "wet" or "dry" election while he is in town.

Santa Barbara is pointed to as the one city in California where there is no prohibition agitation. The way liquor is dispensed there seems to please everyone, including the man who sells it. The plan, which is known as the Santa Barbara plan, is studied by the executives throughout the State. Four years ago Santa Barbara had 25 saloons and an election on the "wet" or "dry" question. But instead of putting

one or two amendments on the ballot they put four on. One was a no-saloon, one was no liquor to be sold in the cafés, one no liquor to be sold at the hotels and the other no liquor to be sold at the wholesale or family liquor stores. The people voted out the saloons by some 400 votes and voted out liquor selling at the cafés by forty votes and voted to sell liquor at the hotels and by wholesale. The wholesale or family liquor stores were established by reputable firms. The town has 20,000 population. These firms were granted the right to sell liquor in quantity not less than a commercial quart which must not be consumed on the premises. The quart could be made up of a pint of wine and a pint of beer or any other combination of alcoholic liquors. The hotels were granted the right to sell liquor with meals in the dining-room. Two famous tourist hotels were given the right to have buffets where liquor is served with what is known as a Los Angeles meal, *i. e.*, a wafer-like sandwich, the name growing out of the fact that you cannot buy a drink in a café in Los Angeles without a "meal." Two clubs were given the right to sell to their members.

For four years there has been no change in the way liquor is sold in Santa Barbara long enough to try the plan out and there is nothing but praise for the system from the people of Santa Barbara. There is almost no drunkenness and very little blind pigging and what there is is confined to the Mexican quarter. And the consumption of liquor has increased. The wholesale or family liquor stores are conducted much like grocery stores, they are frequented as freely by women as by men, but most of the business is done over the telephone. Some accounts are carried. The most popular drink is beer, which is used in many homes as a beverage with meals where it was not used at all when the man of the house did his drinking in the saloon. The use of the so-called table wines has jumped three hundred per cent. during the four years. While Santa Barbara is a good market for whisky, the sale is confined almost entirely to the rich. Drinking in public is not tolerated in Santa Barbara, it means a five-dollar fine for the drinker and a fine for the owner of the premises. One cannot buy a bottle of beer and take it to a café and drink it—that's drinking in public—but on the other hand one can go to a hotel and have anything they want served with their meals in the dining-room.

Both Sacramento and Stockton are reducing the number of their saloons, the former by consolidation and the latter by revoking their licenses.

Among the brewers in San Francisco one hears a good deal of talk of consolidation and, it is expected that the smaller breweries will get-together in some sort of company before the new tax on beer goes into effect.

STILL AN OPEN QUESTION. "Whether alcohol belongs in the class of habit-forming drugs, is a big and broad question. On that question doctors disagree. There is no progress toward its determination in adjectives or generalities on either side. On that question hinges the expedience of legislation against alcohol."—(Brooklyn [N. Y.] "Daily Eagle.")

ONLY THEN. "When I grow so old—if I can ever get that old—that I cannot enjoy the laughter of my fellow men; when I shall begrudge them the right to do as they please, providing they injure no others; when I have lost the art of smiling and feeling a thrill of ecstasy as I go out into the fields of an early spring morning; when I can see nature at its best and not thank the good God for every moment that He lets me live—then, and then only, will I become a Prohibitionist."—(Hal. Bailey.)

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,

46 Cannon St., E. C., July 13th, 1917.

Newly appointed Government commissioners are now at work trying to formulate additional rules by which to still further restrict and hamper the brewing industry in the United Kingdom while the war lasts and, who knows, how long after it. What these commissioners may decide has not yet been disclosed, but it is rumored that they will even go so far as to strictly regulate the degree of attenuation as well as the price of the little beer that brewers may produce and sell.

In regard to the proposed scheme of taking over all breweries in this country, the government is still holding back all information, but it has been stated that nothing definite will be done without consulting Parliament. It is even possible that action may be deferred until after the next general election. Nor will the government say whether it is intended not to permit any further use of grain in the brewing of ale, porter or beer, a proposition that has been made with all seriousness during the past fortnight. The question of whether the advantage of the use of intoxicating drink in the army was found to outweigh the value of human food destroyed in its production was raised in the House of Commons recently by Mr. Ginnell, to whose added inquiry whether most of the venereal diseases in the army was also due to drinking, and seeing that there had been good soldiers who used no intoxicants, whether the use of intoxicants in the army would be discontinued? the Under-Secretary of State for War, Mr. Macpherson replied: "No intoxicating drink is issued to the army except on the recommendation of medical officers. If, however, the hon. gentleman refers to canteens, I consider that they are a safeguard against drunkenness, as they provide good light beer under regulated conditions as an alternative to unregulated drinking outside the canteen. I must not be taken as accepting the hon. gentleman's suggestion as to the percentage of military offences due to drink. The answers to the second and third parts of the question are in the negative."

Mr. Duncan Millar asked the Parliamentary Secretary to the Ministry of Food whether any licenses had been issued for the brewing of beer for the army in excess of the 10,000,000 standard barrels of beer allowed by order of the Food Controller; and if he could state the additional amount of beer brewed during the past month? Captain Bathurst replied: "The answer is in the negative. The amount required by army canteens will be included in the 10,000,000 barrels, and it is not now intended to issue any licenses for excess brewing for army requirements."

The stocks of beer in hand are becoming very low and the consequence has been that hundreds of licensed houses had to close their doors. Prices for porter have been increased for the second time since the shortage made itself felt. Porter per pint is now 6d. to 8d., half-pint 3d. to 4d., "mediums" 4d. to 5d., and bottles 4d. to 5d.

The seventh report of the Commissioners of Customs and Excise for the fiscal year 1915-1916 states in regard to the beer duties that under the Finance Act, 1914, the duty on home-made beer was raised from 7s. 9d. to 25s. per standard barrel, subject to a rebate of 2s. per barrel up to March 31st, 1916, and of 1s. during the financial year 1916-17. The effective rate of duty in the year under review was, therefore, 23s. Corresponding changes were made in the Customs duties and the drawbacks. The estimate for the year's receipts, made for the May budget and not altered for the September budget, was £30,400,000, but the actual receipts (from home-made and imported beer together)

were £33,770,000. As against the last pre-war year 1913-14, the actual fall in consumption in 1915-16 was about 17 per cent., considerably less than had been anticipated. Compared with the receipts of 1914-15, those of 1915-16 show an increase of £17,889,000. This is due partly to the fact that only eleven months' duty from home-made beer was received in the former year, as a result of the permission given to brewers under the Finance Act of 1914 which raised the duty, to defer payment for one month beyond the period previously allowed. But the main cause of the increased revenue in 1915-16 is the additional duty, which was collected for 12 months, against only 2½ months in 1914-15.

The imports of beer which amounted to 74,665 barrels in 1914, decreased to 19,893 in 1916, and the number of brewers for sale decreased from 3,746 to 3,370, while the number of brewers not for sale increased from 4,537 to 5,991.

The net receipt from Excise licenses in 1916 was £4,644,861, as compared with £5,412,246 in 1914-15. The decrease of £767,385 is attributable mainly to causes connected with the war. Liquor license duties realized £3,419,835, as against £4,234,904, in 1914-15. The decrease of £815,069 was due chiefly to rebates allowed under the various Finance Acts in respect of curtailment of hours of sale. There was also a decrease of £63,927 in brewers' license duty, the yield of which is dependent on the quantity of beer brewed in the previous license year.

By an Order in Council the acreage of hops to be cultivated this year has been reduced fifty per cent. of what it was in 1914.

Father Bernard Vaughan, the noted and liberal-minded priest, has recently declared that there was no wickedness in drinking a glass of beer, and that he would rather see the working man with his glass of beer and contented than without it and plotting treason. "Why," he asked, "did we not make them something at twopence instead of fourpence—something within their means?" He thought that some of the strikes had been due to the workers being out of condition, wanting something to make them cheerful and happy under dull dead hours of monotonous work making guns and munitions to destroy others.

The management of Guinness's Brewery have added 5s. per week to the wages of their 3,000 employés, the third advance they were granted since 1914.

Captain James Calder, son of John J. Calder, managing director of Samuel Allsopp & Sons, Ltd., has been awarded the Military Cross.

Major H. Page Croft, M.P., maltster, was recently promoted to the honorary rank of Brigadier-General. He went to the front at the beginning of the war and was promoted while still a major to the command of a brigade, which he led until his return some time ago to attend to his Parliamentary duties.

Major H. Rudyard, son of E. Rudyard, manager of the Burton Brewery Co., Ltd., was mentioned in Sir Douglas Haig's dispatches for "gallant service and devotion to duty."

Major Charles H. Seabrooke, of Seabrooke & Sons, Ltd., has been appointed Chairman of the company in place of the late Jonathan Seabrooke. George Wilmot Glenny, of The Brewery, Barking, has been elected a director.

Among those members of the trade honored with a baronetcy at the Kings' birthday are: James F. Remnant, M.P., who is a director of Samuel Allsopp & Sons, Ltd.; W. Cain, a director of R. Cain & Sons, Ltd., Liverpool; S. H. Whitbread, chairman of Whitbread & Co., Ltd., and Sir Thomas Dewar, manager of John Dewar & Sons, Ltd.

Brewing News from the European Continent.

The lack of beer is gradually making the people of Germany more depressed than ever, if not actually rebellious, and conditions will hardly improve, a fact which is indicated by the announcement of the food controller that the figures for the grain crop to be expected this year will not be made public. However, it is known that the barley crop will yield less than it has done since 1914; and the quality of the barley is said to be exceedingly poor. There will also be less hops than ever, as the hop acreage has been reduced from about 24,000 hectares in 1916 to hardly 16,000 hectares in the present year. Imports of grain will be smaller than ever before, since the United States government has placed an embargo upon exports to neutrals by whom the Germans have been principally supplied surreptitiously. The quality of the beer now being produced in Germany may well be judged from the fact that in most of the breweries barley malt is no longer available and potato starch and saccharine have been substituted as the principal brewing materials, while the resins are partly extracted from the hops for obtaining an additional stock of fats, before the hops are permitted to be employed in brewing. At least one-third of the restaurants and all other places for the retailing of beer had to be closed as the proprietors are no longer able to serve beer to their customers. The number of breweries closed since 1914 is so large that the German Brauer-Bund has proposed to consolidate all breweries in districts having less than 300,000 inhabitants.

The production of beer decreased in France during the month of May, when the taxes paid by the French breweries amounted to 1,601,000 francs, or 53,000 francs less than during the same month of normal years but 649,000 francs more than in May, 1916. During the first five months of 1917 the French beer tax brought 6,156,000 francs, as compared with 3,738,000 francs during the corresponding period of 1916, an increase of 2,418,000 francs.

From the report of the American consul in Havre, John B. Osborne, it appears that the consumption of beer in the Havre region has increased three-fold since the beginning of the war, the reasons being:

The arrival and passage through Havre of English soldiers who habitually drink beer and prefer it to other available beverages and, similarly, a large number of Belgians temporarily residing in Havre or its suburbs; also the departure for military service of the heads of families who were in the habit of making their own cider for family use. Consul Osborne is convinced that wine drinking is not a serious obstacle to the introduction of American beer and brewers in the United States will find a ready market for their product at Havre.

The two brewers' organizations of Paris have appointed a commission to purchase malt for them in the United States. There is also a great demand for other brewery supplies, particularly machinery to replace what has been destroyed and removed by the invading enemy.

The Brewers' Unions of the South and Southwest of France have inaugurated a movement to obtain from the French government assistance for the entire French brewing industry in the way of enabling it to greatly increase the production of beer, as high prices for brewing materials have compelled brewers to raise their prices for beer and the consequence will be that large numbers of retailers are threatened with bankruptcy as consumers refuse to patronize them at present figures. Some brewers have raised their prices to 45 francs per hectoliter.

New names for the Golden Book of the French Brewing Industry are those of Sergeant Paul Delos, son of M.

E. Delos-Neuville, brewer at Ham-en-Artois, and Lieut. Edouard Koell, treasurer of the Alumni Association of the Nancy Brewers' Academy, both killed in action; Henry Deberdt-Cousin, brewer at Steenwerk, Department of the north, cited for bravery under violent bombardment; Elie-Henri Vangraefscheppe, brewer at Eecke, North Department, killed in action; Oscar Persyn, brewer at Watten, North Department, for rescuing wounded comrades under fire.

The Belgian government has appointed a commission for studying the question of alcohol with particular regard to aiding the brewing industry of Belgium, which has been almost wiped out by the invading enemy who not only destroyed large numbers of breweries, but also carried off their equipment and many brewery employes. Among the members of the commission is Professor Verhelst, of the Brewers' Academy of Louvain and several members of Belgian brewers' associations are still to be appointed. The commission is also to reduce the number of retail places, a proposition to which the brewers are strenuously opposed. The production of spirits is to be prohibited in the liberated Belgium.

The Nederlandsche Brouwers Bond has adopted resolutions pledging its members to raise their prices to 14 florins per hectoliter of ordinary beer, and to 16.50 florins per hectoliter of lager beer, brewing materials being so high that the former prices were no longer possible.

The price of beer having been raised by brewers in Switzerland 12 francs per hectoliter, the Swiss Association of Café Proprietors has unanimously decided to boycott the breweries until they come down again with their prices.

The barley crops in Italy and Spain will be larger this year than during the last five years.

Wm. G. Shepherd, United Press Staff Correspondent in Petrograd, writes: "Russia never has been dry. Under the old censorship of the days of Czardom no correspondent would have been permitted to send this fact to the outside world. But now the truth may be told. The Russian Government officials discovered that it pleased the Czar greatly to be placed before the outside world as being the sponsor of prohibition in Russia and they did all they could in the way of giving out erroneous impressions as to the extent of the dry wave in Russia. Russia did go dry—for the peasants. But the Czar's famous prohibition law was so arranged that any man with money enough could get all the liquor he desired. The Government manufacture of vodka was stopped and a law was passed prohibiting the sale of any liquor containing more than 3 per cent. of alcohol. The importation of wine did not cease. The price of champagne went up to \$25 a bottle, with other prices in proportion. The popular cabarets, hotels and restaurants served wines in China pitchers and China cups, but everywhere the man with money was able to have all his liquor orders filled to the smallest whim. Foreigners were permitted to purchase all liquors in the shops provided they presented permits to purchase issued by their embassies. There was no law of any kind that prevented a citizen from having liquor on his premises or from drinking it. One of the greatest mistakes the Czar ever made was to force the peasants to sober up. He took the peasants and made them sober; he gave them good clothes in the way of military uniforms, and he gave each peasant a rifle and taught them how to shoot. He thought he was turning the peasants into soldiers, but they remained peasants at heart. When the right time came these sobered peasants turned their guns on him."

By Cable.—From the American Training Camp in France, July 18th. The Quartermaster's Department is still trying to decide what to do with the gift made by the

French Government to the American troops, in honor of July 14th, the French national holiday, consisting of champagne, red wines, jellies, ham and other delicacies. There is a considerable quantity of champagne and red wine for each soldier and officer, but for the present the authorities have not been able to decide whether the distribution of these wines should be in violation of the spirit of the recent legislation covering the question of liquor to soldiers.

American Training Camp in France, July 21st (by Associated Press).—This was champagne day for the American soldiers. After a long discussion the American staff decided to allow the soldiers to accept the champagne and red wines which the French Government presented to them on July 14th, Bastille Day.

REAL BUSINESS MEN SHOULD MANAGE U. S. BUSINESS. "Half the business of the United States is badly done because the man at the top puts elephants to chase mice and hires cats to hunt tigers."—"Current Thought."

"GET THE 'YOU' ELEMENT. The 'hundred-point' interviewer looks at his proposition through his listener's eyes. Show your man how your project fits his needs—how assent will forward his desires, his plans, his ambitions. Talk from your listener's side of the fence."—"Current Thought."

"PROHIBITION IS ESSENTIALLY CLASS LEGISLATION, as the rich employers can import liquors from 'wet' States or foreign countries for their own use. Have you noticed any of the corporation magnates who denounce as 'class legislation' laws to promote the welfare of labor, say anything against depriving the working classes of a harmless pleasure?"—(Whidden Graham.)

"DO WE NOT KNOW from past experience that where prohibition is enforced the people will make their own spirits? Prohibition could never be enforced, for it would be impossible for any government to police all homes. The making of spirits is a simple matter, requiring no more intelligence than bread baking. And this sort of home-made liquor is about the most injurious of any. In those departments of France where such liquor is made the mental and physical demoralization of the peasantry is said to be extreme."—(N. Y. "Medical Times.")

"YOU SHOULD OPPOSE PROHIBITION in whatever guise presented, because prohibition means that your personal tastes and habits are subject to the regulation of others; but more particularly because prohibition is based upon an unsound theory, namely—that poverty and its attendant evils are caused by intemperance, rather than by unfair economic conditions. If this theory is accepted by the American people it means a long postponement, if not the ultimate defeat, of the great end for which organized labor is striving—a juster, sounder relation between employer and employé."—(New Orleans "Labor Record.")

USELESS AND UNWORKABLE. "An examination has been made of the available data as to the effect of prohibition upon the States of Maine, Kansas and North Dakota, the only States now having prohibition which have tested the usefulness and workability of the law for a period of twenty years or more. This examination resulted in the conviction that, because of the laxity of the law officers in Maine, no improvements were noticeable which we might attribute directly to the enactment of the prohibition law, and that, with respect to Kansas and North Dakota, there appeared no adequate grounds for stating that prohibition had produced the new virility and the material prosperity which its proponents claimed for it."—(L. Ames Brown.)

Midsummer Annual Outing of The National Brewers' Academy Alumni Association

at Rochester, N. Y., September 15th.

The various committees appointed to look after the many details in connection with the Annual Midsummer Reunion and Clambake of the Alumni Association of the National Brewers' Academy, have been hard at work perfecting plans to make this year's event the most successful of all.

The Dinner Committee, headed by Mr. August Moeller, has held frequent meetings and they faithfully promise that those who attend will enjoy the sampling of the most tasty dishes which will be specially prepared by one of the best chefs in the country.

The Ticket Committee has recently sent out circulars to all the graduates of the N. B. A., giving details of the meeting, with return postals attached. A considerable number of favorable replies have been received up to date, and all graduates who have not mailed their replies are earnestly requested to do so immediately so that proper arrangements can be made for everybody. Those who intend to motor to Rochester will find excellent roads leading here from all directions. As September is the ideal month for touring, many motorists are expected.

The Reception Committee, headed by Mr. Edward Loeb, promise to make everybody happy and "feel at home." It looks like a very enjoyable time for those who join us at Rochester on September 15th.

LOUIS A. WEHLE, President.

Book Review.

New Fields for Brewers and Others Active in the Fermentation and Allied Industries. Edited by Carl A. Nowak, B.Sc., F.C.S., Secretary Master Brewers' Association of the United States and Chemical Superintendent the Wm. Rahr Sons Co. A complete and comprehensive Reference Book for Beverage Manufacturers, Bottlers, Brewers, Brewing Chemists, Distillers, Food Chemists, Maltsters, Students. First Edition—Two Thousand. St. Louis, Mo. C. A. Nowak, Publisher, 2027 Railway Exchange.

This volume of 300 pages, dedicated by the author to Wm. F. Carthaus, president of the Master Brewers' Association of the United States, surveys the field and its present day conditions and considers the problem now confronting every brewer in this country, concluding that there are many uses to which a brewery may be put if required by necessity.

Low alcoholic beers are then classified; non-malt beverages and fruit juices described and discussed; the yeast industry and its products; vinegar; malt flour, malt extracts and diastatic preparations; the industry of breakfast foods; commercial feed; the dairy industry; industrial alcohol; mechanical appliances; bibliography of related literature and patents.

We warmly recommend the work which has been compiled by its author in popular and readily comprehensible terms, with the skill of the scientist and practical expert that he is, to all of our readers and everyone whom they may advise to inform themselves of its valuable contents, the familiarity with which is altogether timely and pressing.

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Acme Brewing Co., Bentleyville, Pa., recently installed a fifty-ton ammonia condenser, etc., which they purchased from the Frick Company, Waynesboro, Pa.

—Alabama Brewing Co., Birmingham, Ala., have installed a 180-ton horizontal double acting duplex refrigerating machine, cross compound engine, etc., constructed by the Frick Company, Waynesboro, Pa.

—Aurora Brewing Co., Aurora, Ill., have had plans prepared for converting their brewery into a packing plant, should beer brewing be prohibited during the war.

—Arnholz & Schaefer Brewing Co., Philadelphia, have installed a complete Barry-Wehmiller automatic outfit, consisting of six-compartment Soaker, automatically connected Brushless Washers, 250-barrel Pasteurizer and Barry-Wehmiller Automatic Rotary Labeller.

—Bartels Brewing Co., Wilkes-Barre, Pa., have installed a six-compartment Barry-Wehmiller Soaker 250 barrels per day, with automatically connected brushless inside and outside Washers and bottle feeder devices carrying the bottles from the discharge of the Washer direct to the filler. Machinery is electrically driven throughout and latest improved model.

—Birk Brothers Brewing Co., Chicago, have installed a triplicate Barry-Wehmiller outfit, consisting of our compartment Soaker and 175-barrel Pasteurizer. All electrically driven and of the latest improved type.

—Val. Blatz Brewing Co., Milwaukee, have installed five complete Barry-Wehmiller outfits, consisting of Bottle Soaking Machines and Pasteurizers, each 250 barrels per day capacity.

—Peter Breidt City Brewery Co., Elizabeth, N. J., have installed a complete Barry-Wehmiller outfit in a new modern and sanitary bottling house, consisting of 205-barrel Pasteurizer, six-compartment Soaker, automatically connected Brushless Washers and all bottle feeds to fillers, complete automatic interlocked outfit.

—Brownsville Brewing Co., Brownsville, Pa., have installed a complete Barry-Wehmiller 75-barrel Pasteurizer, electrically driven.

—Buffalo Brewing Co., Buffalo, N. Y., are equipping their bottling department with additional modern machinery to largely increase its capacity.

—M. Burkhardt Brewing Co., Akron, Ohio, have installed one 85-ton raw water freezing system, filters, storage tanks, etc., furnished by the Frick Company, Waynesboro, Pa.

—John Busch Brewing Co., Washington, Mo., have installed an electrically driven Barry-Wehmiller Duplex Soaker.

—Connecticut Breweries Co., Bridgeport, Conn., have installed a complete duplicate Barry-Wehmiller outfit, consisting of 200-barrel Pasteurizer, 200-barrel five-compartment Soaker, automatically connected inside and outside Brushless Washer, automatic bottle feed to filler. All a duplicate of Barry-Wehmiller outfit installed one year ago.

—Peter Doelger Brewing Co., New York, have placed in operation two Barry-Wehmiller latest improved type of Brushless Bottle Washers, together with electric connection of Soaker and bottle feeders to filler.

—Evansville Brewing Association, Evansville, Ind., are

experimenting with refining sugar, and if they find the result to be practical and profitable their brewery is to be newly equipped for the manufacture of sugar, while Indiana be struggling under the brutal yoke of Prohibition, threatening by legislation in Washington, and that ridiculous State law to become effective on April 2nd, 1918. The company's bottling plant is to be equipped for the manufacture of preserved fruits, vegetables, etc.

—Fauerbach Brewing Co., Madison, Wis., have made plans for the erection of a storage depot on the Sauk road at Middleton, Wis.

—Fidelio Brewing Co., New York, have installed a 250-barrel Barry-Wehmiller Pasteurizer of the latest improved type, all electrically driven.

—German Brewing Co., Cumberland, Md., have installed a complete Barry-Wehmiller outfit, consisting of four-compartment one floor type Soaker, automatic connected inside and outside Brushless Washers, bottle feeders to fillers and 200-barrel Barry-Wehmiller Pasteurizer.

—John Gund Brewing Co., La Crosse, Wis., have installed a Barry-Wehmiller Brushless Washer with automatic bottle feed running direct to filler; also increased the capacity of present soaking machine.

—Hand Brewing Co., Pawtucket, R. I., have installed a 120-barrel Barry-Wehmiller Pasteurizer, electrically driven and of the latest improved type.

—Peter Hauck Brewing Co., Harrison, N. J., installed a complete Barry-Wehmiller outfit, consisting of 200-barrel Pasteurizer, six-compartment one floor Soaker and automatically connected Brushless inside and outside Washers, with all bottle feeds to fillers and Pasteurizer. This is a complete automatic outfit and a duplicate of the same outfit installed by this company one year ago.

—Hausmann Brewing Co., Madison, Wis., are making arrangements to establish a distributing depot at Middleton, Wis.

—Home Brewing Co., Canton, Ohio, are making improvements in their refrigerating plant, installing additional and up-to-date machinery.

—Iroquois Brewing Co., Buffalo, N. Y., have completed the installation of a complete Barry-Wehmiller 310-barrel outfit, consisting of Pasteurizer and eight-compartment Soaker.

—G. Krueger Brewing Co., Newark, N. J., have installed a duplicate Barry-Wehmiller Brushless Washer, also a complete Barry-Wehmiller outfit. This is the third B.-W. outfit installed by the above brewery in the past three years and consists of 200-barrel Pasteurizers, five-compartment Soakers, Washers and all bottle feeds.

—W. Kuebler's Sons Brewery, Easton, Pa., installed a complete Barry-Wehmiller outfit, consisting of 125-barrel Pasteurizer and four-compartment Soaker and automatically connected inside and outside Brushless Washers. All electrically driven and installed in a brand new complete building of the latest improved type.

—Leisen & Henes Brewing Co., Menominee, Mich., are about to remove their plant to Mariette, Wis., where they propose to continue brewing beer until Michigan repeals its insane Prohibition law.

—S. Liebmann's Sons Brewing Co., Brooklyn, N. Y.,

have installed three complete Barry-Wehmiller Soaking machines, seven compartments and 250 barrels per day capacity. All electrically driven and of the latest improved type.

—Menominee River Brewing Co., Menominee, Mich., are considering a proposition to establish a brewery at Crivitz Village, Wis., while Michigan is to be "dry"; malt is to be manufactured in the present plant at Menominee.

—Northern Brewing Co., Superior, Wis., have greatly enlarged the capacity of their plant and equipped it with additional modern machinery, anticipating to produce an enormous amount of beer to last "all through the war," should the U. S. Government be stupid and reckless enough to close all breweries in this country under the false pretense that American barley is needed here and in Europe to feed starving populations.

—O'Keefe Brewery Co., Ltd., Toronto, Can., have installed a complete Barry-Wehmiller, four-compartment, 200 barrels capacity, with automatic inside and outside Brushless Washers and all bottle feed; all electrically driven.

—Pilsener Brewing Co., Cleveland, O., have installed a complete Barry Wehmiller outfit, 200 barrels per day capacity, including four-compartment Soaker, automatically connected inside and outside Brushless Washers, all bottle feeds and B.-W. Pasteurizer; all electrically driven.

—E. Porter Brewing Co., Joliet, Ill., erect an addition to be used as a bottling works and an office. The size of the building is 54x134 feet. It is of brick construction, cost to be \$20,000. The size of the bottling works is 50x100 feet. The main part of the office is 50x34 feet.

—Rock Island Brewing Co., Rock Island, Ill., have installed a complete 300-barrel Barry-Wehmiller Pasteurizer and two Barry-Wehmiller five-compartment Bottle Soakers, 150 barrels per day each, with automatically connected Brushless inside and outside Bottle Washers and all bottle feeds, as well as the Barry-Wehmiller Labeling Machine. All installed in their complete new bottling department building, just completed.

—Rubsam & Horrmann Brewing Co., Stapleton, N. Y., have installed a complete Barry-Wehmiller outfit, consisting of six-compartment Soaker with automatically con-

nected Brushless Washers, 250-barrel Pasteurizer with all bottle feeds. A complete automatic outfit.

—Jacob Ruppert, Inc., New York, have installed three complete Barry-Wehmiller inside and outside Brushless Washers attached to Barry-Wehmiller Soakers installed ten years ago with complete remodeling and overhauling and increasing the capacity to 300 barrels per day each.

—Jacob Schmidt Brewing Co., St. Paul, Minn., have established a storage depot for the sale of their temperance beverage Malto, at East Grand Forks, N. D.

—Wm. Simon Brewery, Inc., Buffalo, N. Y., have installed a complete Barry-Wehmiller outfit, consisting of four-compartment Soaker, automatically connected inside and outside Brushless Washers, bottle feeders, 200-barrel Pasteurizer and Barry-Wehmiller Rotary Labeling Machine. All the above machinery is of the latest improved style, electrically driven and a duplicate outfit.

—Sioux Falls Brewing Co., Sioux Falls, S. D., have installed a plant for the manufacture of "Uno," a non-alcoholic malt beverage.

—Wm. Ulmer Brewery, Inc., Brooklyn, N. Y., recently installed Room piping, accumulator, agitators, etc., for their present freezing tank at Greenport, L. I., all of this machinery having been bought from the Frick Company, Waynesboro, Pa.

—United States Brewing Co., Chicago, have installed a complete quadruplicate Barry-Wehmiller outfit, consisting of four-compartment Soaker and 200-barrel Pasteurizer, all electrically driven and of the latest improved type.

—Washington Brewery Co., Washington, D. C., have installed a Barry-Wehmiller Duplex Soaker of the latest improved type.

—Weibel Brewing Co., New Haven, Conn., have installed a duplicate Barry-Wehmiller complete outfit 200-barrel Pasteurizer, six-compartment Soaker and automatically connected Brushless Washers, with all bottle feeds to fillers and Pasteurizers. Complete automatic outfit.

—West Bend Brewing Co., West Bend, Wis., have installed new bottling machinery at a cost of several thousand dollars.

—The People's Brewing Co., Trenton, N. J., contributes 5,000 pounds of ice every day during the summer to the Trenton "Times" Free Ice Fund.

—The plants of the L. Z. Foerster and Hoch Brewing Companies, Ypsilanti, Mich., have been repurchased by their former owner, L. Z. Foerster, for a consideration of \$19,887.12.

—The Breckheimer Brewing Co., Madison, Wis., which has come under the local prohibition, announce that they will discontinue operations as soon as the beer in their storage cellars has been consumed.

—As soon as it became known that beer and wine were to be left alone by the Food Control bill, brewery stocks, wherever listed on exchanges in this country, advanced many points, after having seriously slumped on June 25th.

—Charles Spang, collector for a Buffalo, N. Y., brewery, was murdered by four masked bandits who shot him down and robbed him of \$2,000 while he was counting his days' collection at a saloon on Fourth and Georgia Streets, Buffalo, July 5th.

—Suits for claims amounting to about \$100,000 have been entered in the Federal Court at Portland, Ore., against the North Pacific Brewing Co., Astoria, Ore., which was declared bankrupt in July, 1916. The present liabilities are fixed at \$180,000 without assets.

—The Stroudsburg Brewery Co., Stroudsburg, Pa., went into the hands of a receiver July 13th.

—C. H. Evans & Sons, Inc., Hudson, N. Y., have recovered damages from a local soft drink dealer for selling lemonade, etc., in the brewery's bottles.

—Prohibition has forced the Hennepin Brewing Co., Minneapolis, doing a large business in Iowa and the Dakotas, to ask for the appointment of a receiver. Victor A. Johnson was appointed.

—The Anheuser-Busch Brewing Association, St. Louis, have novel automobiles for advertising purposes, the body of the machines representing a submarine destroyer with a small cannon mounted in the front. The machine has all the make up of a boat only it is on wheels.

FIRES. The plant of the Joseph Schwartz Brewing Co., Hartford, Wis., was damaged by fire June 26th to the extent of about \$1,000.

Fire almost totally destroyed the plant of the West Louisville Brewing Co., Louisville, Ky., June 15th. The loss is estimated at about \$80,000.

One of the barns owned by the Fred Miller Brewing Co., Milwaukee, was destroyed by fire June 19th; loss about \$2,000.

An overflowing pitch kettle caused some damage and injured two workmen in the Wieland plant of the San Francisco Breweries, Ltd., June 30th.

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW INCORPORATIONS. The National Brewing Co., Chicago, have amended their charter increasing their capital from \$100,000 to \$350,000.

Solano Brewing Co., Vallejo, Cal.: President, Charles Widenmann; vice-president, Mrs. Charles Widenmann; secretary-treasurer, H. J. Widenmann; general manager, A. F. Widenmann; additional directors, W. A. Widenmann and Mrs. Nell Widenmann. The brewmaster is Antone Halfmann.

Officers have been elected by brewery companies as follows:

American Brewing Co., Rochester, N. Y.: President and general manager, Frederick C. Loeb; vice-president, George Wunder; treasurer, Edward W. Loeb; secretary, Carl H. Loeb; brewmaster, Charles Fromm; manager bottling dept., K. Graning.

Bassler Brewing Co., Inc., Trenton, Ill.: President, Edward Dressler; secretary-treasurer, superintendent and brewmaster, August Bassler.

Beadleston & Woerz, New York: President, Alfred N. Beadleston; secretary and treasurer, Frederick W. Woerz.

Centennial Brewing Co., Butte, Mont.: President and general manager, Arthur H. Mueller; vice-president, Louis Frank; treasurer, Walter Mueller; secretary, James J. McCarthy; superintendent and brewmaster, Tony Scheu.

Christ Brewing Co., Inc., Louisville, Ky.: President, John M. Christ; vice-president, Fred J. Hinkebein; secretary and treasurer, John B. Rapier; brewmaster, Charles Meyers.

A. Dotterweich Brewing Co., Dunkirk, N. Y.: President and general manager, Andrew C. Dotterweich; vice-president, Robert J. Dotterweich; treasurer, Maria T. Dotterweich; additional director, Frank J. Dotterweich.

Farmers' Brewing Co., Shawano, Wis.: President, John Popp; vice-president, Frederick Kuhn; secretary and treasurer, Charles E. Otto; superintendent and brewmaster, Ulrich Santner.

Fort Edward Brewing Co., Inc., Fort Edward, N. Y.: President, Fred McNaughton; treasurer, George F. Ferguson; general manager, William Jay; brewmaster, Valentine Giesler.

Forest City Brewing Co., Cleveland, Ohio: President, V. Humel; vice-president, F. J. Kankovsky; treasurer, J. V. Chapek; secretary, J. F. Troyan; general manager, Albert Panek; brewmaster, M. Hansky.

A. Gettelman Brewing Co., Milwaukee: President and treasurer, A. Gettelman; vice-president, W. A. Gettelman; secretary, M. L. Schultz; general manager, Fred Gettelman; brewmaster, Julius Stemler; additional director, M. Gettelman.

Home Brewing Co., Bridgeport, Conn.: President, Louis Kutscher, Jr.; treasurer, Sigmund Loewith; secretary, John H. Spittler; general manager and brewmaster, Walter Loewith; brewmaster, Alfonse H. Gosch.

Ironwood Brewing Co., Ironwood, Mich.: President, Reiner Hoch; vice-president, George A. Cuny; secretary-treasurer and general manager, Frank Dick; brewmaster, Fritz Gretzinger; additional directors, C. M. Humphrey and Carl Meeske.

Oriental Brewing Co., Manila, Philippine Islands: President, Gabriel Perfecto; treasurer and general manager, Pascual Candido; secretary, Jose Carpi; superintendent, Martin Lauritsen; brewmaster, F. Hauswirth.

Peoples Brewing Co., Terre Haute, Ind.: President and general manager, Charles N. Murphy; vice-president, George Terhorst; treasurer, Alva S. Morton; secretary, M. T. Hidden; additional directors, Wm. H. Steeg, J. B. Pfister, Chas. Stuemple. The brewmaster is Louis Kempe.

Philipsburg Brewing Co., Philipsburg, Pa.: President and general manager, E. C. Beezer; vice-president, F. P. Graham; secretary-treasurer, W. A. Loding; brewmaster, George Burger.

Port Washington Brewing Co., Port Washington, Wis.: President, Ludwig Labahn; vice-president and general manager, George Blessing; secretary and treasurer, Charles F. Labahn; brewmaster, George J. Blessing, Jr.

Rainier Brewing Co., San Francisco: President, Louis Hemrich; general manager, R. Samet; superintendent, I. A. Scheibe.

Rockwood Brewing Co., Rockwood, Somerset County, Pa.: President, W. F. Murdock; vice-president, J. C. McSpadden; treasurer, George Holtzouer; secretary and general manager, E. J. Weimer; brewmaster, John Straser.

Roessle Brewery, Boston, Mass.: General manager and superintendent, Walter A. Carl; brewmaster, Albert C. Lieber.

Sacramento Brewing Co., Sacramento, Cal.: President, C. J. Mathews; vice-president, F. L. Martin; secretary and general manager, E. C. Roeder; brewmaster, F. C. Wallner.

Southern Indiana Brewing Co., New Albany, Ind.: President, J. M. Ferguson; vice-president, Michael Schrick; secretary and treasurer, Gustav Weinmann.

South Fork Brewing Co., South Fork, Pa.: President, Robert Prance; vice-president, M. F. Murphy; treasurer and general manager, William Fox; secretary, S. J. Dolan; additional directors, John Karl, F. J. Vilsack and Patrick McDonald. The brewmaster is John Hauck.

Standard Brewing Co., Scranton, Pa.: President, Otto J. Robinson; vice-president, Adam Spitzer; secretary-treasurer and general manager, P. F. Cusick; brewmaster, Fred Fuchs.

Star Brewing Co., Minster, Ohio: President, Frank Herkenhoff; vice-president, A. W. Gerwels; secretary-treasurer and general manager, C. F. Herkenhoff; manager of sales and collections, Fred Guehl; superintendent and brewmaster, Joe Brinkman; additional director, A. W. Frierott.

Joseph Stoeckle Brewing Co., Wilmington, Del.: President and general manager, Harry J. Stoeckle; treasurer, Harry S. Neher; secretary, Morris A. Grubb; brewmaster, Herman A. Wolters.

Storck Brewing Co., Schleisingerville, Wis.: President, general manager and brewmaster, Henry N. Storck; vice-president, William Storck; treasurer, August Storck; secretary, Charles D. Storck.

Sudbury Brewing & Malting Co., Sudbury, Ont., Canada: President, John J. Mackey; vice-president, George Fee; secretary and treasurer, John J. Doran; brewmaster, John C. Clemens.

Virginia Brewing Co., Virginia, Minn.: President and general manager, Nels Anderson; vice-president, Peter McHardy; treasurer, A. C. Emmons; secretary, Nora C. Vail; brewmaster, William Becker.

BRITISH-AMERICAN BREWERIES. The Cincinnati Breweries, Ltd., report a loss of £8,525 for their American plant (Jung) at the end of 1916. The sales amounted to 46,519 barrels, a decrease of 13,483 barrels, as compared with the sales in 1914, poor prices and the advance in the price of brewing materials accounting for the result. The capital has been reduced from \$1,000,000 to \$500,000.

The Denver United Breweries, Ltd., whose American plant was closed by Prohibition in Colorado, have decided to discontinue paying the full debenture interest, reducing it from 6 per cent. to 3 per cent. during the continuance of the war, and for two years afterward, on the understanding that the remaining 3 per cent. would be made up out of the earnings of future years.

FERMENTED LIQUORS BENEFICENT. "If the physiological effect of fermented liquors is detrimental to human kind, then logically the race which have continuously used same for generations and generations should surely show decadence and physical and intellectual inferiority and no great scientist, no great thinkers, no great writers, no great soldiers would be found among them, but is that true of England, France, Germany and other leaders of civilization? And is it not a fact observed by all travelers through England that a drunken man in the rural districts of the wine producing countries is almost an unknown sight?"—(Paul Masson.)

PROHIBITION AND DRUGS. "In the Southern States, where Prohibition has almost become universal, the increase in the sale of drugs per capita is greater than the increase in population. The legitimate amount of opium calculated as absolutely necessary for medical and commercial purposes for one year's consumption is 60,000 pounds. Last year over 48,000 pounds were brought into the United States through the custom house. This, of course, does not include the vast amount that is smuggled over the borders. The use of opium, cocain and other such drugs is, I regret to say, largely on the increase all over the United States, especially in localities where the sale of liquor is prohibited. The pure food laws have done good work regarding the sale of patent medicines, but the drug store has taken the place of the saloon in many of our cities where the sale of liquor is not permitted."—(Rev. C. H. Brant, Episcopal Bishop of Manila.)

OUT OF HARMONY WITH LIBERTY AND JUSTICE. "Let me ask you for a moment to think of the most elemental injustice of prohibition; here is a species of property running into many hundreds of millions of dollars, giving bread and butter to many thousands and representing their savings and their toil, which is to be wiped out by your cross mark on the ballot. This property was accumulated under the protection of the law, and had the encouragement of the nation; it filled a public demand; and has paid thousands of millions of dollars to the Government in taxes. You say different times, different ideas, but is it in harmony with simple liberty and justice to confiscate this property without a cent of compensation? To any other people on earth, except those—carried away by religious zeal, by wild fanaticism, by illusions and words, and swept off their feet by organized agitation and political cowardice, such an invasion of men's rights and liberties would be unthinkable."—(O. F. Hershey.)

Personal Mention.

C. C. Donovan, hop merchant, 227 Fourth Street, Santa Rosa, Cal., has made a bet to pay \$10,000 to any one who can prove that the figures showing that prohibition has increased drunkenness, crime, violent deaths, and suicides in Maine and Kansas, quoted by him in the Santa Rosa "Republican" are false, adding:

"How are you going to reconcile yourself with our Lord, Who never preached Prohibition and Who never lived it, for the enormous sin on your soul by voting to destroy your neighbor's property and render him homeless?"

John B. Hasslocher, superintendent of the George Ehret brewery, New York, celebrated his sixty-sixth birthday July 19th, congratulated by his relatives, his associates and innumerable friends. He has now been with George Ehret more than forty-five years.

Adolph G. Hupfel, Jr., president of A. Hupfel's Sons, Inc., New York, has been honored by Mayor Mitchel appointing him a member of the Traffic Commission which is to confer with and advise the Mayor on ways and means how to increase the capacity of the New York streets for vehicular traffic.

Harry D. Meyer, second vice-president of the Consumers' Brewing Co., New York, celebrated his forty-second birthday on Wednesday, July 18th, being the recipient of untold congratulations from near and far.

Henry F. Schibi, secretary and brewmaster of the Schibi Spring Brewing Co., St. Charles, Mo., has resigned to enlist in the Aviation Officers Reserve Corps of the United States Army.

Frank X. Schwab, who for twelve years was in charge of the bottling department of the Iroquois Brewing Co., Buffalo, N. Y., recently was the guest of honor at a banquet given by the employes of that company, the occasion marking Mr. Schwab's departure from the Iroquois Brewery to assume the managership of the Buffalo Brewing Co. His former associates presented him with a watch charm. Joseph J. Suttner was the toastmaster.

Hon. Charles A. Stadler, better known than whom among the trade throughout this country there are not many, reached the biblical age on his birthday, July 15th, and it goes without saying that his thousands of friends and business colleagues showered upon him their good wishes and gifts, fitting the happy occasion.

George Stahl, brewmaster for Peter Hauck & Co., Harrison, N. J., and his wife, have announced the engagement of their daughter, Miss Hildegard Stahl, to be married to Frank Maennle, son of Wm. Maennle, brewmaster of the Wm. Peter Brewing Co., Union Hill, N. J.

S. S. Steiner, hop merchant, 17 Battery Place, New York, with branch offices in Germany, Austria and England, and Mrs. Steiner, have announced the marriage of their pretty daughter, Eleanor Rose, to Monroe Hess, son of Mr. and Mrs. Ferdinand Hess, New York, the wedding having been celebrated July 11th, at the home of Mrs. J. E. Heimerdinger in Long Branch, N. J.

Henry Uihlein, president of the Jos. Schlitz Brewing Co., Milwaukee, celebrated the forty-seventh anniversary of his wedding day last Thursday, July 26th. He and Mrs. Uihlein are enjoying the best of health and they are as active in life as when they were in the happiness of their young wedded life.

Frank Yoerg, president of the Yoerg Brewing Co., St. Paul, Minn., celebrated his birthday July 10th, having now passed his first one-half century. His many friends and associates overwhelmed him with their cordial good wishes and congratulations.

Obituary.

William G. Bee, vice-president of the Edison Storage Battery Co., who was well known among the trade throughout this country and abroad, died at his home, 477 Main street, Orange, N. J., July 11th, at the age of forty-nine years, survived by his widow. Mr. Bee was the first man to drive an automobile in the streets of Newport, R. I., with John Jacob Astor as a passenger, and the vehicle created such excitement that the Newport City Council took a special vote to decide whether automobiles should be permitted on the streets. He also gave Thomas A. Edison his first automobile ride.

Born in Hartford, Conn., in 1868, Mr. Bee served in the United States navy from 1883 to 1898. He was commended for his bravery while on board the Gloucester at the battle of Santiago.

Resolutions of condolence and appreciation of the faithful services rendered them by the deceased have been adopted by the Board of Directors of the Edison company.

Louis P. Dettling, president and general manager of the Akron Brewing Co., Akron, Ohio, died in that city on Monday, July 16th.

Albert Fisher, president and general manager of the A. Fisher Brewing Co., Salt Lake City, Utah, died on June 29th at the Hot Lake Sanitarium, Hot Lake, Oregon, where he was under treatment for rheumatism and neuritis. He was born in Baden, Germany, October 30th, 1862 and came to the United States when he was twenty years of age. After a brief sojourn in the East, Mr. Fisher settled in Salt Lake City, to stay there ever since. His brewery was established in 1884. Surviving him are his widow and four children, Frank A. Fisher, Mrs. Fred Davidson, Albert B. Fisher and Carl A. Fisher.

Adolph Glaser Hupfel, formerly one of the most active and successful members of the brewery firm of A. Hupfel's Sons, Inc., New York, died at his country residence, Brinkerhoff, Dutchess County, N. Y., July 14th, aged seventy-two years. He was born in Orange County, N. Y., August 12th, 1844, son of the founder of the Hupfel brewery, Anton Hupfel. After having graduated from the public schools, Mr. Hupfel was apprenticed to the trade in his father's brewery and soon became an efficient expert to whose unceasing efforts and professional care and skill his business gradually assumed the comprehensive proportions it has ever since preserved. The deceased retired from active business in 1908, retaining however his holdings in the brewery, as well as his participation in advancing the interests of the trade in the organizations of which he had been active as a member and an officer for many years. Mr. Hupfel married Miss Magdalena Kuntz, of New York city, about forty-five years ago. Four children were born to them. They are Mrs. Katherine G. McMann, Mr. A. G. Hupfel, Jr.; Mrs. Antoinette G. Deppeler and Mr. Otto G. Hupfel. His widow and the children survive him.

Albert L. Irion, former president of the British-American Brewing Co., Inc., Windsor, Ontario, Canada, died June 19th at his residence, 389 Chicago Boulevard, Detroit, Mich., death being due to paralysis. Born in Ottawa, Ill., fifty-four years ago, Mr. Irion came to Windsor in 1893 and became a partner of his brother-in-law, the late Louis Griesinger, founder of the British-American Brewing Co. After the death of Mr. Griesinger, Mr. Irion was made president of the company and continued in active management until five years ago, when he was stricken with illness. Besides his widow, who was Miss Ida Griesinger,

of Ottawa, Ill., Mr. Irion is survived by two sons, Louis A. and Raymond Irion; two brothers, Paul and Charles Irion, and one sister, Mrs. Josephine Weise, of Ottawa, Ill.

Edwin M. Jackson, president of the Yonkers Brewery, Yonkers, N. Y., died at his home, 92 Hamilton Avenue, Yonkers, July 2nd in his sixty-eighth year, having suffered from a paralytic stroke for several months. He was born in Chelsea, England, and came to Yonkers in 1870. He and his brother, the late Robert G. Jackson, connected themselves with the old-established ale brewery of E. Underhill, on Chicken Island. Later a stock company was formed in the name of the Yonkers Brewery. The business was incorporated in 1898 and Mr. Jackson was made president. He was married on June 16th, the anniversary of his birthday, 1880, to Miss Amy Underhill, whose family were the founders of the brewery. His wife died two years ago. The deceased is survived by a sister, Miss Emma Jackson.

August J. Roeck, formerly connected with Neidlinger & Sons, maltsters, New York, whose firm subsequently joined the American Malting Co., died at his home, 601 East 170th Street, New York, July 23rd, in his sixty-ninth years. He was well known among the trade throughout the United States.

William J. Schenck, solicitor for the Ohio Brewing Co., Columbus, O., died at his home, 40 East Mound street, Columbus, July 6th, aged fifty-four years. Surviving him are three brothers, Charles G. Schenck, 1068 High street, secretary and treasurer of the Lang-Schenck Co., Oscar A. Schenck, cashier of the Market Exchange Bank, and Arthur E. Schenck, secretary of the Ohio Brewing Co., and two sisters, Mrs. A. B. Courtright and Mrs. Frederick Schmidt.

Albert Schmidt, brewmaster for the Wacker & Birk Brewing & Malting Co., Chicago, died suddenly in that city June 19th, aged fifty years. He was a native of Breslau, Silesia, Prussia, and emigrated to the United States in 1889, to work in New York breweries until 1892, when he moved to Chicago, where his first position as brewmaster was with the George J. Cooke Company. From Chicago he went to Louisville, Ky., to accept a position offered him by the Frank Fehr Brewing Co. Returning to Chicago, Mr. Schmidt was engaged by the McAvoy Brewing Co., which he left to go to the Dostal Bros. Brewing Co., Bucyrus, Ohio. In 1911 he again returned to Chicago to engage with the firm whose brewmaster he was when death called him away. His widow, one daughter and a son are his survivors.

George Weidner, one of the founders and vice-president of the Diogenes Brewing Co., Brooklyn, N. Y., died at his home, 1544 Greene Avenue, Brooklyn, July 18th, in the seventy-fifth year of his age, heart trouble hastening the end. He had been active in business almost up to the last hours before his demise. Mr. Weidner was a native of Bavaria and had come to the United States in his early youth. For many years he was engaged in the retail trade until he took an active part in establishing the Diogenes brewery. His survivors are his daughters, Mrs. Caroline Schurjer, Mrs. Minnie Goennewich, Mrs. Lauretta Chapman, his son, Frank Weidner, a brother, a sister, six grandchildren and one great grand-child.

Deaths in Foreign Countries.

Arthur Montgomery Adams, of The Brewery, Marlborough, Wiltshire, England.

Col. W. H. Baxter, in India while on sick-leave from Mesopotamia. He was proprietor of the Dorsetshire Brewery, Sherborne, England; aged 52.

Sharples-Bently, director of the Milshaw Brewery Co., Ltd., Accrington, England; aged 48.

Corporal H. J. Binsted, son of the managing editor of the "Brewer & Wine Merchant & Brewers' Guardian," London; killed in action.

Lieut. Andrew R. Buxton, son of John H. Buxton, of Truman, Hanbury, Buxton & Co., Ltd., London; killed in action; aged 37.

Alban A. Clarke, one of the directors of the Hook Norton Brewery Co., Hook Norton, North Oxfordshire, England; killed in bicycle accident, aged 59.

Lieut. Cecil F. Manners, son of the late W. P. Manners, chairman of Worthington & Co., Ltd., Burton-on-Trent; aged 27; died of heartstroke.

Ovide Rolland, proprietor of brewery at Heuchin, Pas-de-Calais, France; aged 71.

Arthur Charles Tanqueray, former president of the Institute of Brewing, London, and head brewer of the Strouts Brewery, Clerkenwell Road, also for Watney, Combe & Reid, Pimlico.

W. Barwell Turner, formerly with Allsopp & Sons, Ltd., Burton-on-Trent, subsequently manager of the Brunswick Brewery, and then practicing in London as a consulting brewer and analytical chemist; aged 72.

Elie-Henri Vangraefscheppe, brewer at Eecke, North Department, France, brigadier general of 86th Regiment of Artillery, aged 32; died from wounds received in battle.

Ernest Webb-Smith, head brewer and a director of the Mountjoy Brewery, Birmingham, England; aged 54.

John Wotton, managing director of Tomson & Wotton, Ltd., The Brewery, Queen street, Ramsgate, England; aged 60.

Among the Brewmasters.

Master Brewers' Association of the United States. Wm. F. Carthaus has tendered his resignation as president of the Master Brewers' Association of the United States, and Carl A. Nowak, the Association's corresponding and recording secretary, also resigned, president Carthaus accepting the resignation to take effect July 31st, 1917. Reasons were not given by either of these officials, but they were laid before the Board of Trustees whom Mr. Carthaus called together for a special meeting, which was held in Detroit, Mich., July 18th. The Board accepted the president's resignation and unanimously elected Robert Weigel, of the New York District, to fill the unexpired term. Mr. Carthaus was then elected Honorary President.

The members of the Technical Committee had also resigned and their resignation was accepted.

After due consideration of existing conditions it was resolved that the annual convention be postponed for the period of one year, or until such a time that the conditions would again warrant the holding of the convention.

In the evening the delegates were the guests at an informal dinner arranged by District Detroit at the Schiller Hall. The affair was a decided success and most of the delegates were asked to speak. For the following morning the local members had arranged an automobile trip through the city of Detroit and its beautiful environs, including a visit to the famous Bell Isle and several breweries.

District Meetings.

Albany. The members of the Albany District have recently discussed the question of how to make beer palatable ("Vollmundig"), and they concluded that the following

methods will accomplish the object: Correct mashing temperatures; the exclusive use of malt; practically constructed cookers or converters, and the use of large percentages of grits; high amount of unfermentable extract and malto-dextrin; while upon the questions of lactic acid, albuminoids, wheat, after-mashing, kraeusening and carbonating opinions differed and colleagues in all other Districts were requested to communicate with Albany as to their opinions upon these subjects.

Boston. The Boston District will elect officers next month and a nominating committee is at work preparing a ticket. President Carroll has declined to accept a renomination; so has secretary Nicoll, who is about to withdraw from the District.

Buffalo. The Buffalo District has received a correspondence between The Larkin Company and the Wittemann Company, both of Buffalo, the former pleading with President Wilson for, and the Wittemann Company against Prohibition, the Wittemann Company evidently having had the best of the argument. Colleague Ernst Steige has withdrawn from the Association.

La Crosse. The La Crosse District has been discussing subjects relating to "Safety First." Colleague William A. Steinemann has joined the ranks of the organized brewmasters.

Milwaukee. The Milwaukee District has adjourned over the summer months. Colleague Otto Rubisch, of the Hillsboro Brewing Co., Hillsboro, Wis., has been admitted to membership.

New Orleans. While the members of the New Orleans District are continuing their arrangements for the National Convention, they are awaiting developments which may result from further discussion upon the advisability of holding the convention this year.

New York. The July meeting of the New York District was held in the Abbey Hotel at Albany, N. Y., on Sunday, July 15th. In regard to the Board of Trustees meeting to be held at Detroit, July 18th, the delegates of the New York District were given full power to act as they saw fit and recommend that owing to the conditions there be no convention held this year. A party of about thirty members and ladies left New York on Saturday evening, July 14th, on the People's Line steamer "C. W. Morse." After enjoying a pleasant sail up the Hudson River and arriving in Albany Sunday morning, the party was met by president Robert Weigel and in waiting autos were driven to the Abbey Hotel, where everybody was made to feel at home. After the meeting and lunch the afternoon was spent on an auto trip followed by a dinner at Keelers.

JOHN KOENIG, Secretary.

Philadelphia. Colleague James A. Bain has read an interesting paper entitled "Yeast" before a large audience of the members of the Philadelphia District and a committee which attended a hearing before the Pennsylvania District Board in regard to compiling a new Brewery Code for Pennsylvania has reported as follows: Besides the members of the board and our representatives a committee of the Brewers' Association, and a committee representing the different Brewers' Unions in this State, were present. Most of the recommendations offered by the board relating to safety appliances were accepted and incorporated in this new code. The only difference of opinion arose on the heating and drying of vats, tanks, etc. The board recommended that only electric heaters should be used for the above purpose. After showing the impracticability and in-

justice of this recommendation a compromise was reached allowing the use of gas and electric heaters and prohibiting the use of coal, coke, charcoal and oil heaters for the drying of brewery containers preparatory to varnishing. The code also prohibits the use in closed vessels of varnish containing wood alcohol.

PITTSBURG. The members of the Pittsburg District are opposed to the National Association's controlling the funds of the districts. Colleague Charles Hollweger, who lost his position, has been granted a withdrawal card. The newly appointed Technical Committee is composed of colleagues Hoffmann, Dan Sutter, Hammer, Louis Meyer, and Charles Wieland. The question of sterilizing bottles, instead of pasteurization, has been interestingly discussed.

Colleague Dan Sutter of the Technical Committee has submitted a report as to the use of "Mammut," and the question relative to the lubrication of air pumps which was submitted by Colleague Kilger resulted in an instructive debate in which Colleagues Zimmermann, Sutter and Poelhuiss participated. The request for withdrawal card received from Colleague Christian Kull, who is out of position, was granted.

St. Louis. Herman Reck, superintendent of the Alton Brewing Co., Alton, Ill., has been admitted to membership in the St. Louis District.

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

24803.—An association in England wishes to purchase malt, barley, glucose, beer in casks and bottles, coloring for brewing. Quotations should be made c. i. f. French or British ports, also c. i. f. Haifong, French Indo-China. Payment will be made by cash against documents. Reference.

24816.—A firm in England is in the market for malt, the bulk to be suitable for pale English beers and a small amount for brewing porter. Quotations should be made c. i. f. Havre. Payment will be made by cash against documents at Havre, through French agents of English bankers. The goods should be packed in metal-lined cases or double bags, if considered suitable for transport. The beer and porter is for the British and Belgian troops. Reference.

24905.—A request has been received from a firm in England dealing in foodstuffs that it be put in touch with American exporters who would ship best lager beer in cases of 48 bottles of 1 quart that would keep in good condition in abnormal climates. Cash will be paid against documents on arrival of goods at European port. References.

EXPORT LICENSES are required, as per proclamation by the President of the United States, dated July 9th, 1917, among other commodities, for the exportation from this country of food grains, flour and meal therefrom, particularly barley, malt and rice.

—The price of beer was raised last month in Washington, D. C.; many places in Wisconsin; Boston, Mass.; Buffalo, N. Y.; Terre Haute, Ind.

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

NEW BREWERIES.

PENNSYLVANIA—ButlerIndependent Brewing Co. of Pittsburgh (Butler Brewery).
WISCONSIN—SuperiorNorthern Brewing Co.

FIRM CHANGES.

CALIFORNIA—San Francisco....California Brewing Association succeeds Union Brewing & Malting Co.
" —San Francisco....California Brewers' Association succeeds Claus Wreden Brewing Co. (Washington Brewery).
ILLINOIS—ChicagoProducer's Brewing Co. succeeds Brand Brewing Co.
WISCONSIN—NeoshoEdmund J. Labuwi, Trustee of Sebastian Niedermair (bankrupt) succeeds Neosho Brewery (Sebastian Niedermair, owner).

BREWERIES CLOSED.

ILLINOIS—ChicagoGottfried Brewing Co.
" —ChicagoUnited States Brewing Co., No. 4.
MASSACHUSETTS—Fall River...Old Colony Breweries Co. (Enterprise Branch).
MINNESOTA—New Ulm.....New Ulm Brewing & Malting Co.
NEBRASKA—Falls City.....Gehling Brewing Co.
" —Grand Island.....Grand Island Brewing Co.
" —OmahaJoseph Guggenmos.
" — "Jetter Brewing Co., Ltd.
" — "Fred Krug Brewing Co.
" — "Storz Brewing Co.
" — "Willow Springs Brewing Co.
PENNSYLVANIA—Punxsatawny.Elk Run Brewing Co.
WISCONSIN—Stevens Point....National Brewing Co.
" —WaupunWaupun Brewing Co.

TOVEY'S OFFICIAL BREWERS' AND MALTSTERS' DIRECTORY OF NORTH AND SOUTH AMERICA FOR 1917 is a complete, accurate and up-to-date directory of the LAGER BEER AND ALE BREWERS and maltsters in the United States and Canada, also in all other American countries where breweries exist, alphabetically arranged, with postal addresses, corrected to January 15, 1917.

The Directory can be obtained only by subscribing to THE BREWERS' JOURNAL, Irving Building, 1 Hudson St., cor. Chambers St., New York (Subscription, Five Dollars per year), and is supplemented monthly by the publication in the JOURNAL of a list of new breweries, firm changes and breweries closed recorded during the preceding month in the Bureau of Internal Revenue, Washington, D. C.

Internal Revenue Decisions.

David A. Gates, Acting Commissioner of Internal Revenue, has decided that Internal Revenue stamps (especially those having money value) should be delivered by collectors directly to the taxpayer or his representative, except only in cases where the law or regulations expressly provide otherwise. In no instance, except as above provided, should stamps be delivered to a gauging officer or other person employed in or connected with the internal revenue service. In other words, such officer or employé must not act as the messenger for conveying the stamps from the collector's office to the place where they are to be affixed to packages, thereby assuming the risk of safe delivery. Where the applicant requests that the stamps be forwarded by mail or express the collector is, of course, absolved from responsibility upon complying with the shipping instructions."

CANADA'S BEER IMPORTS IN 1916-1917 were valued at \$141,405, \$80,431 of which was for British and \$59,121 for beer from the United States. In 1915-1916 the total imports of beer into Canada were valued at \$236,648. The imports of spirits decreased from \$3,402,143 to \$3,339,849.

"Is DRINK the only temptation to which man is subjected? And is legal prohibition of drink the only remedy? To be logical, why not prohibit the growing of these grains and fruits because, forsooth, some weakling might use to excess the alcohol extracted from them and become inebriated? The world would be desolate and a barren sphere if all objects of temptation to man were eradicated."—("National Bulletin.")

"NATION-WIDE PROHIBITION would fail because a large majority of the adult male population use liquor, and because the will of a minority cannot be enforced against the majority. The insincerity of the Hobson resolution is shown in the limiting phrase 'for sale.' Every man would have the right to manufacture liquor for his own use. Such activities are forbidden by the Government now, but under 'nation-wide' they would be legal. Millions of gallons of liquor would be imported from Canada and Mexico, for 'private use,' and again the Government would be powerless. This situation would mean the creation of an army of Government liquor spies numbering hundreds of thousands—a force large enough to control a Presidential election."—(Howard Noble.)

ILL-STARRED PROPAGANDA. "Prohibition aims at annihilating alcohol; and, in the very nature of things, that cannot be done. Alcohol is one of the products of the decomposition of sugar by natural fermentation. Any earthly thing that contains sugar—as do all fruit juices, more or less, and anything that can be converted into sugar, as can the starch contained in cereals, roots and many other things, can be a very simple process—much more simple than are the common cooking operations performed in our kitchens—be made to produce an alcoholic drink—many juices and infusions ferment spontaneously, the drink makes itself, so to speak. All primitive races have discovered this fact for themselves and have thus made some sort of an inebriating beverage for their own use. The worst feature of this ill-starred prohibition propaganda is that the prominent leaders of it know very well that they cannot do away with alcoholic drinks by any such means, and, what is more, they do not try to."—(Henry W. Booth, Birmingham, Mich.)

"AM I MY BROTHER'S JAILER? The last thing that the average person among us is able to learn is to mind his own business. It is none of your business what your neighbor eats, or what he drinks, or what he reads, or what he wears, or how he spends his time, provided he pays his debts and keeps on his own side of the street. But people tell us that they regard themselves as their brothers' keepers. What they really mean is that they regard themselves as their brothers' jailers. Much of our charity talk is the rankest kind of humbug. People want you to think as they think, to feel as they feel and to do as they do. That kind of thing has been reduced to a system in America. We read the same books, see the same plays, wear the same kind of clothes and do almost everything else as our neighbors do. There was never a despot of old whose tyranny was so intolerable as the despotism of our neighbors is rapidly becoming. Our sociability is almost a vice. There was once a man who had a very bad reputation. He had committed no crime, and consciously violated no law, but he frankly admitted that he preferred the theology of Hegel to the theology of the village preachers, the politics of Aristotle to the politics of the town and state politicians, and the characters of Shakespeare to any of his neighbors' for miles around. That was quite enough to prove him a villain of the deepest dye, and if he be still living, he is doubtless yet so regarded."—(Rochester, N. Y., "Herald.")

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,231,092. Barrel-washing machine. Arthur J. Suhm, Milwaukee, Wis.
- 1,231,634. Labeling-machine. Nelson Muslar, Worcester, Mass., assignor to Clarence R. Streeter, Worcester, Mass.
- 1,232,175. Bottle-washing machine. Juan Baeninger, Buenos Aires, Argentina, assignor to Barry-Wehmiller Machinery Co., St. Louis, Mo.
- 1,232,694. Carbonator. Herman Kruecke, Milwaukee, Wis.
- 1,232,882. Switch for gravity conveyors. John A. Alvey, St. Louis, Mo., assignor to Alvey Mfg. Co., St. Louis.
- 1,232,885. Heater. Richard F. Beutlich, Chicago, and Frank Schurek, Jr., West Allis, Wis., assignor to Milwaukee Brewers' Specialty Co., Milwaukee.
- 1,232,989. Instrument for measuring the turbidity of liquors. Otto M. Smith, Little Rock, Ark.
- 1,233,056. Automatic refrigerating method. William J. Herdman and Thomas E. Moldon, Toronto, Ont., Canada.
- 1,233,385. Thermometer-holding device for tanks and the like. Henry W. Maurer, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y.
- 1,233,468 and 1,233,469. Receptacle, container-capping machinery. William E. Heath Baltimore, Md., assignor to Heath Self-Opening Stopper Co., Baltimore, Md.
- 1,233,896. Bottle-cap. James F. McDonnell, Lakewood, Ohio, assignor to the McDonnell Bottle Cap Co.

The following Trade Marks have been definitely Registered:

- 117,486. Non-alcoholic cereal beverage sold as a soft drink. Suffolk Brewing Company, Boston, Mass. Filed January 23rd, 1917. Serial No. 100,864. Published May 8th, 1917. Registration granted, July 10th, 1917.
- 117,497. Non-alcoholic effervescent beverages sold and used as soft drinks. The Geo. Wiedemann Brewing Company, Newport, Ky. Filed March 6th, 1917. Serial No. 101,948. Published May 8th, 1917. Registration granted, July 10th, 1917.
- 117,557. Non-alcoholic beverages to be sold as a soft drink. Hemrich Bros. Brewing Co., Seattle, Wash. Filed February 15, 1917. Serial No. 101,396. Published May 15, 1917. Registration granted July 17, 1917.
- 117,538 and 117,539. Non-alcoholic carbonated beverage sold as a soft drink. Fitger Brewing Co., Duluth, Minn. Filed April 7, 1917. Serial No. 102,801 and 102,802. Published May 15, 1917. Registration granted July 17, 1917.
- 117,611. Beer. A. Schreiber Brewing Co., Buffalo, N. Y. Filed February 19, 1917. Serial No. 101,512. Published May 15, 1917. Registration granted July 17, 1917.

"E. F." (Enzyme Ferment.)

The Baldwin F. Schirmer Company, 21 Park Row, New York City, state in a business announcement, published elsewhere in these columns, that "E. F.," the Enzyme Ferment, which they offer for sale to the trade: "Saves over 50 cents per barrel of Beer without changing its flavor or quality; produces finest temperance beers." Also that "80 per cent of the brewers are using it."

Horst's Pacific Coast Barley Statistics.

The highly interesting statistical table which the E. Clemens Horst Co., hop merchants in San Francisco, prepare every year to show the production and crop movement of Pacific Coast Barley, made its appearance on June 20th. This table should be carefully studied by all brewers, maltsters and dealers in Barley, as it will enable them to profitably supply themselves with the fine Barley the farmers in California, Oregon, Idaho and Washington place upon the markets of the world. The table also contains prices, figures relating to the exports of Barley and a great deal of other valuable information. The E. Clemens Horst Co. will send the table to all who apply for it.

PERILOUS SITUATION. "Those who believe that prohibition means the spread of temperance may have their faith in such belief rudely shaken by official statistics, but there can be no disputing the fact that the nation is facing a perilous situation that calls for immediate action before prohibition spreads further."—(Manufacturers' and Merchants' Association of New Jersey.)

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 103,211. William J. Lemp Brewing Company, St. Louis, Mo. Filed April 23, 1917.

Particular description of goods.—A Non-Intoxicating Beverage of a Malt Nature Containing Less Than One-Half of One Per Cent. of Alcohol.

Claims use since March 30, 1917.



Ser. No. 103,226. Milo Beverage Co., Milwaukee, Wis. Filed April 23, 1917.

Particular description of goods.—A Non-Intoxicating Malt Beverage Sold as a Soft Drink.

Claims use since March 24, 1917.



Ser. No. 104,429. Pabst Brewing Company, Milwaukee, Wis. Filed June 13, 1917.

Particular description of goods.—A Non-Alcoholic Preparation, Which is an Artificially-Carbonated Beverage Compounded with Various Carbohydrates and Matter Derived from Hops, Which is Not Brewed or Fermented and Does Not Contain Any Malt or Alcohol at Any Stage of Its Manufacture.

Claims use since March 1, 1917.



Ser. No. 102,2786. Lexington Brewing Company, Lexington, Ky. Filed April 7, 1917.

"Bone Dry."

Particular description of goods.—Non-Alcoholic Beverages for Soft Drinks.

Claims use since Jan. 29, 1917.



Ser. No. 103,930. Geo. Muehlebach Brewing Co., Kansas City, Mo. Filed May 18, 1917.

Particular description of goods.—A Non-Alcoholic Maltless Cereal Beverage Sold as a Soft Drink.

Claims use since May 5, 1917.



Ser. No. 104,407. Frank Jones Brewing Co., Ltd., London, England, and Portsmouth, N. H. Filed June 12, 1917.

Particular description of goods.—A Maltless Beverage Containing Only Thirty-five One-hundredths of One Per Cent. of Alcohol and is to be Sold as a Soft Drink.

Claims use since April 1, 1917.



Ser. No. 104,422. Fremont Brewing Company, Fremont, Nebr. Filed June 13, 1917.

Particular description of goods.—A Non-Intoxicating Malt Beverage Sold as a Soft Drink.

Claims use since May 18, 1917.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,

NEW YORK, July 30th, 1917.

Barley. According to the Government's estimate, published by the Crop Reporting Board July 9th, the Barley crop of the present year will aggregate 214,000,000 bushels, as compared with the December, 1916, estimate of 181,000,000 bushels, an increase of 33,000,000 bushels, the yield per acre having increased from 23.6 bushels to 25.5 bushels, while the price per bushel rose from 59.3c. in July, 1916, to \$106.6 in July, 1917. The condition of the Barley crop, July 1st, 1917, is given at 85.4, as compared with an average of 84.6 on July 1st during the last ten years.

There is practically no Barley market, hardly any Barley coming in, only a few cars of Coast. Brewers are using as little as they can get along on; making a few sales a day, are sitting back waiting for the new crop. Shipping orders are very good. Quotations: Malting Barley, \$1.55@1.65, nominal, f. o. b. New York.

BUFFALO, July 27: "There is practically no Barley fit for malting offered on this market. Occasionally a car or part of a car arrives which has been selling at \$1.60@1.66. Old Western Barley seems to be cleaned up."

CHICAGO, July 27th: "The receipts of Barley in July were very small, with prices very erratic owing to the uncertainty regarding legislation which affect the brewing industry. For instance, Barley sold in a small way at 40 cents a bushel less in Minneapolis than the same Barley sold 10 to 12 days later. For years the stock of Barley has not been as thoroughly exhausted as it is now. Up to the time that new Barley may begin to move, very little will be done in Barley. It is generally conceded that the California Barley crop is very large and generally predicted that the Middle Western Barley crop will be normal in size, probably large and uniform in berry, but probably also quite generally stained, owing to excessive moisture. Harvesting will begin in Iowa very soon and will gradually work northward."

Malt. The Malt market is pretty slack, brewers only buying for absolute need; prices: Standard, \$1.74; Bottle Beer Malt, \$1.82.

BUFFALO, July 27th: "Standard Malt is quoted here at \$1.73@1.75; Choice, \$1.78@1.80."

CHICAGO, July 27th: "To-day's quotations for Standard Malt are \$1.65@1.66; Bottle Beer Malt, \$1.71@1.73; Fancy, \$1.80@1.82; Coast, \$1.50@1.53."

Corn Goods. Grits are quoted in New York at \$5.60; Meal, \$5.59; Corn Sugar, \$5.91 in barrels and \$5.98 in bags; Corn Syrup, \$5.89.

CHICAGO, July 27th: "Grits sell here at \$5.22@5.24; Meal, \$5.21@5.23. Business very dull."

Hops. The hop market underwent some change in July, the more favorable legislation in Washington, D. C., having caused a better feeling all around. Prices have advanced about 2c. per lb. for 1916 hops as well as contracts, and the market has been very active on the Coast, where large quantities, especially of the new crop, have been engaged. Brewers as a general rule carry large supplies and prefer to await the final outcome as regards the prohibition question in Washington. Crop prospects on the whole are favorable, but it is quite certain that on account of a large decrease in acreage, a much smaller quantity of hops will be raised. Dry weather in California and Oregon has not been conducive to the growth of the plant, and while it is rather early to predict the final outcome, the chances are that the crop in the United States will be from 75,000 to 100,000 bales less than in 1916. We quote: 1916 Pacific coast hops, 10@14c.; 1916 N. Y. State hops, nominal, 32@36c.; 1915 N. Y. States and Pacifics, 7@9c.; 1914 N. Y. States and Pacifics, 5@6½c.

"DO AWAY WITH LIQUOR and you do away with Crime, Murder, Police, Jails, and Insane Asylums." So say the Prohibitionists. Arkansas is not only "Bone Dry," it also prohibits liquor advertising of any kind. Insanity gained 108 per cent. in a few years in Kansas. More than thirty thousand simple minded in Kansas to-day." So says the "Topeka State Journal," Topeka, Kan. Kansas is another "Bone Dry" State. The above are absolute facts and cannot be disputed."—(The Manufacturers & Dealers Association of America, Chicago.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Willich & Co., Rice Merchants.

Theodore Willich and Samuel Hecker announce that they have formed a co-partnership under the style and firm name of Willich & Co., for the transaction of business in rice, with offices at 11-19 William Street, New York, and an agency at 321 Whitney Central Building, New Orleans, La., under the management of D. R. Bertant.

New Offices for Bidel Chemical Works.

The offices of the Bidel Chemical Works, Inc., New York, manufacturers of Bidel's Antisepticum, were recently removed from No. 60 Water Street to the corporation's extensive new five-story brick building, 51 Front Street, New York, the opening ceremony being attended by a large number of invited guests, friends and customers of the business, the officers of which, headed by president C. H. Mantler, gloried in showing them around, a fine spread and seasonable refreshments being served in one of the spacious rooms. The building is 100x28 feet in ground dimensions, the offices occupying the second floor, while the three upper floors are used for storage purposes.

Edison Storage Batteries for the South.

The Edson Storage Battery Co., Orange, N. J., have made the subjoined announcement:

"Mr. D. B. Mugan, formerly associated with the Illinois Central Railroad Company, in charge of their Electrical Department at New Orleans, La., has been appointed Resident Manager of the Edison Storage Battery Supply Company with headquarters at 201 Baronne Street, New Orleans.

"The South is full of promise for considerable development in both the sale of commercial street trucks and the sale of storage battery industrial trucks and storage battery tractors. And the popularity of Mr. Mugan's appointment breathes a confidence that this section of the country will be developed as never before."

De La Vergne Horizontal Machines.

In Bulletin No. 170 of the Refrigerating Department of the De La Vergne Machine Company, Foot of East 138th Street, New York, the latest type horizontal Refrigerating Machine is illustrated and described in detail.

Of the horizontal type the Bulletin says: "It is apparent that a machine of the horizontal style will be more accessible and under the eye of the operator at all times; moreover, it is easier and less expensive to build a durable and well-designed machine in the horizontal form than to construct a vertical type which has the principal part of the machine supported on frames at a considerable height above the foundation. De La Vergne machines of the vertical type were the first successful pioneers in the field of refrigeration over thirty years ago and we still build this style. However, we offer our horizontal machine at less cost and on account of its accessibility, economy, safety features and heavy construction, recommend it as superior to any other type or make of refrigerating machine.

"The predominant features of the design of our compressor are accessibility and impossibility of serious derangement. This is accomplished by a complete departure from the ordinary design of horizontal ammonia compressors. Instead of the valves being located in the heads, they are arranged below the cylinder, making it impossible for a loose or broken part to get into the cylinder and cause serious damage.

"The ordinary design of horizontal compressor, with the valves sticking out at both ends, giving it a porcupine appearance, is widely different from our construction and much cheaper to manufacture. The hot ammonia discharge gas very quickly increases the temperature of the heads to such a degree that the incoming gas is heated and expanded, thus reducing the volumetric efficiency. It will be noted in this style of compressor, the suction and discharge ammonia connections must necessarily be arranged so that it is im-

possible to remove a cylinder head without disturbing these connections."

Those interested in refrigerating machinery are advised to carefully peruse this interesting Bulletin, which may be readily obtained by applying for it to the De La Vergne Machine Co.

Installations of Frick Machinery.

The Frick Company, Inc., Waynesboro, Pa., report that they recently made installations of their machinery in sixty-five different plants, among them those of H. D. Beuchler, Leesburg, Va., one 5-ton vertical single acting belt-driven, enclosed type, two cylinder refrigerating machine and high side, with brine cooler, etc.; P. H. Hill, Terra Alta, W. Va., one 5-ton vertical single acting, belt-driven, enclosed type refrigerating machine and high side with brine cooler, etc.; Clinton Ice & Coal Company, Lock Haven, Pa., direct expansion piping; Marshall Ice Company, Lock Haven, Pa., one tandem compound Corliss Engine; Sprague Ice & Coal Company, Bridgeport, Conn., one 60-ton steam condenser complete; Marion Products Company, Fairmont, W. Va., apparatus for changing present plant to flooded system, dip tanks, dump boards and cans; Sohn Products Company, Marion, Ind., one 20-ton vertical single acting, belt-driven, enclosed type refrigerating machine and high side together with direct expansion piping, etc.; G. A. Wegner Const. & Engr. Co., Rochester, N. Y., for Odenbach Hofbrau House, Rochester, N. Y., one 15-ton vertical single acting, belt-driven, enclosed type refrigerating machine and high side; J. A. McCloud, Jr., Berkley, Va., one 5-ton vertical single acting, belt-driven, two cylinder enclosed type refrigerating machine and high side; John Wildi Evaporated Milk Company, Columbus, Ohio, for their creamery in Horseheads, N. Y., one 15-ton vertical single acting, piston valve, refrigerating machine and high side; F. W. Hallam, Brooklyn, N. Y., H. Bahrenburg, Richmond Hill, L. I., N. Y., one 5-ton vertical single acting, belt-driven enclosed type refrigerating machine and high side; Koellner Refg. & Ice Machine Company, Chicago, Ill., one 10-ton vertical single acting, belt-driven, enclosed type refrigerating machine; Dempster Machinery Company, Kansas City, Mo., for Parsons Cold Storage and Crystal Ice Company, Parsons, Kans., one 110-ton horizontal double acting refrigerating machine and high side; Judd Engineering Company, Boston, Mass., for Canal Fish and Freezing Company, Sandwich, Mass., one 20-ton vertical single acting, belt-driven, one 50-ton vertical single acting, belt-driven refrigerating machines and high side; J. J. McPherson Packing & Ice Corp., Norfolk, Va., one 80-ton open flow ammonia condenser complete; Steelton Store Company, Steelton, Pa., one 30-ton closed flow ammonia condenser complete; Crockett Ice, Elec. Lt. & Power Co., Crockett, Texas, one 25-ton flask steam condenser complete; Sears, Roebuck & Company, Dallas, Texas, one 10-ton vertical single acting Corliss refrigerating machine and high side; Old Dominion Beverage Company, Richmond, Va., one 5-ton vertical single acting, belt-driven enclosed type refrigerating machine and high side; Paul O. Reymann Company, Wheeling, W. Va., one 25-ton flask type steam condenser for ice plant; Nyack Ice & Coal Company, Nyack, N. Y., room piping, etc.; George Rhode, Kutztown, Pa., one 2-ton vertical single acting, belt-driven, enclosed type refrigerating machine and high side; W. J. Palmer & Son, Buffalo, N. Y., one 3-ton vertical single acting, belt-driven, enclosed type refrigerating machine and high side; Kolts Ice and Cold Storage Company, Los Angeles, Cal., one 30-ton flooded freezing system, etc.; Logan Ice and Storage Company, Logan, W. Va., Freezing tank piping and propeller agitator for present freezing tank; Klages Coal and Ice Company, Akron, Ohio, one 125-ton horizontal double acting, belt-driven refrigerating machine and high side, 80-ton freezing system, motor, direct expansion piping, etc.; Schmadel Packing & Ice Co., Evansville, Ind., one 10-ton open flow ammonia condenser, etc.; Frid Engineering Company, Philadelphia, Pa., for R. A. Bowers Company, Philadelphia, Pa., one 10-ton vertical single acting, belt-driven enclosed type refrigerating machine and high side. Machinery furnished to breweries is mentioned in another column of this trade journal.

THE BREWERS' JOURNAL

AND
BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

Established in 1876 by A. E. J. TOVEY, Honorary Member of the United States Brewers' Association.

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Honorable Mention, Paris Exposition, 1878.

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No More Amendments by Minorities.

If we are to have real Democracy in this country, the Constitution should be so changed that amending it by State Legislatures saying so is no longer possible.

Legislatures, under the present system, generally make laws benefiting either "influential" individuals, wealthy corporations, or some of the Legislators themselves. That does not look like representing the masses of the people, nor protecting their interests and their liberty. Therefore, Legislatures must be deprived of the right to vote for Constitutional amendments proposed by minorities or vicious cliques.

Amendments to the Constitution of the United States should be submitted to a referendum of the entire American people. Only then an amendment can be considered to be the expression of the will of the majority.

In Ohio they propose the organization of a new political party to bring about a rational method of amending the Federal Constitution. The name of the new organization is to be "The National Liberal Party."

Let us hope that the movement may rapidly gather force and then accomplish the sorely needed change!

All Will be There!

Every brewer who is determined to resist the attempted destruction of the American brewing industry will be at the Hotel Traymore, Atlantic City, N. J., October 2nd to 5th, 1917, when the United States Brewers' Association will meet at its 57th, and probably the most important annual convention in its history.

The special convention rates at the hotel are as follows:

One person, American plan: Daily—\$6, \$7, \$8, \$10, \$11, \$12, \$14.

One person, European plan: Daily—\$3, \$4, \$5, \$6, \$7, \$8, \$9, \$11.

Two persons, American plan: Daily—\$10, \$11, \$12, \$14, \$15, \$16, \$18.

Two persons, European plan: Daily—\$5, \$6, \$8, \$9, \$10, \$12.

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

"Vollmündigkeit"—Palate-fullness.

By WILLIAM CARTHAUS.

What is "Vollmündigkeit" or palate-fullness? Its degrees are a matter of taste. The sense, however, is largely individual. Health or illness affect it. Coating of the tongue interferes with it, causing in some instances an increased salty, sweet, sour or bitter expression of taste. Expressions of hearing or seeing are always more uniform than those of tasting. Sound waves affect the sense of hearing of a group of auditors alike. A view will reach the sense of vision of a group of men alike, but many people tasting the same object, will express radically different opinions. I have heard one man call a beer sweet and the other call it bitter. I have heard one call a beer "vollmündig" when another called it "süffig" and another called it "empty" (leer). Only one could be right, who was? There is error somewhere.

I have heard much about the term "Vollmündigkeit" but never heard a satisfactory explanation of what it implies. Does it include the wort taste of low alcoholic beverages, for instance?

Granting that the sense of taste is developed differently in different individuals and that many other causes affect the taste, there remains the doubt that if we should taste the same thing in the same way, whether we will express that which we taste in the same terms.

A few years ago we were experimenting with beers brewed with hops of different origin and were determining the influence of different hops upon the taste, I mentioned our inability to taste. Trial brews were made in several parts of the country. A few friends were trying one of these beers when one of the party remarked: "You certainly have not been saving on imported hops in this beer," to which came the reply: "In this brew there is not one pound of imported hops." Experiments made at that time convinced me that over half of us cannot taste at all—of those that claim they can, the great majority are guessing and happen to hit it right, which they will not do in a second test, and that those that can taste have not been educated to the proper expression of that which they taste.

We should devote some efforts on what we may term the standardization of the expression of taste of beer. This could possibly be done at a Convention by a Board of Judges, who have previously tried and agreed upon the expressions of taste of various beers, and placing them before all participants will express their judgment as to the proper terms of taste for each beer, with the reasons for their judgment. In that way each individual would be told how to express what he tasted and would understand similar expressions better in the future.

But supposing we agree upon a uniform expression of taste of beer, can we best produce a "palate-full" beer with the different propositions District Albany advances?

Undoubtedly palate-fullness includes "character" and more so the character of malt than of hops, although of both is necessary. I consider it difficult, if not impossible, to produce a palate-full beer with an ordinary amount of extract under any of the propositions advanced by Albany

from an improperly grown, low-dried malt. I claim that the first requisite of a "palate-full" beer must be looked for in the Malt House. A malt of character mashed high or low, kräusened or carbonated, blended with any hops will give its particular stamps to the beer produced.

Is a dark Münchener beer with a low amount of extract and a limited hop taste "vollmündig"? Are the entirely different pale Pilsener beers with a higher percentage of alcohol and more strongly hopped also vollmündig? The character of both types, different in themselves, are to be credited to a great extent to the malt employed, the very factor to which we do not pay enough attention in some of our American Brewing Factories.

By GEORGE J. FRIEDRICH.

In order to produce a beer which shall excel in palate-fullness it is quite obvious that the first factor to be considered is the amount of material used in making the brew and the proportion of malted to unmalted cereals employed. In other words, you cannot expect to have the same degree of palate-fullness from a beer of 10 per cent. Balling as that of 13 per cent. brew, nor will a brew where perhaps 50 per cent. of an unmalted cereal has been used compare in this respect with one of only 25 per cent.

It quite frequently happens, even though the original gravity of the beer was high enough and the saccharometer indicates a high percentage of extract in the finished beer, that there is an empty or thin taste to be noticed. This would indicate that not all extractive substances contained in beer give it the desired palate-fullness. In such a case the following factors may influence the degree of palate-fulness of the finished product. It may be that the malt employed was of unusual long growth and low albumen content. Such malt will generally produce a thin beer, especially if a mashing process of long duration and comparatively low temperatures, between 32 deg. R. and 46 deg. R. was employed. Better results will be obtained from such a malt by mashing a shorter period and using higher temperatures, both for mashing in, and for conversion.

On the other hand, when working with a malt which is too short-grown is poorly dissolved, it is advisable to observe a rest period at a temperature of 30 to 40 deg. R. for one-half to one hour before going up to the conversion temperature. At these temperatures the enzyme peptose acts most vigorously, forming the group of albuminoids called peptones, which are the chief factors in producing foam-holding capacity and palate-fullness. The albumoses and amides which are likewise formed at the above temperatures also have a share in this, though not in such a marked degree; the latter forming almost entirely nourishment for the yeast.

Certain types of yeast have the property of furnishing less palate-full beers than others, especially wild yeasts.

Lastly, lack of palate-fullness is often attributed to too intensive filtration inasmuch as a great amount of colloidal substances, that is, substances not altogether in solution but distributed in infinitely small particles in the beer, are retained by the filter.

On the Detection of Methyl Alcohol in Alcoholic Beverages, and Its Formation by Several Kinds of Yeasts.

By TEIZO TAKAHASHI, MASAGI GUNKE and TAKEGI YAMAZAKI.

On the same subject one of us has already published a paper in "The Journal of the Coll. of Agric. Imp. Univer. of Tokyo," Vol. V, No. 3. In that case the beverages examined were "saké," shochiü (spirit of "saké"-mash cake), a Scotch whiskey, cognac, wine in the market and one prepared in our laboratory, using Denige's colorimetric method and our official method modified by the author. Therefore, it is unnecessary to test for methyl alcohol in alcoholic beverages by the same method. Recently Yanaghisawa and Maruyama have published a method for the detection of formaldehyde in "saké," based on Eury's method. Their's is quoted here:

"Take 100 c.c. of 'saké,' add 2 c.c. of diluted sulphuric acid, then distill it as commonly done. Lay aside the first distillate of 30 c.c., and collect the rest till amounting to 20 c.c., which is used for the test of formaldehyde. Take 5 c.c. of the distillate in a tall beaker and add 5 c.c. of an egg-white solution and 15 c.c. of HCl, then heat to the boiling point. After that compare the violet color produced to the controls: one in treating water and the others the solution of formaldehyde in 1:1,000,000 in the same way as the distillate obtained."

The method mentioned above induced us to observe again methyl alcohol in alcoholic beverages, but at first we could not believe the method; for Eury's process is a simple modification of Hehner's, which is based on the fact that when a testing fluid containing formaldehyde is mixed with a newly prepared peptone solution and after that, an equal volume of H₂SO₄ is added, there appears a blue ring in the contact surface of the two fluids. Whereas Hehner's process is utterly absurd; for we tested the several kinds of peptones prepared by many factories and found that almost all samples gave a very similar coloration by treating a pure distilled water by Hehner's method, using sulphuric acid.

Starting from such an opposed point of view, we could not find out any difficulties in recognizing Yanaghisawa's process as a right method for the testing of formaldehyde contained in pure water. Not only so, but the method was applicable safely in the distillate of pure "saké," on condition that we distill "saké" below 80 deg. C., using a fractionating column.

It may be mentioned that there are objections to applying Yanaghisawa's method for the detection of formaldehyde in "saké," and Yoshimoto's report is at least one of them. He has tested the distillates of the infusion of wood in alcohol, the same in "saké" or in distilled water; while he has always found the violet coloration in the test of the last distillate of these infusions. But in his report he describes that such obstacles which come from the wood of tub may be very easily rejected by the distilling of "saké" below 80 deg. C., and in that case there occurs no violet color in the distillate except in the first 20 c.c. of it, which gives merely a reddish-brown color by being treated after Yanaghisawa's method. This description favors us very nicely, in carrying our examination of methyl alcohol in alcoholic beverages.

In our experiment we were very careful in the method of distillation: We distilled always under the condition below 80 deg. C., using a fractional column, although it was not mentioned in Yanaghisawa's method. After distillation, we have very safely oxidized by using K-permanganate and sulphuric acid as mentioned in Aweng's or our

official method. In the distillation of the oxidized alcohol, the first part (acetaldehyde) was set aside by the test of Rimini's or Jean's reagent, and after adding calcium-carbonate redistilling the distillate, the test was made about the last distillate thus obtained.

As a means of the ascertainment of applying Yanaghisawa's method to our purpose we prepared one pound of almost absolute alcohol from five pounds of a spirit by distillation, and from this one pound, adding some lime, we had many fractions by the distilling at 78 deg. C., using a fractional column. From 50 c.c. of the last distillate we took 10 c.c. and tested after Yanaghisawa's method after oxidizing as described above. By this test there was no violet coloration, except a very faint yellowish color; in spite of the fact that a violet coloration appears when the original spirit is treated in the same way. If formaldehyde exists in original spirit, there must be a stronger reaction in the last fraction as well as in the original sample than in the first fraction of the distillate of spirit, but it is decidedly disproved in our case.

As the subordinate test for methyl alcohol, we applied Manzoff's nitro-methane method, and Rimini's test was not neglected for the test of aldehyde after the oxidation.

The samples were always taken by volume of 200 c.c., except in beer, in which it was impossible to get a distillate below 80 deg. C., when applied a fractionating column, so that we took 300 c.c. of it and after the ordinary distillation, the fractionating column was used in the case of redistilling of the first distillate. In the case of spirit we diluted the sample until it contained about 20 per cent. of alcohol. The other details are just the same as our official method, quoted above.

The results are tabulated below:

(+ denote presence and + weak, ++ medium, +++ strong reaction.)

The substance examined.	Yanaghisawa's reaction.	Rimini's reaction.
1) Wine in the market.		
a) Mont ferland	+ dark violet	+
b) Soint sulpice	++ dark violet	++
c) Daikokuten (white)	+	+
2) Whiskey in the market.		
a) The House of Common.....	+++	+++
b) Glenlivet whiskey (Watson Company)	++	++
3) "Saké."		
a) M.	-?	-
b) C.	-?	-
c) G.	+ reddish violet	+ trace*
d) S.	-?	-
e) C. M.	-?	-
f) S. G.	-?	-
g) S. T.	+	-?
h) T.	+	-
i) Institute of "saké" brewing		

* In this sample there was an evidence of methyl-lactate, which is proved by anisaldehyde and sulphuric acid.

- 4) Spirit.
- a) Dainihon pharmacet. Co. ++ ++
- b) From 300 c.c. of the sample, I to IV fractions were obtained by the distillation, and the examination was made about each

fraction:

1. Ist fraction (50 c.c. +++) +++)

2. IIIrd fraction (50 c.c. +) +

3. IVth fraction 50 c.c. ++

c) In one pound of the same sample lime was added, and after two days, I to VI fractions were obtained therefrom by the distillation.

VIth fraction +

d) The spirit sealed by our government sanitary experiment station + trace

5) Beer.

a) Stout (imported from England) -

b) Y. B. + trace

c) S. P. +

d) S. b. + trace

e) K. r. + trace

f) S. K. +?

6) "Saké," manufactured at our Brewing Institute.

a) In the market.....+++ +++)

b) No. 144.....+ +

c) No. 199.....+ -?

d) No. 138.....++ ++

e) No. 149.....++ ++

(In all cases the distillates were tested before the oxidation for the presence of formaldehyde, which was disproved out of question.)

From the table we can easily bring to light that "saké," in general, contains a smaller quantity of methyl alcohol than the other alcoholic beverages. We could not find out any positive proof of the presence of methyl alcohol by the above method, except the special kinds of "saké." On the other hand, the distillates of beer, wine and spirit, after oxidation, gave an evident reaction of Yanaghisawa's, although there was an exception.

A special sample of "saké" marked G in the table induced us to question again in regards to the application of Yanaghisawa's process for our purpose; for the positive reaction of Rimini's ensued in the other sample of "saké" was very faint in this one, in spite of an evident coloration established by Eury's process. In this respect fusel oil comes as a substance to be tested; for this substance after oxidation gives a coloration analogous to formaldehyde in certain processes of the detection of the latter. For this purpose we applied to the distillates of "saké" Teizo Takahashi's method of testing. As a result we find methyl-lactate in the distillate of the special sample (G) of "saké," instead of finding out fusel oil, which was proved to be present decidedly in the other distillates, almost destitute of methyl alcohol by Yanaghisawa's method. Therefore, there is no reason to believe that the presence of fusel oil interferes with the reaction of methyl alcohol in our case.

Five samples of a "saké" brewed in our Institute of Brewing are proved to contain methyl alcohol. This fact is very interesting, for the samples are almost free from oil derived from the wood of tub, while the other samples in the market contain a larger quantity of it. Notwithstanding, the latter has passed safely in the examination of

methyl alcohol, so that we can conclude without question that the wood oil which comes from tub has no influence on the application of Yanaghisawa's method for the test of methyl alcohol in the distillate of "saké" below 80 deg. C.

Manzoff's nitro-methane method, which we used as a subordinate test, gave an evident proof of methyl alcohol in spirit we have tested. We carried on some further examination on "saké," which proved to be almost free from methyl alcohol when Yanaghisawa's method was applied. For this purpose we took some larger quantities of "saké" than before in the examination, i. e., we have condensed methyl alcohol by the redistillation of the first distillate. The results are tabulated below:

Name of "saké."	G. K.	S.	S. K.	K.	C. H.
Sample taken	700 c.c.	do.	do.	do.	500 c.c.
First distillate	80-90 c.c.	do.	do.	do.	60 c.c.
Distillation after addition of					
lime	20 c.c.	do.	do.	do.	15 c.c.
Nitro-methane method	++	++	+	++	+
Yanaghisawa's method	++	++	+	+	+

Thus we see that methyl alcohol is proved in "saké" by both Manzoff's nitro-methane method and Yanaghisawa's.

A further investigation was made as to whether the varieties of the yeast or the pabulum in which the organisms are cultivated behave to the formation of methyl alcohol in alcoholic fermentation. The yeasts used in the research were beer, "saké" and distillery yeast in the state of pure culture. In the first series, "koji"-extract was used as a nourishing medium, amounting to 1 L. in each case. The infection of the yeast was made after the ordinary treatment of the pabulum for sterilization, and the cultures were held at 25-30 deg. C. during 12 days. After the end of the fermentation the whole fluid was distilled and the redistillation was made for the first distillate. The test for methyl alcohol was carried on in the second distillate, i. e., a concentrated sample. The result of analysis are as below:

Yeast.	Pabulum.	Detection of Methyl Alcohol in Media, by		
		Nitro-methane method.	Yanaghisawa's method.	Rimini's method.
"Saké" yeast,				
A No. 34.....	"Koji"-extract	+	+	-
Wine yeast				
(Oppenheimer). "Koji"-extract		+ trace	+	-
Beer yeast				
(bottom)	"Koji"-extract	+	++	+
Distillery yeast....	"Koji"-extract	+	+	-
Wine yeast				
(Oppenheimer). Raisin-extract		+	+	-?
"Saké" yeast,				
A No. 34.....	Hayduck's solution (1 per cent. glycocoll instead of asparagin in Hayduck's solution.)	+	+	-
"Saké" yeast,				
A No. 34.....	Hayduck's solution (1 per cent. glycocoll instead of asparagin in Hayduck's solution.)	+	++	-?
Beer yeast.....	Hayduck's solution	+	+	+
Beer yeast.....	Hayduck's solution	+	++	+
Distillery yeast....	Hayduck's solution	+	+	-

Thus, the formation of methyl alcohol by all kinds of yeasts examined is out of question, especially in the case of "saké" yeast the quantity of methyl alcohol formed was increased when glycocoll was used instead of asparagin in Hayduck's solution. The other interesting fact to be mentioned is the behavior of the wine yeast to the pabulum. The quantity of methyl alcohol formed was decidedly larger in the raisin-extract than in "koji"-extract, which after the fermentation, was proved to be almost free of it.

In summarizing our experimental results we arrived at this conclusion:

1) In the distillates of alcoholic beverages, which we have examined, we could not find formaldehyde directly when we distilled below 80 deg. C., but after the oxidation of the distillates there were found differences in regard to the quantities of methyl alcohol according to the kinds of alcoholic beverages. The smallest quantity was found in the case of "saké," except a special sample, in which there was a distinct evidence of methyl-lactate too.

2) The presence of fusel oil in the distillates of alcoholic beverages shows no interference for the detection of methyl alcohol tested after oxidation. It is based on the fact that many samples of "saké" were proved to be almost free from methyl alcohol in spite of an evident accompaniment of fusel oil.

3) In the sample in which it is hardly possible to prove methyl alcohol we can bring to light by increasing the quantity of the sample for analysis followed by the redistillation of the distillate.

4) Common spirit always contains a trace of methyl alcohol, and when rectified at the lowest temperature possible, the last part is almost free from it.

5) All the kinds of yeasts tested, "saké," beer, wine and distillery yeasts formed methyl alcohol in the saccharine fluids and the quantity of it increased by the addition of glycol as a nourishment. The fact exactly coincides with Ehrlich's theory of the fermentation of protein matter.

"Accidents" in Refrigerating Plants.*

By THEODORE O. VILTER.

Accidents, of course, are a bad thing, and, while we do not like to advertise them, a thorough investigation should be made and the cause and remedy, if any, made known. A greater portion of the accidents chronicled in the daily press are not accidents at all, and largely for that reason we hesitate to talk on this subject, for fear of being misquoted and the subject harshly handled by the daily press. The best thing is to prevent accidents, that is, design our machinery and layout and install plants for their prevention—do the work right. I remember in the early days great carelessness prevailed in the installation of refrigerating machinery. In one instance I figured on a job myself and lost it, and later I wanted to know how my competitor could undertake the work for so much less money than what was my figure and make both ends meet; so I visited the plant (it was in Akron, Ohio), and what do you think I found? There were 2 by 4s nailed against the joists with a couple of spikes and other spikes driven at an angle into the 2 by 4s, and on these spikes the direct expansion pipe was resting. Now that surely was not putting up ammonia piping in a proper manner. We do not dare to do such work, because we do not want accidents; we do not like to kill people and we do not like to have our name appear unfavorably in the papers.

There was another case in a brewery, where practically the same careless work was done and the pipe dropped, but only 12 inches to the top of the big vats. Fortunately, there was no accident, but all the pipes were down on the tubs instead of hanging on the ceiling.

As to machinery, it is practically the same thing. If a compressor is put up properly and the piping is carefully arranged, with a liquid trap in the suction line, it is hardly possible to knock out a compressor head, whereas if there is no trap in the suction line, no matter what the system, liquid is liable to get into the compressor. It is just the

same with a steam engine should water get into the cylinder, as it is not built for water, but for steam. If liquid gets into some ammonia compressors, and they have only 1/32 of an inch clearance, there is not much space for liquid to get out, and the head has to go or the plunger rod will buckle up or the crank break—and those things have happened.

Of course, accidents will occur, because piston rods break, and this has happened, and are thrown against and break the head. There are numerous other accidents that occur in the line of refrigeration. One is, for instance, where an additional room is added to an old system and the owner insists that a test of 300-pounds air pressure in the coil must be made before he will allow it to be charged with ammonia. I usually tell him that he can test it himself, and in the meantime I get out of the building, because nine times out of ten there will be an accident from the accumulation of a mixture of oil and ammonia and the temperature resulting from the air pressure.

We tell our engineers to avoid just such accidents and under no circumstances test an old system higher than 100 pounds. We had an accident in Mt. Carmel, Pa., where the whole oil trap and discharge line was scattered all over the engine room; and another case in Texas, and still another, I believe, in Kansas City. It was then that we gave our engineers instructions, and such accidents have not occurred since.

Other accidents happen during erection, if the erecting engineer is rather lax. Still other accidents happen with welded containers, and, when I think back a little bit, we have had accidents with screwed containers. In this case a steel head was screwed on the oil trap, and when an over-pressure developed the head just ripped the threads off the pipe. So you see welding has nothing to do with such accidents, because they happen with screw joints just the same.

It is possible to pump up a pressure of 200 or 300 pounds, when I am dealing with experienced engineers, but not when I am dealing with inexperienced labor. When 300 to 500 pounds pressure is desired on an old system, time must be taken to do it. The compressor may have to be shut down ten or twelve times.

RESTRICTION OF DIASTATIC ACTION. By O. Overbeck. Processes for the limitation of diastatic action are legion. What we have to avoid in these are set mashes, sticky goods, and cloudy worts, and especially soluble starch, not to speak of any loss of extract at the present price of malt. Just as soluble diastase has been used to counteract this drawback, so have also papain and pepsin been employed to clarify beer in barrel or bottle, clouded from insoluble albuminoids. The best preparations convert 6000 times their weight of albuminoids. This is especially of value in raw grain worts.

FERMENTED BEVERAGES FIRST CLASS NUTRIMENT. By J. Koenig in "Menschl. Nahrungs- und Genussmittel." The beverages produced by fermentation of liquids or extracts containing sugar are known as "Genussmittel" (relishes); however, they may also be regarded, on account of the extractive substances they contain, like sugar, dextrin and albumin, as foods, in this respect beer being rated first, next wine, while spirits contain no extractive substances. But alcohol must also be considered a food, as like starch, sugar, etc., it is burnt up in the body, and protects on this account other valuable food ingredients, respectively, the substances of the body itself. In this respect the moderate consumption of alcoholic beverages has a favorable effect upon the mucous membrane of the stomach and intestinal tract, resulting in an increased secretion of the digestive juices and aids in this way the digestive processes.

* Discussed at Fifth Western Meeting of the American Society of Refrigerating Engineers, held in Milwaukee, Wis., June 7, 8 and 9, 1917.

Monthly Report from the Laboratories of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

July 15th—August 15th.

The samples received during this month were classified as follows:

Malts	167
Malt Adjuncts	48
Colorants	15
Hops	2
Grains (mash tun residue)	44
Waters	29
Worts	53
Yeasts	205
Beers and Ales	313
Temperance Beverages	54
Fuels	27
Miscellaneous	26

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Malts.

Of the 167 samples received, 33 were made from Pacific Coast barley and 133 from Western barley. The most striking feature in the composition of all the Malts submitted is their unusually high amount of moisture with a proportionate lowering of their yield of extract. The averages found for the Pacific Coast Malts were, moisture 6.21 per cent. and extract 69.6 per cent., which, calculated to dry substance, equals 74.3 per cent. In the Western Malts the average percentage of moisture was 6.12 per cent. and the extract 67.4 per cent., corresponding to 71.8 per cent. of extract calculated on the dry substance. One sample of Caramel Malt from Pacific Coast barley was very satisfactory, having an extract yield of 66.4 per cent.

Malt Adjuncts.

During the month we received 42 samples of raw and prepared cereals and 6 samples of brewing sugars and syrups. These samples were classified as follows:

Corn Grits	17
Corn Meal	14
Refined Grits	6
Rice	5
Brewing Sugars	3
Brewers' Syrup	3

With the exception of a high amount of moisture in two samples of Corn Grits and one of Corn Meal, these materials were all of satisfactory quality and brewing value.

Colorants.

Fifteen samples of malt color, sugar color and porterine were tested as to their solubility in beer and ale under various conditions of temperature and during varying test periods. All these samples were considered satisfactory for the purposes intended.

Hops.

Both samples of hops were Pacific Coast of 1916 crop; one of the samples was very well preserved and considered an excellent brewing material, while the other sample contained a large amount of mouldy cones, whereby its brewing value was materially impaired.

Grains.

Of the 4 samples of mash tun residue analyzed, two were of satisfactory composition, while the other two samples were insufficiently exhausted, showing by a large amount of insufficiently crushed kernels that the milling operations were not conducted in the proper manner.

Waters.

An unusually large number of water samples were received. All 29 samples were examined in the Biological Laboratory; besides the usual biological tests several samples were also subjected to special examination in order to determine their fitness for general domestic and drinking purposes, according to the methods prescribed by the U. S. Public Health Bureau. A complete chemical analysis was made of 12 samples of water, in order to determine the nature and quantity of their mineral constituents.

Worts.

Forty-eight samples of Lager Beer Wort and 5 samples of Ale Wort were examined as to their general composition and suitability for certain types of Beer and Ale, all of which were found satisfactory for the production of the character of Beer or Ale desired. The samples were also examined biologically in order to control the sanitary conditions of the cooling apparatus, the cooler room and pipelines.

Yeasts.

The yeasts received comprise 51 samples of Ale Yeast and 154 samples of Lager Beer Yeast. One sample of Ale Yeast contained an excessive amount of lactic acid ferments, while the remaining 50 were in every way satisfactory. Five samples of Lager Beer Yeast were received from our Pure Yeast Department; these were all entirely free from infection and in excellent condition generally. Five samples of brewing yeast were infected by various bacteria to such an extent that their further use was discontinued. One hundred and forty-four samples of brewery yeasts were in a satisfactory biological condition.

Beers and Ales.

One hundred and forty-eight samples of Ale and 165 samples of Lager Beer taken from various stages of manufacture were subjected to biological examination as well as to chemical analysis. The average composition was as follows:

Ales.

Original Gravity	12.9 deg. B.
Alcohol by weight	4.02 per cent.

Lager Beers.

Original Gravity	11.3 deg. B.
Alcohol by weight	3.08 per cent.

It is to be noted that the average original gravity as well as the average alcohol content are lower during this last month than in any previous periods.

Temperance Beverages.

Fifty-two samples of low alcoholic beers and ales were analyzed, mainly in order to control their alcoholic content. The average composition was found to be as follows:

Original Gravity	5.6 deg. B.
Alcohol by weight	0.32 per cent.
Alcohol by volume	0.40 per cent.

There were also received two samples of Cider, one of which was a Sweet Cider and one Fermented Cider; the general chemical composition of both Ciders was normal, and their alcohol content by volume was 0.20 per cent. and 4.85 per cent., respectively.

Fuels.

Twenty-seven samples of Coal were analyzed of which 10 contained excessive amounts of ash, the highest amount being 39.4 per cent. Seventeen samples had a satisfactory composition and heating value.

Miscellaneous.

Under this heading are classified: 26 samples comprising mainly Lubricants, Filtermass Materials, Cleansers, Soaking Solutions, Crown Seals, etc.

ALCOHOL A FOOD. By Prof. O. W. Atwater. The chief fuel ingredients of food are the carbohydrates and fats. These are either consumed in the body or are stored as fat to be used as occasion demands. In this view food may be defined as material which, when taken into the body, serves to either form tissue or yield energy, or both. This definition includes all the ordinary food materials, since they both build tissue and yield energy. It includes sugar and starch, because they yield energy and form fatty tissue. It includes alcohol, because the latter is burned to yield energy, though it does not build tissue. It excludes creatinin, and other so-called nitrogenous extractives of meat; and likewise thein or caffeine of tea and coffee, because they neither build tissue nor yield energy, although they may, at times, be useful aids to nutrition.

PRESENCE OF ARSENIC IN HOPS. W. W. Stockberger and W. D. Collins, both chemists for the United States Department of Agriculture, have made experiments to determine the presence of arsenic in Hops, because minute traces of arsenic had been found in American hops exported to foreign countries. The findings of these experts, reported in Bulletin No. 568, U. S. Department of Agriculture, Bureau of Plant Industry, are summed up in the following conclusions: "Sun-dried hops collected from various yards in Oregon in 1915 contained practically no arsenic. The spraying materials in general use, such as solutions of whale-oil soap and quassia or nicotin sulphate, are not to be held responsible for the contamination of hops with arsenic. The sulphur in use in 1914 and 1915 was generally contaminated with arsenic, many samples containing over 100 parts of arsenic as As_2O_3 in 1,000,000 parts of sulphur. When such sulphur is used in curing hops, the hops may contain three or four parts of arsenic per million parts of hops. Little, if any, doubt remains that impure sulphur alone is responsible for the contamination of hops with appreciable quantities of arsenic."

WELDING AT THE PLANT OF THE VILTER MFG. CO. On Saturday morning, June 9th, the members and guests present at the fifth annual meeting of the American Society of Refrigerating Engineers, held in Milwaukee, were conveyed in private automobiles to the plant of the Vilter Manufacturing Company to witness demonstrations in electric and oxy-acetylene welding, and later a test of the bursting strength of a cylinder made of 8-inch common pipe about 18 inches long, with both heads of 5/16-inch material welded in concave by the electric arc welding process. A nipple was welded in the cylinder, and when a pressure of 3,200 pounds per square inch was applied one head started to reverse—that is, dished outward. The dishing caused the pressure to drop to about 2,000 pounds. This latter pressure was sufficient to completely dish the head outward, and at a later pressure of 3,000 pounds the pipe began to flare outward at the end now containing the convex head, and the cylinder finally cracked near the end having this outwardly dished head. The cylinder was stretched to a diameter of about 1/4 inch larger at the center of the cylinder than the original size of the pipe.

Brewing Sugars in England.

By ARTHUR R. LING.

Brewers use different kinds of sugar. The chief of these are invert sugar, which is derived from raw cane sugar, and solid and liquid glucose, which are derived from maize and other starches.

It is perfectly obvious to anyone acquainted with the methods of valuing sugar that the British Government Order mentioning 89 degrees refers to raw cane sugars, which the brewer seldom uses as such. The Customs authorities have, since the imposition of the sugar tax, assessed the latter on the so-called polarization of sugar: that is to say, the percentage content of sucrose in a sample as indicated by the polariscope or polarimeter. Consequently, 89 degrees polarization refers undoubtedly to raw cane sugar. If the Order referred to brewing sugars in general it would obviously be absurd to interpret the strength of any but raw cane sugars by the polariscope using a scale constructed in terms of sucrose.

Let me take the sugar used by brewers seriatim. Raw cane sugars are, as I have already pointed out, the source of invert sugar, one of the principal sugars used by the brewer, and at the present time to limit the polarization not to exceed 89 degrees, seems fairly reasonable, for a raw cane sugar showing even a much higher polarization than this would not be fit for direct consumption. But one of the difficulties in assessing the value of cane sugar on its polarization is that the latter tends to diminish the longer the sugar is kept, by reason of the fact that some of the sucrose which polarize to the right in the sample becomes converted into invert sugar, which polarizes to the left. But this is beside the immediate point at issue.

Commercial invert sugar prepared from raw cane sugars consists of some 35 per cent. of dextrose and the same quantity of lævulose, together with 2 or 3 per cent. of unaltered sucrose and some 18 per cent. of water. This mixture instead of polarizing to the right, as do raw cane sugars consisting mainly of sucrose, polarizes to the left; hence the order cannot refer to invert.

Solid glucose, which is obtained from starch, consists mainly of dextrose with a small quantity of maltose. On an average it may be said to contain 65 per cent. of dextrose, 3 per cent. of maltose, and 10 per cent. of other carbohydrates, together with some 14 to 18 per cent. of water. The polarization of the mixture of sugars known as solid glucose is a right-handed one, but the degree of this polarization is somewhat less than those of sucrose. Consequently the limit laid down in the order referred to, 89 degrees polarization, would not, if applied to solid glucose, give a measure of the content of sugar contained in the sample.

The so-called dextrin-maltose, or liquid glucose, is a partially converted starch product, containing on an average 24 per cent. of dextrose, 24 per cent. of maltose, and 31 per cent. of unfermentable dextrin, together with some 18 per cent. of water. It is not very extensively used by brewers. The polarization of this mixture is nearly twice as great as that of cane sugar; consequently here again the 89 degrees referred to in the Order could not be applied to it.—(London "Brewers' Journal.")

NOW IS THE TIME FOR PAINTING surfaces which are beginning to suffer from exposure. Make the plans and buy the paint now, in order that it may be on hand for use when a slack day comes.

Low Gravity Beers.

By "MIDLAND" in "Journal of the Operative Brewers' Guild."

The present chaotic state of the brewing trade, both with regard to the choice of material and the sale of the finished article, makes any remarks on methods of brewing somewhat futile; but if we consider the future there can be no doubt that beers of low gravity will be more in demand than in pre-war days, and the old type of heavy, full-drinking mild ale will become a thing of the past, and if a normal output is once more reached beer will not be consumed as quickly as it is at present, and consequently the difficulties of producing a good beer will be increased rather than diminished. Now, whatever methods of brewing may be adopted, the basis of all good beer is sound material, and this is more especially the case with weak beers.

The malt should be made from sound material and be well cured, undercured malts being liable to produce beers which are fretty and drifting in character.

A fairly high percentage of malt substitutes should be used to reduce the albuminous matter, which, if present in excess, makes the beer more susceptible to the influence of atmospheric changes, and at the same time affects the stability. Low gravity beers are never so stable owing to the low percentage of alcohol, which is a natural preservative, so that anything which would be liable to increase instability should be avoided.

The sugar should be of the best quality. Some of the low-grade cane sugars contain a large amount of impurities, which not only produce early acidity in the beer, but also affect the flavor.

The initial heats should be kept up, and the length of infusion curtailed.

Many brewers reduce the quantity of hops when brewing light beers, but this is a mistake. More preservative matter is required in light beers, and a delicate flavor should be aimed at.

The wort should be well boiled, and the excess proteid matter eliminated by wort agitation in the hop back and cooler.

The fermentation of weak gravity beers is always a difficult matter, especially in the summer, the lack of yeast nutrient often causing a fretty fermentation which affects the clarification in cask, the beer frequently developing early acidity.

The difficulty of keeping the yeast in sound condition is greatly increased. Low fermentation heats should be used, and the gyle made up of a strong and weak wort which can be blended at rack. By this method the yeast can be collected from a wort containing sufficient food for the yeast. Frequent rousing should also be resorted to in order to oxygenate the yeast.

Pure air plants should be installed in the refrigerator room, in order to protect the wort from wild yeast contamination, which has a much greater chance of developing in weak beers.

Care should be taken to see that no undue agitation takes place at racking, otherwise the gas will be expelled, leaving the beer flat and insipid.

The cask plant must be sweet and clean. Any defects in this respect will be quickly shown in weak beers, which soon develop abnormal flavors.

Taken all round, it is much easier to brew a beer of good quality, so that increased care and attention is necessary when dealing with light beers.

Condition of Beer at Racking--Yeast Storage.

When beer is racked with too much yeast in it there is always a risk of a primary fret and the production of excessive bottoms. Racking, as usually carried out, always involves a certain amount of aeration of the beer which stimulates the yeast, and unless the primary fermentation has been conducted in such a way as to cleaf out absolutely all fermentable matter and assimilable nitrogenous matter, some reproduction must take place. Even if such a primary yeast fret subsides quickly enough not to interfere seriously with the sale of the article, the excessive formation of yeast increases waste and may also add to the difficulties of cask cleaning if any of the sludge gets a chance of drying on, a chance which is only too likely to occur in the hot weather. With the progress which has been made in regard to aërating fermentations, this racking of beer with excessive amounts of yeast in suspension is far less common than it used to be. On the other hand, racking too clean may also produce its inconveniences. The racking process generally involves a slight loss of carbonic acid, and if there is no yeast present to replace this by cask fermentation, it is rare to find the beer going satisfactorily brilliant. Finings act much better when there is plenty of gas in the beer, its absence either results in the finings remaining in streaks in the beer, or the beer after going bright reverts slightly and then requires a good deal of rolling and refining to bring it brilliant again. It is this difficulty in respect to ultimate brightness of over-clean beer at racking which forms the main objection to fining in the racking back. This practice is sometimes followed with the idea of eliminating any wild yeast infection which may be expected, but it is very doubtful if it is in any sense a cure. If wild yeast is present at that stage the removal of practically all primary yeast would mean that if only very few wild yeast cells got through to the racked beer they would, in absence of all competition, stand a better chance of ultimate development. Flatness of beer is one of the main encouragements to wild yeast.

The question of keeping the yeast healthy is one that concerns many breweries nowadays, owing to the greatly reduced brewing, the time between the collection of the crop and its utilization for pitching being prolonged beyond the normal. In these cases it is necessary to keep in mind that the main principles of successful yeast storage are low temperature and the quick removal of beer. The temperature of the yeast should be reduced as soon as possible, and it is the benefit derived from this that caused us to commend that yeast collection process in which the yeast press was jacketed so as to admit ice-cold water between the plates. In this case the yeast was necessarily in thin layers, thus being more readily receptive of the cooling effects of the liquor, and at the same time it was parting with its excess of beer. Hitherto brewers have been more inclined to separate the beer from the yeast first and then cool the yeast; this would at first sight seem more economical of cooling liquor since the separated beer would not be cooled. But in fact there is not so much saving because when the yeast is separated from the beer it is so bad a conductor of heat that it is cooled with greater difficulty. Years ago we remember a patent for taking skimming yeast direct over an inclined copper refrigerator, and we think brewers who have to store their yeast for unusually long periods might contrive something of this sort, without infringing a doubtful patent, with great benefit to their yeast. At any rate it should not be difficult to contrive a method of quick cooling suitable to the plant of any particular brewery, and then take the necessary steps to store the cooled yeast in as cold a place as possible.—(London "Br. Tr. R.")

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the National Brewers' Academy and Consulting Bureau.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

N. K. B. You must be careful to so regulate the actual conversion temperature as to conform with the rearrangement of your grist composition. We assume that you have made a very careful calculation so as to insure the presence of a sufficient percentage of acidity, and a sufficient quantity of soluble protein in your cooled wort, received in the fermenting tun. We do not entirely agree with the views you express, or the changes you have decided to make, but we shall be at all times very glad to give you any advice, based on our practical experience of similar experiments that have been made in other breweries.

E. M. M. We cannot see any difference between the two samples of malt which you have marked "W" and "R," respectively. Both are made from California barley of good quality, but both are poorly made malts; insufficiently steeped, irregularly grown, and evidently treated with too much sprinkling water on the floors. Finally, they have been unskilfully kilned, with the result that a first class barley has been spoiled in turning it into malt. Despite these harsh criticisms, we should not advise you to reject these malts under present market conditions.

M. J. S. The question you ask us is very vague. You say that from the materials you mention, you are producing 382 barrels of beer in the fermenters. This may or may not be very good practice; but how are we to decide in the absence of any statement about the gravity or Balling degrees of the beer? If you will be kind enough to supply us with that elementary particular, we will make the necessary calculation and let you know the result.

J. J. Q. Both your samples of water are of great purity, from the chemical as well as from the biological standpoints. Both are admirably suited for making steam, and both may be safely used for cleaning purposes in and about the brewery, washing yeast, etc. For the brewing process proper, however, both these waters ought to be hardened, preferably by the addition of $1\frac{1}{2}$ ounces per barrel of soluble gypsum. If you do not wish to use it in your hot water tank, you may use the gypsum either in the converter or in the mash tun, taking the necessary precautions to see that it is first of all made into a smooth milk, with a little water.

B. E. M. There is no particular criticism to make on your brewing process, nor do we believe that the trouble that you are having with your beer has anything to do with the way in which you make your mash. We think your best plan would be to cool your finished beer down to 0 Reaumur before filtering it. Rack it off against a counter pressure of carbonic acid gas instead of air, and get your beer bottled without loss of gas or rise in temperature.

J. M. F. Both samples of yeast have a stale and disagreeable odor, but this may be due to the length of time taken up in transmittal by mail. The sample marked No. 2 is very weak, contains an abnormally high percentage of dead cells and is grossly contaminated by *Sarcina* and *Saccharobacillus Pastorianus*. The sample marked No. 1 is much more uniform in appearance. The protoplasm is fairly normal, but like sample No. 2 it is too much con-

taminated by *Sarcina* and is likely to give the beers a disagreeable odor. We advise their rejection.

A. D. M. Both the samples of wort are entirely normal in composition from the chemical standpoint, but both have a very harsh, bitter taste, which is to be attributed to the fact that the hops have been kept too long in the boiling kettle and hop jack. Your samples of beer amply bear out this conclusion, and we are not surprised that you should have complaints concerning their harsh bitterness. We recommend that you use in future 156 pounds of Pacific 1916 hops; that you put in about 20 pounds when the kettle has been boiling 15 or 20 minutes, and that you use the balance about half an hour before turning out. Arrange for the separation of the hops from the boiled wort as rapidly as possible. You ought to be able to cool at least 150 barrels per hour down to 7 deg. R.

C. D. The pasty mass which you sent to us in a small bottle and which you scraped off the interior of the hose connecting your chip casks with the bottling tanks, is nothing more nor less than an aggregation of putrefactive ferments. The predominating types are the *Saccharobacillus Pastorianus*, some *Sarcina* and *Mucor*. It is hardly necessary to state that this is a proof of the greatest neglect of cleanliness, and but for the fact that all your beers are steamed immediately after bottling, you would find yourself in very serious trouble.

H. E. W. The sluggishness of your yeast and the improper attenuation of your beer are due to a perfectly natural cause, viz., insufficient yeast food. You are using too much raw grain and too little barley malt. We recommend that you restrict the percentage of raw grain to that quantity which will represent no more than 40 per cent. of the wort solids. If you do this, and start with a wort of 12 Balling in the fermenter, pitch at 7 deg. R. and go up to 10 or 10.5 deg. R., you should have no difficulty in getting an apparent attenuation of 72 per cent., which means that at the end of the fermentation your beer will show about 3.3 deg. Balling. No change need be made in your mashing methods or temperatures.

L. C. The special sugar krausen can be made at any time of the day, when the brewhouse is practically idle. It takes little time, is quite apart from the regular brewings, and adds about 15 per cent. to your total brewing capacity. If you do not wish to use your kettle, you can make the sugar krausen in your cooker just as well. If you make it with a gravity of from 10 to 12 Balling, you should use it in the proportion of about 10 per cent.

F. A. M. It seems to us that the temperatures you mention are rather too high. We should prefer to see your fermenting cellar kept uniformly at 3 to 3.5 R. Under such conditions, if your fermentations progress normally and properly, the temperature of the beer should rise at the approximate rate of 1 deg. Fahrenheit every 12 hours. As a matter of personal preference, we like to see the fermentation proceed a little faster than this. We believe in getting the beer out of the fermenting tuns and into the storage casks as quickly as may be compatible with the best results.

E. S. We cannot recommend the use of your well water for boiler purposes, and if we are not mistaken, we told you the same thing three years ago. It would not do any good to previously boil the water, and the only suggestion we can make, if you have no other way out of your difficulty, is that you treat it with soda ash, in the proportion of 1 pound for every thousand gallons. The soda ash should be dissolved in the water in an outside tank before it enters the boilers.

— THE —

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Only Six Years More?

Congress has resolved to "prolong" the life of the American brewing industry until 1923. But then it must die—if the necessary majority of State Legislatures says so.

Some people are of the opinion that the respective provision in the new Food Control law is unconstitutional. Even so. But what will prevent an ever willing Congress to so change that law that it will be constitutional? The fellows who voted for the submission of the constitutional amendment to make the whole nation "dry" would vote for anything that the Prohibition parsons demand of them—unless the masses of the people should arise in their might and shout them a thundering "Halt, and not one step further!"

But can the masses be aroused?

They can be! And they must be!

The brewing industry, threatened in its life by a small minority of fools and knaves, now stands before the alternative of either tamely striking its colors and abandoning the field of battle, or making a determined fight that will result in victory.

Truth is with us. Science is with us. The popular demand for a healthy and civilizing beverage is with us. And if the masses are only told the truth about the reasons why a few reactionaries and desperadoes want to economically and politically enslave the American people, they will act and overthrow them forever.

To reach the ear of the masses, therefore, is the problem to be solved by the brewing industry. Its agitation must be so extended that there is not a hamlet in the country where the voice of reason shall not have been heard before the enemies of Democracy and Liberty can succeed in bulldozing the legislatures which they need to accomplish their sinister ends.

There are a number of Southern States suffering from the effects of Prohibition to such an extent that their industries and their state and municipal governments are nearly paralyzed. These States must be made to repeal their Prohibition laws. Virginia seems to be ready to do so. The next governor will favor the repeal. All that is needed now is to elect a "wet" Legislature in Virginia. West Virginia might also be reclaimed. Its people are sick and tired of Prohibition. Its mining industry is crippled by the lack of laboring men who will not work where they cannot obtain beer. Its state finances are on the verge of bankruptcy. Georgia, Alabama, Tennessee and Mississippi can be regained, as conditions there are similar to those prevailing in Virginia and West Virginia. The colored workmen are leaving in large numbers for the North, where they can live without being treated worse than ever were their slave ancestors. Oklahoma may be brought back to rational conditions of living. Its organized workmen will see to that if properly supported by our trade and its agitation. Colorado, Washington, Oregon, Iowa, South Dakota and Nebraska ought to be made safe and sane again. It can be done and it ought to be done.

Michigan and Indiana should be prevented from making Prohibition effective. In these two States the incubus has not yet begun to work its destructive way. By showing the people of Michigan and Indiana that they have been betrayed by their cowardly legislators and that the fate of the South awaits them should they fail to undo what has been done to them. They have been stabbed in the back and they will succumb unless rational means are employed to heal the wound inflicted to their body politic by the treacherous enemies of enlightenment and progress.

It is thought by most of our friends that New York, New Jersey, Pennsylvania, Connecticut, Ohio, Maryland, Delaware, Massachusetts, Texas, Louisiana, California, Minnesota, New Hampshire, Kentucky, Missouri and Wisconsin cannot be conquered by the enemy within the next six years. But you never can tell. The enemy is hideously and sneakingly shrewd and clever. He never sleeps. He never stops his underhanded work of poisoning the minds of the unsophisticated and uninformed. Therefore, it is of the utmost importance that in the States still unconquered by the vicious crew of the parsons and peanut politicians the work of enlightening agitation should be pursued with unceasing zeal, vigilance and determination. We must do as the enemy does: work day and night; never stop, always on the alert, for truth, justice and liberty. Unless we do that, falsehood, injustice and tyranny will overwhelm even some of our States which still permit their inhabitants to live like civilized beings.

That the trade will do its duty we firmly believe and so we do not fear in the least that the brewing industry will be extinguished in the United States until 1923 nor ever after that year.

Prohibition Not Only Enslaves, But Also Starves Americans.

If the American people are compelled to pay extortion prices for meat, and if those unable to pay such prices are compelled to reduce their American standard of life and content themselves with a Chinese diet, they may blame it on the parsons and politicians who have saddled them with the insanity of Prohibition laws.

Experts on meat production assert that in the Prohibition States it is almost impossible to raise cattle because spent grains from breweries and distilleries are unobtainable and beef raised on pastures only is not profitable to the farmer, he therefore raises grain and vegetables only. The consequence is that beef has become scarce and for the little that comes to market, outrageous prices must be paid by the consumer.

One of the experts, Patrick Quinn Foy, publisher of the "Daily Market Report," says: "Figures show that a steer weighing 600 pounds will weigh 900 pounds when ready for the market if fed on grain refuse, whereas a steer of the same weight left to pasture will not weigh more than 700 or 725 pounds. With the closing of the whiskey distilleries on September 8, the situation will become still worse, and prices will reach figures heretofore never dreamed of."

Let these facts be drummed into the heads of all who have been indolent and ignorant enough to permit the Prohibitionists to deprive them not only of their liberty, but also of one of the most important necessities for the maintenance of the heretofore healthy and decent American standard of life!

"THE CRAVING FOR STIMULANTS is everywhere in evidence, and since we are unable to eliminate it, we may profitably give our attention to modifying it instead of aggravating it. We have ever been a consistent advocate of temperance, not only in beverages but in language, deportment, etc., and have opposed intemperate attacks on unoffending people whose habits are not ours."—(Rear Admiral Baird, U. S. N.)

MENACE, INSTEAD OF CURE. "Prohibition is a fallacy. Experience proves it a legislative delusion, and history emphasizes the lesson. It has never solved the problem of intemperance; it has aggravated the evils it sought to cure. Indeed, instead of being a cure for social and political ills, it is itself a menace."—(Howard Noble.)

American "War Beer"?

It has been reported from Washington that our war food controller, Herbert Hoover, in order to save grain for England, France, Belgium and Italy, intends sending 35,000,000 bushels, principally of barley, to Europe and at the same time compelling the brewers in the United States to so reduce the alcohol content of their beer output that the amount of barley to be commandeered by Mr. Hoover may become available for the purpose designated by him.

We and many others have repeatedly demonstrated that there is a surplus of American-grown barley large enough to supply the English, French and Belgian brewers with all the brewing material required for the civilians and soldiers battling for freeing the world from despotism and militarism, and yet this Mr. Hoover proposes to compel us to make and drink "war beer" as they have it now in Germany!

What does all this mean? Is Mr. Hoover, instead of scientifically regulating the production and distribution of food in this country, simply playing the game of the Prohibitionists who would deprive the American people not only of strong alcoholic liquors, but also of all good and palatable beer?

It looks like it!

But Mr. Hoover may soon discover that the beer drinkers in this country, of whom there are millions, and who, at the same time, represent the majority of the sturdy, intelligent and industrious masses of our working population, will not be contented with "war beer," offered them by a disguised parson-led Prohibitionist. They do not want an unpalatable beverage and they will say so in terms that will be understood in Washington, D. C.

We need not send any barley to England. The British brewers say so themselves; and we should not send barley to Holland nor to Switzerland, because from there it will go to the enemy. Whatever barley may be needed in France and Italy we can spare from our abundant surplus, to be transformed into good and palatable beer. The European soldiers in the field would reject "war beer," just as the workingmen in America will reject it.

FORCED BY SMALL MINORITY. "More than 80 per cent. of the adult males of the United States drink some form of liquors, it is contended, because they like to drink, and they believe that they have a right to drink. A less than 20 per cent. minority, composed chiefly of those whose unsupported statements claim to represent the majority, have forced the prohibition movement in this country."—(Andrew MacLean.)

TAKING AN ILLEGITIMATE ADVANTAGE. "The adherents to the prohibition propaganda and its promoters may think that they have won a great victory in the action which has just been taken by the Senate, and they may feel exultant over it, but in subordinating and sacrificing the national interests to the attainment of a partisan purpose the Senators who injected prohibition into a bill where it has no proper place did their cause a grave disservice and exposed their own patriotism to a justifiable suspicion. They took an illegitimate advantage of a national exigency, to accomplish an end which, whatever may be its merit, could not otherwise have been achieved, and they did so with what appears to have been an absolute indifference to the consideration that their procedure would inevitably provoke discord and dissension and delay where it is imperatively necessary and even essential that there should be harmony and union and expedition."—(Philadelphia "Inquirer.")

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Beware of Labor's Discontent!

It has been said that one of the principal reasons why Congress dared not disturb the brewing and wine industries was the fear of labor's discontent. Many voices have warned legislators that in present circumstances it would be exceedingly dangerous to unnecessarily aggravate workingmen upon whose exertions rests the fate of the war. Not only the workingmen drafted into the army, but also those building cantonment barracks and ships, making guns and ammunition, raising and preparing food, manufacturing uniforms and other war material, and doing all other work required to successfully waging war, must be made as contented and as comfortable as possible. To suddenly deprive them of their accustomed potion of beer and other stimulants would increase their discontent and restlessness. There would be more strikes and violence than usual.

Workingmen are always more or less discontented and restless. The more intelligent and enlightened they are, the greater is their determination to improve their condition. Sudden deprivations and arbitrary interference with their habits, wishes, rules of organization, etc., always arouse their indignation and stir them up to resistance and even to aggressive demands. Their discontent leads them to collective action through organization, first economical and then political. Some are even so hot-headed as to take physical action; they become anarchists and destructionists. The ultimate goal of the organization of labor is to obtain "the full fruit of labor," an object which can only be accomplished by the workmen taking possession of the land, and the means of production and distribution—in other words, by the Social Revolution.

That revolution is approaching rapidly. We see it raising its Gorgon head in Russia. It is present in Germany, where one-third of the population consists of Social Democrats, who, although they were compelled by sheer brute force to take up arms for the Kaiser, are still Revolutionists, determined to establish the co-operative commonwealth as soon as the physical powers of militarism have been exhausted. Organized labor in France, England and Italy is as revolutionary as it is in Russia and Germany. It is revolutionary throughout Europe and America, and it only awaits a favorable opportunity to forever overthrow capitalism and its inherent militarism.

Governments, as presently constituted, and basing their existence upon capitalism, can only delay the advent of the Social Revolution. They cannot prevent it. Therefore, it must be their policy to keep labor as contented as possible. To take beer and wine away from the laboring masses today, and throw millions out of work, would hasten the coming catastrophe, which will engulf not only all undemocratic and oppressive governments, but also the fool parsons and politicians who, to advance their own sinister schemes to satisfy their greed for lust and power, are trying to accomplish that object by Prohibition.

Government Control or Purchase — Which?

The question of "Shall the government control or purchase the breweries?" has been discussed in England ever since the war compelled its government to most carefully guard its resources and exercise the most painful economy. Government control was finally decided upon, while the question of purchasing the breweries is being held in abeyance, probably until the war shall have been terminated.

In the United States this question is of mere academic interest. American politicians either do public business like crooks, bullies and rowdies, or they do nothing at all. They have just passed a bill in Congress empowering the President to "control" the production and distribution of food by one-man power, to say how much of all sorts of commodities is to be produced, how they are to be distributed and at what prices. It remains to be seen how the thing will work out in practice. Enormous quantities of food products have been cornered and are held to advance prices. The men who have done the cornering are capitalists, wielding great economic and, therefore, political power. They make and unmake Presidents, Governors, Legislators, Mayors, Judges, Police Commissioners, and all other public officials—to do their bidding. Will the food controller dare to act contrary to the wishes and interests of the men who own the government? It is hardly probable.

And what would be the result if one man were to control the breweries of this country and regulate their output? Confusion, corruption, partiality, waste, and a whole lot of other evils would be the consequence.

The purchase of the breweries would bring about still greater evils. Government breweries would be "run" by politicians; politicians would do the buying of barley, malt, hops and other brewing material, accessories and machinery; they would appoint favorites to brewmaster and maltmaster positions, and the consequence would be poor beer and, therefore, public discontent and dissatisfaction.

Control or purchase of breweries in the United States will be impracticable as long as the present political and economic system prevails. The private ownership of breweries, as at present exercised, is the only practical method, as it regulates output, quality and price through competition. The modern American brewer can only succeed if he produces good, pure and palatable beer at a fair price, and that is what he has been doing ever since the brewing industry was established in this country, and he is doing it to-day. For this reason he should be left alone and no longer threatened with the chimeras of control or purchase.

Some "dacter" in California has invented a new-fangled disease which he calls "dystocia," its symptoms being pain in the right arm; and he says that it is produced by men lifting glasses of beer, wine or whiskey to their lips. As we all do that, we all must have "dystocia." But who is going to be a patient of the smart alleged medical Aleck in California? Does he expect all of us to pay him "two bucks" per visit?

No Compensation Means Lawlessness.

Another logical thinking jurist has declared that to prohibit a man to carry on a lawful business is unconstitutional and a "law" permitting confiscation has no standing in court.

The case in which this ruling was made last month is that of a South Brooklyn, N. Y., grocer in whose behalf the Long Island Family Liquor Dealers' Association attacked the New York State law, known as "Chapter 521 of the Laws of 1917," and the judge who declared it null and void was Supreme Court Justice Cropsey of Brooklyn. Under this "law" the State Excise Commissioner had closed thirty-six saloons and grocery stores in the vicinity of the E. W. Bliss ammunition factory and the Morse Dry Dock, where work is done on U. S. government ships, it having been claimed that the respective saloons and stores were keeping the workmen in the two establishments named from being industrious and effective.

In his ruling the Justice said, that the "law" is unconstitutional because it takes property without due process of law and without making compensation. "The relator has a large stock of liquors on hand which he bought on the assumption that he would have the right to sell them under his liquor tax certificate, which he procured long before the act in question became a law. Under the Excise Commissioner's order he is prohibited from selling this liquor. The order is virtually an absolute prohibition against a sale for—in effect the order prohibits him from selling it anywhere, for a sale cannot be made unless in quantities of five gallons or over without a license. All the relator's rights under his liquor tax certificate have been suspended, and he is in the same situation as though he never had a license. The effect upon the relator, as the papers show, would be to work a great injury and damage to his business, and thus to him.

"While in a very real sense individuals must in time of war yield to the Government, it is still true that the Government must proceed lawfully. No emergency justifies an act of lawlessness. Chapter 521 conflicts with the Constitution, in that it attempts to delegate legislative power. The Legislature can no more delegate its power to repeal a law than it can to enact one and it must follow that it cannot delegate its power to suspend the operation of a law, as that, in effect, is a repeal. This act confers an arbitrary power upon the officials named to suspend the privileges under liquor tax certificates already issued or hereafter to be issued and to 'prohibit the sale of alcoholic beverages' during the whole or a part of the duration of the present war. No rule or regulation is laid down for the guidance of the officials clothed with this power. There is no limitation even upon the exercise of the power. The power granted is absolute. There is nothing to insure any uniformity of action. The officials are left to act as they deem proper. In a word, they are to legislate. Such an act cannot be upheld. And a statute which makes an arbitrary classification or permits others to do so is invalid."

We now wonder what the Anti-Saloon Yelpers and the Prohibition Parsons' Shysters will have to say to controvert Justice Cropsey's terse and clear cut denunciation of confiscation by brutal and foolish Prohibition "laws"—?

An organization of butchers, who recently met in convention at Minneapolis, has suggested that the breweries in this country should be converted into slaughter houses. The idea to reduce the infamously high prices of meat did not occur to these peculiar "patriots."

Our Enormous Crops.

The August crop report of the United States Department of Agriculture is still more encouraging than its estimate in July, 1917. It now appears that the wheat crop will amount to 653,000,000 bushels, or 15,000,000 bushels more than previously announced. The corn crop is to be 3,191,000,000, or 67,000,000 bushels more than reported in July. Oats are to increase to 1,456,000, a gain of 3,000,000 bushels. Rye remains stationary at 56,000,000 bushels. Buckwheat will be 19,900,000 bushels, an increase of 8,000,000 bushels. The potato crop is estimated at 467,000,000 bushels, or 15,000,000 bushels more, but it will be much larger than the official crop reporters say, as it is impossible to estimate the enormous amount of potatoes grown by private persons on vacant soil heretofore never cultivated. Sweet potatoes have increased from 82,200,000 bushels to 86,400,000 bushels since July. Rice gained 200,000 bushels, raising the total to 34,600,000 bushels.

To be brief: The August forecast for 1917 is that we are to have one of the most bountiful harvests in American history, as the indicated yield of grains is placed at 5,578,900,000 bushels, an increase of 863,000,000 bushels as compared with the total grain crop of 1916. The present corn crop has never been reached before; it exceeds the record corn crop of 1912 by 68,000 bushels.

From these figures it appears that there will be not the faintest reason for an arbitrary curtailment of the material to be allotted to the American brewing industry for at least one year. We have far more barley and more of all other food in this country than we need and enough to export to the brewers of England and France.

To suspend the brewing industry in these conditions would be one of the most atrocious economic crimes ever perpetrated by any government upon a civilized nation.

Connecticut has at last given up its Blue Laws. The Light is spreading. Quibbling, hypocrisy, evasion, lawlessness and political graft, always the products of parson-bred "laws," will now disappear from the Nutmeg State, whose decent example ought to soon be emulated wherever the parsons have saddled people living upon American soil with hateful and obnoxious dark ages legislation.

Some of our friends are reproaching the "soft drink" makers for having been among the most assiduous lobbyists in Congress for Prohibition. Why shouldn't they have favored it? Business is business. If beer, wine and whiskey could be eliminated from the economic fabric of nations, the "soft drink" fellows would monopolize the beverage industries. But don't let them tell you that they are our "friends." That would be as deceitful and hypocritical as the deceit and the hypocrisy of the parsons and their peanut political tools.

The British government has excluded from its mails two Prohibition books entitled "Defeat" and the "Fiddlers," because they harped upon the lying assertion that "drink" would result in defeating England in the present war. Here, in the United States, literature asserting the very same thing, is transmitted through the mails by thousands of tons every year; it is even sent out under the free mail privilege of U. S. Congressmen and Senators. The question therefore arises: Is the British government more sensible and more Democratic than the government of the United States, and what sort of Democracy do we want to make "safe" for the world? We refrain from answering this ticklish question, as otherwise Uncle Sam's military authorities might make some trouble for us.

Poisoning American Soldiers.

The nefarious prohibition by Congress of selling beer and wine to United States soldiers and sailors already bears its dreadful fruits. From all points where this prohibition can be enforced, to wit: the vicinity of army and navy posts and training camps, it is reported that the surreptitious peddling of whiskey, cocaine, heroin and other narcotic poisons is assuming awful proportions. Here and there some pedlar of these destructive drugs is arrested and punished, but the great majority of these infamous traffickers elude the vigilance of the military and naval authorities, and the poisoning of our boys in uniform proceeds uninterruptedly.

And for this, American parents may thank—if they do not prefer to curse them—the miserable weak-kneed peanut politicians in Congress, who, cowed by the bulldozing threats of Prohibition parsons, Anti-Saloon League grafters, and those whole-souled darlings, the members of the Christian (!) Women's Temperance Union, have permitted to let the law against selling to soldiers and sailors light alcoholic stimulants, to which the overwhelming majority of Americans are accustomed, go upon our Federal statute books.

The poor boys, who, made desperate by being deprived of the drinks to which they were used before they donned their uniforms, become addicted to the use of death-dealing drugs, are sacrificed to the Moloch of theological greed, and the fanaticism created by it. Their minds and bodies are destroyed before they can reach the enemies who are threatening to destroy Democracy and liberty throughout the world, and the efficiency of the military and naval power of the United States is dangerously impaired, the civilized world standing aghast when viewing these results of insane American legislation!

As we understand it, the Kaiser can be whipped if we drink enough beer.—*Prohibition Paper Headline.*

That may be so. But for the life of us we cannot see how the Kaiser can be whipped if our soldiers in the trenches and our industrial workers producing war material are made disgruntled and obstreperous by preventing them from enjoying the drinks to which they have been accustomed ever since they grew up to manhood.

Kansas Prohibition papers are insinuating that President Wilson should be impeached because he is opposed to prohibiting beer and wine. "This is the most shameful chapter written in American history since the days of James Buchanan," exclaims one of the parson-ridden "editors," to then continue: "During his administration the White House was the refuge of the slave power. Now it is made the refuge of a greater evil, the liquor traffic." If Mr. Wilson is as bad as Buchanan was, let them move for his impeachment. But they will not dare to. They know that what they say is merely "hot air."

Charlie Stelzle, the ex-union labor agitator and now fake "Reverend," who some time ago whined that he must have \$10,000 for his "work" in aiding and abetting the Prohibitionists and anti-labor scab bosses, has come to the conclusion that \$10,000 would be but a drop in the bucket. He, therefore, makes it to be known that not less than \$1,000,000 will satisfy him. That sum is to be raised by what the Anti-Saloon League outfit calls the "Federal Council of Churches of Christ in America," and it is to be spent in advertising in all newspapers willing to publish Prohibition stuff. Should Charlie succeed in even a moderate way, the trade will have to go into an advertising campaign also. And even if Stelzle fails, the trade should advertise, no matter what the cost will be.

Another Prohibition Lie Exploded.

The lie that pellagra, the dreaded skin disease first observed in the rice fields of Italy, was caused by the eating of rice and corn, which also enter into the production of alcoholic beverages and, therefore, the latter must be suppressed, according to the demands of Prohibition parsons and other liars, has now also been exploded by official investigation, as "Recent experiments and observation in pellagra are reported in U. S. Public Health Service Bulletin No. 106. Attempts to transmit pellagra to monkeys by inoculation resulted in only one case out of 94 which even suggested pellagra, but by feeding dogs upon a diet consisting of boiled dried peas, cracker meal and cottonseed oil or lard a diseased condition closely resembling human pellagra was produced, while the addition of meat to the diet caused these symptoms to disappear. The conclusion is drawn that the disease is not infectious but is due to a deficiency of some essential dietary constituent."

After this great war humanity will be really free, as with the alleged "divine right" of kings and despots all other would-be enslavers of mankind, among them the Prohibitionists, will be swept from their thrones and all other strongholds in legislative halls, courts and administrative offices. The masses of the people will rule and they will eat, drink and enjoy life as reason and science dictate. No more dictation by individuals or minorities anywhere!

Constitutional nation-wide Prohibition would invade the police power of the States opposed to Prohibition. It would not be supported by public sentiment and, hence, difficult of enforcement, evasion, fraud and political corruption to result with certainty. It would be unconstitutional because it would destroy legally created values without compensation and, worst of all, it would be undemocratic, despotic, because enacted by a majority of legislators representing a minority of the American people, an injustice which was tersely described by Abraham Lincoln when he said that "no man is good enough to govern any other man without that man's consent."

The prohibition of liquor advertising by preventing publications containing it from being carried in the United States mails is nothing less than an attempt at muzzling the public press, and if the American people fail to vigorously resist similar attempts in the future, the liberty of free press and free speech, which their constitution guarantees them as among the principal foundation of political and economic freedom, will be taken away from them. The Prohibition parsons are afraid of and hate free speech and a free press, because they endanger their nefarious business of keeping the masses in ignorance and, therefore, blind credulity, the only pillars with which they still prop up their mediaeval structure of despotism promoted by falsehood.

The other day in Washington a group of steel manufacturers were gracefully submitting to government price-dictation. At the same time the government was clumsily submitting to law-dictation from the beer trade.—*Waycross (Ga.) "Herald."*

Stuff and nonsense! If the beer trade had the power of dictating to Congress, things would be different from what they are. The only ones dictating to Congress are the Prohibition parsons and their foolish followers whom Congressmen and Senators fear, believing them to possess political power—which they possess not. The beer trade has not been prohibited this time because the politicians in Congress know that the masses who drink beer, will and must have it, are the real political power in this country.

United States Brewers' Association.

FIFTY-SEVENTH ANNUAL CONVENTION

TO BE HELD IN

ATLANTIC CITY, N. J., October 2nd to October 5th, 1917.

August 21st, 1917.

To the Members of the

UNITED STATES BREWERS' ASSOCIATION.

Gentlemen:

We are planning to hold our Convention at the Hotel Traymore, Atlantic City, from October 2nd to 5th.

The Trustees will meet on the 2nd of October, and the stated meetings of the members will be held on the 3rd and 4th of October.

It would be advisable for you to write direct to the Hotel Traymore for your accommodations, without delay.

We are not getting out a formal program, for the reason that it is proposed to dispense as far as possible with reports and routine proceedings, so as to devote ourselves to the consideration of plans for the future of the industry. Undoubtedly great changes are impending, but we are much encouraged by the rapid development of public sentiment in favor of beer and other mild alcoholic beverages.

Our opponents will renew their fight for the passage of the National Prohibition amendment as soon as Congress meets next December, and we must make our preparations for it now.

This is the time for the brewers to look ahead to meet public criticism squarely, and to work out a constructive program which will stabilize the trade and put the distribution end of the business on a more satisfactory basis.

Of course you will be present on this momentous occasion, and take part in the proceedings! Will you please notify me accordingly as soon as possible?

Yours very truly,

HUGH F. FOX,

Secretary.

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

Washington, D. C.—The Senate, on Monday, August 6th, adopted (65 to 20) the Sheppard constitutional amendment resolution:

"Resolved by the Senate and House in Congress assembled (two-thirds of each house concurring therein) that the following amendment to the constitution be and hereby is proposed to the states, to become valid as a part of the constitution when ratified by the legislatures of the several states as provided by the constitution:

"Article 1, Section 1. The manufacture, sale or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territories subject to the jurisdiction thereof, for beverage purposes, is hereby prohibited.

"Section 2. This article shall be inoperative unless it shall have been ratified as an amendment to the constitution by the legislatures of the several states as provided in the constitution within six years from the date of the submission hereof to the states by the Congress.

"Section 3. The Congress shall have the power to enforce this article by appropriate legislation."

To make this resolution effective it must also be adopted by two-thirds of the House of Representatives and then be ratified by 36 states. There is very serious question whether the second section of the resolution, providing that the amendment must be ratified within six years, is constitutional. The provision of the constitution providing for its amendment puts no time limit on the right of the states to ratify an amendment proposed. It is pointed out that those states which have already adopted state prohibition are mainly rural states. The great states of Massachusetts, New York and Pennsylvania have not, and it can safely be said will not, adopt any such backward policy. The indications at this writing are that the House of Representatives will refuse to take any action whatever on this proposed constitutional amendment at the present session of Congress.

Representatives "Lonesome" Randall, of California, the single representative of the Prohibition party outfit in Congress, has issued a statement characterizing the six-year clause in the Sheppard resolution as a "joker" slipped into it by "the liquor interests," as he calls them. Says Randall: "The friends of national prohibition have been flim-flammed by the liquor lobby in the constitutional amendment adopted in the Senate. The joker is not in the six-year clause itself, although that is without a single precedent. The six-year clause provides that the prohibition amendment would not become a part of the constitution unless ratified in six years. The fact is it will become a part of the constitution if ratified after the time limit, but will be inoperative. This promises long years of litigation. The duty of the House is clear: Throw the six-year clause out."

Herbert C. Hoover, federal food administrator, has ruled that all processes in the production of distilled spirits for beverage purposes must cease at 11 o'clock on Saturday night, September 8th. Under the prohibitive section of the food-control act it is provided that "from and after thirty days from the date of the approval" of the act no foods,

fruits, food materials or feeds shall be used in the production of distilled spirits for beverage purposes. The 30-day period named will expire at midnight, September 9th. This date falls on Sunday, and as the internal revenue laws prevent the operation of distilleries after 11 o'clock at night on Saturday until the following Monday at 1 A. M., it is held by the food administrator that the law becomes effective on Saturday night, September 8th. According to Mr. Hoover, the law contemplates that all steps in the process of distillation shall cease at the time indicated in the ruling.

The following communication has been sent to the government by the National Wholesale Liquor Dealers' Association: "The plants will be held subject to the necessities of the government for the purpose of making alcohol for war munitions. Distilleries are as necessary to modern warfare as artillery. It takes nearly two pounds of alcohol to make one pound of smokeless powder. The distillers have been and will continue to be as patriotic as any other citizens."

In the consideration of the war revenue bill the Senate, on August 16th, adopted the provision placing a tax of \$60 per hundred pounds on cereals, etc., entering into the production of distilled spirits, and a tax of \$5 per wine-gallon on the molasses used. Under the bill distilled spirits are now taxed \$3.30 as against the \$2.20 proposed by the House and the existing rate of \$1.10. The beer tax is made \$3 per barrel as against the House tax of \$2.75 and the present rate of \$1.50. The bill levies \$140,000,000 additional taxes on distilled and rectified spirits, and includes clauses, effective during the war, prohibiting their importation and providing a prohibitory tax of \$60 per hundred pounds upon their further manufacture from foodstuffs, as noted above. The House bill levied \$107,500,000 additional taxes and prohibited the manufacture of distilled spirits only.

Increase of revenues from beer and other malt and fermented liquors of \$46,000,000 is provided, as compared with \$37,500,000 under the House bill.

Reduction to two per cent. of the alcoholic content of beer is expected to be Herbert Hoover's next grain conservation step. Following his order to stop distillation of spirits after 11 P. M. on September 8th, Hoover is said to have decided that beer strength must be reduced from its present 3½ or 4 per cent. of alcohol to 2 per cent. in order to save 35,000,000 bushels of grain.

There are no saloons in the District of Columbia which should be closed because of the ruling prohibiting saloons within a half-mile of army camps. A number of the saloons in the northeastern section of Washington which had been notified by the police to close have reopened on advice of the district attorney.

With the approach of November 1st, when the District of Columbia goes "dry," a number of saloons are making preparations to open soft drink and refreshment emporiums. Several proprietors have applied to the excise board for permission to now open on Sundays with soft drinks only—the balance of the stock being removed for the day—but permission was refused.

Suit for an injunction to restrain the District of Colum-

bia government from enforcing the Sheppard prohibition law which will make Washington "dry" after November 1st, is to be filed in the District supreme court early in October by the National Democratic Fair Play Association. L. G. Warfield, secretary of the association, which was formed to test the validity of the fourteenth and fifteenth amendments to the constitution, states that at least fifty suits of this kind will be filed before November 1st, attacking the Sheppard law from every angle. It will be charged, among other things, that the law is illegal because the amendments in question were illegally ratified by Congress.

During the agitation preceding the adoption of the Sheppard resolution, the Farmers' Feed Co., New York, sent letters to the various officials in Washington, expressing in emphatic terms its opposition to prohibition, but, unfortunately — through somebody's error in Washington — their position, as well as some other bodies', arrayed against prohibition, was read into the "Congressional Record" as being in favor of prohibition instead of the exact antithesis. The company thereupon wrote to the Vice-President, Thomas R. Marshall, acquainting him of the misinterpretation of their thoroughly defined attitude against prohibition, saying, in part: "We want to say with all the emphasis at our command that we are opposed to prohibition and shall continue to oppose it for the following reasons: Prohibition is a deathblow to the liberty of the individual because it prohibits what is not wrong in itself. Prohibition runs counter to human nature because the taste and appetite of man cannot be regulated by law. Human laws are powerless against the laws of nature. Prohibition undermines manliness. Its premise is that men are children, who must be led by the leading strings of law. Prohibition undermines respect for law. A thousand ways will be found to evade the law, and the result will be a nation of lawbreakers, a condition which must inevitably lead to lawlessness and anarchy. National prohibition by constitutional amendments or by riders to a food bill is unworthy of a great people. A constitution, I take it, is a Bill of Rights for the protection of life, liberty and property, and especially for the protection of the minority; attaching riders to a bill which are not germane to the bill proper must be considered as an open confession that those who support such measures believe in putting a premium upon fraud, trickery and deceit at the expense of truth, honesty and justice; and if such methods are allowed to obtain in the Congress of the United States can the citizens look confidently to the officials of their government to uphold the dignity and purpose of their vested rights as exemplified in the Constitution? National prohibition means the complete subversion of the fundamental theories upon which our system of government rests. By the wise foresight of the fathers of the republic the police power was reserved to the separate states upon which the exclusive rights to pass sumptuary laws was conferred. This sacred theory would be torn into shreds by conferring police powers on the national government. Prohibition means the confiscation of property valued at a thousand million dollars, property which has been acquired strictly in accordance with state and federal law. Prohibition will take the bread from the mouths of hundreds of thousands of employes and workingmen and forever."

Atlanta, Ga. There is a bill before the Georgia Legislature providing an annual tax of \$25 for every bottling machine used in this State, having one filling head; \$75 for two filling heads; \$125 for three filling heads, and \$50 for each additional filling head.

Baton Rouge, La. The Louisiana Legislature, by a vote of 69 to 44, has indefinitely postponed consideration of the

bill to prohibit "liquor" within ten miles of the military camps in this State.

Lexington, Ky. Pessimists think that, because in many congressional and State Senatorial primaries of Kentucky Prohibitionists were nominated, the next Legislature of this State will pass a State-wide Prohibition bill. But Governor A. O. Stanley has announced that he will protect the interests of the Kentucky brewers, adding that he will act with the distillers in all matters where theirs may clash with the brewers' interests.

San Juan, P. R. The ninth Legislature of Porto Rico, now in session, is to raise taxes, because State-wide Prohibition will reduce the public income by more than \$1,500,000 per year.

Austin, Tex. The Texas Senate has requested the members of Congress from this State to vote for Nation-wide Prohibition and the House wants to impeach the Governor for alleged misconduct.

Madison, Wis. The Wisconsin Legislature has passed a bill permitting cities to refund saloon license money if Congress enacts nation-wide prohibition as a war emergency, and, therefore, the large Wisconsin cities have granted licenses to more than 4,000 saloon keepers. The licenses had been held in abeyance since July 1 because of the uncertainty of the provisions of the national food conservation law.

California. The Public Welfare Committee of the Los Angeles Common Council has unanimously turned down a petition signed by about 4,000 Prohibitionists to prohibit the sale of "liquor" in Los Angeles, one of the reasons given by the committee being that the people of Los Angeles voted overwhelmingly against Prohibition nine months ago; another reason: That the city needs the \$900,000 annually collected from the trade.

Colorado. District Attorney Foley threatens to prosecute druggists for selling Jamaica ginger without a physician's prescription.

Connecticut. This State has thrown its 300-year-old blue laws upon the scrap heap. Stores have now been open on Sundays for nearly one month, refreshment served, and even the "movies" have entertained the crowds. The parsons are in despair, as they are no longer able to turn the Wheel of Progress backward.

About sixty quarrymen and kiln tenders of the New England Lime Co., at its Pierce & Freeman and Canfield branches in Canada, and the Allendale Lime Co., at East Canaan, August 23rd, quit work because the companies refused to furnish them with beer.

Florida. Judge Moreno Jones, of Pensacola, has ruled that the serving by an individual with the proper licenses of alcoholic liquors in quantities less than a half pint does not constitute an offense. It is now understood that clubs will move for the protection of their service bars.

Illinois. His Methodist brethren have compelled the Rev. H. W. Ohlinger, a German pastor at New Athens, to resign from the ministry because he acknowledged that, whenever he wanted to do so, he would go into a saloon and drink a glass of beer, or two.

Iowa. This State will vote on October 15th upon a constitutional amendment prohibiting the manufacture and sale of liquor in Iowa. The amendment is so strict that the Prohibition hypocrites who preach one thing and practise another must beat the amendment or never a drop for beverage purposes can they get. If the amendment carries, these people will be prohibited from making wine or beer for their own homes. Blind tigers are still operating almost everywhere in Iowa.

Numerous arrests for selling whiskey were recently made at Muscatine.

The thirsty ones at Mason City went over the border into Minnesota two weeks ago and returned with a hearse filled with bottles of whiskey, those having hired it posing as mourners. That night almost all of Mason City was gloriously drunk.

Kansas. Over 8,000 miners in Franklin and vicinity have notified Governor Capper that they will no longer work in Kansas unless they are permitted to have beer and wine in their homes.

The number of prisoners is increasing in the penal institutions of this State, and so is the number of divorces, as reported by J. W. Howe, secretary of the Kansas State Board of control.

Massachusetts. Many arrests have been made in Massachusetts cities of saloon men who sold liquor to soldiers and sailors in uniform.

Minnesota. Controllers to regulate the sale of beer have been appointed in several Minnesota counties, and the bureau established by the Minnesota State Brewers' Association is co-operating with the State authorities to properly enforce all laws relating to the trade.

In a case against the Silver Lake Brewing Co., Silver Lake, Governor Burnquist has decided that the company are entitled to legally dispose of beer in quantities of five gallons or more provided it is brewed in their own brewery.

At a convention of butchers held in Minneapolis, August 10th, resolutions were passed telling the United States Government that all breweries and distilleries in this country should be converted into slaughter houses.

Missouri. Judge William H. Wallace, who is a rabid Prohibitionist, in his annual address to the Kansas City Board of Police Commissioners has again thundered against beer and brewers, harping upon the Missouri law under which brewers may not own saloons, or have a financial interest in them. He concluded his harangue by shouting: "We are sending our finest men to the front to save civilization from German barbarism. The Kaiser's agents in this country, through the saloon, are destroying our effectiveness as a nation. It should be stopped. The one certain way is to prevent the brewery from selling its product, both wholesale and retail."

Nearly 300 saloons have been closed in Kansas City because they were within the half-mile "dry" zone surrounding military camps. The plant of the Geo. Muehlebach Brewing Co. had also to be closed.

Representative labor editors recently in convention assembled at St. Louis have adopted the following resolution: "Resolved, That we tender our moral support to those workers, who are now menaced by these would-be saviors, whose only desire, to our mind, is to lower the standard of wages and lessen the opportunities for employment by adding to the army of the unemployed; and that we do all in our power to obliterate this hysteria of prohibition."

New Hampshire. The New Hampshire State Board of Health publishes a report saying: "With the progressive increase in the extent of prohibition territory, numerous substitutes for beer are springing up. These appear to be artificially carbonated, hop-flavored decoctions, depending mainly or wholly upon glucose for their carbohydrate constituents, showing no analytical evidence of malt, and containing but trifling percentages of alcohol. Using the terms in their universally accepted technologic sense, such are scarcely to be regarded as either fermented or brewed beverages, and there is apparently nothing harmful or objectionable in their composition. However, it is not the province of this department to rule as to their eligibility to sale with-

out license. Two of the three brands examined were found to comply with the Food and Drug Law requirements. The third brand is deemed to be improperly labeled in that such claims as 'nutritious,' 'tonic,' 'contains the nourishing qualities of the best cereals,' 'a health-giving beverage for the old, middle-aged and young,' are more or less untruthful or misleading."

New Jersey. In Camden some Democratic politicians, who have been frightened into hysterics by a number of parsons and fanatics, have started an intrigue to have Excise Commissioners elected who will refuse to issue any saloon licenses next year.

The Hoboken Innkeepers' Association has pledged its members not to sell liquor to soldiers and sailors in uniform.

The Excise Commissioners of Clifton have adopted an ordinance which will regulate the sale of liquor and also the hour and the conduct of all saloons, road houses and hotels. Important among the provisions of the ordinance are that all saloons must be closed between 1 and 5 A. M., there being a penalty of \$100 fine for the first violation, \$200 for the second, and revocation of license for the third. No free lunch is allowed and no gifts or premiums are to be given by the proprietors, under penalty of \$50 fine. The license fee is \$301.50 for retail and \$501.50 for wholesale licenses.

The conviction of William H. Fennan, manager of the Atlantic Amusement Co., on charges of violation of an Atlantic City ordinance by operating amusement devices on Sunday, has been upheld by the Court of Errors and Appeals. After his conviction, Fennan was sentenced to pay a fine of \$200 or spend one day in jail on each charge.

When the vote on nation-wide Prohibition was pending in the U. S. Senate the Christian Feigenspan Corporation, Newark, sent out the following hurry call to their clients and friends: "Constitutional amendment for national prohibition will be voted on in the Senate Wednesday; in the House Thursday. This means that the prohibitionists are making a strenuous and final attempt during this session of Congress to make the country dry. It is very urgent that you wire and have your friends wire their Senators and Representatives urging them to vote against the passage of this amendment."

The Commissioners of Asbury Park have been asked by 397 voters, signing a petition, to pass an ordinance permitting the granting of saloon licenses.

New York. The most important event last month in the State of New York was the ruling made by Supreme Court Justice Cropsey, of Kings, in the case of 34 South Brooklyn liquor dealers and grocers whose stores had been closed because they were located near an ammunition factory and a shipyard. The Judge declared that the respective law passed by the last New York Legislature is unconstitutional, not only because it interferes with the business of the courts, but also because it takes property away without compensating the owner. The saloon and grocery stores were at once reopened.

In Manhattan and the Bronx several persons have been arrested for selling narcotic drugs like cocaine, heroin, etc., to soldiers and sailors. In other cities arrests continue for selling liquor to soldiers and sailors.

Utica and Syracuse ministers have repudiated John L. Warner, a representative of the Anti-Saloon League, because he sent false telegrams to President Wilson, alleging that they were signed by pastors and members of their congregation, urging the President to use his influence in favor of nation-wide Prohibition.

Dr. Paul Luttinger, bacteriologist in the research laboratories of the New York City Department of Health, after having submitted a report in which he reached the con-

clusion that alcohol, taken in small quantities, was not harmful to the life processes of warm-blooded animals, has been dismissed from office by Health Commissioner Emerson, a rabid Prohibitionist, upon the pretense that Dr. Luttinger was incompetent and that he disobeyed certain orders.

Commissioner Emerson has also prohibited the sale of absinthe from now on.

North Dakota. Officials of the East Grand Forks Brewing Co., East Grand Forks, Minn., have been arrested by Federal officers, upon warrants issued by District Attorney Hildreth of Fargo, N. D., who alleges that they violated the Webb-Kenyon law by shipping beer into a Prohibition State.

Ohio. The National Liberal Party has been organized in Cincinnati, its principal object being to so change the United States Constitution that it can no longer be amended by the minority vote of State Legislatures, amendments to be submitted to the people of the entire nation.

Charges having been preferred by State Liquor Licensing Board by Liquor License Commissioner Kevin O'Dwyer that Toledo bootleggers and saloonists were "tipped off" by the Huebner-Toledo Breweries Co. that detectives were operating in Toledo and they should "lay low," President James E. Pilliod, of the Huebner-Toledo Breweries Co., Toledo, has denounced them as "a mesh of misinformation and fact," declaring: "More than two months ago I addressed a letter to each customer of the Huebner-Toledo Breweries Co., asking them to give me, in confidence, the name and address of each speakeasy. At the same time I addressed a letter to the President of the Lucas County Liquor Dealers' Association, asking for the same information, it having been agreed that the information so gained was to be placed before the State Liquor Licensing Commission in an appeal for help to remove the evil. All this was well known to Mr. O'Dwyer when he stated in his interview that all the breweries in Toledo were opposed to the speakeasy, except the Huebner-Toledo Breweries Co. Only recently, in fact, within three weeks, Commissioner O'Dwyer personally opposed the committee of saloonkeepers who wanted to lay the matter before the State Board, O'Dwyer claiming it was not necessary. I advised the committee to go to Columbus, in spite of O'Dwyer, and take the matter up with the State authorities and the recent drive against speakeasies and blind tigers is the result of that action, which neither I nor my associates opposed. I have always given the inspectors access to the books of The Huebner-Toledo Breweries Co., and have instructed our bookkeepers to lend them every possible assistance. Ever since Mr. O'Dwyer has been in office he has known, and his predecessors knew, of the existence of speakeasies, bootleggers and blind tigers, but neither he nor the others took any aggressive steps as a board or as individuals to enforce the law. He practically admits that in his interview. But he and the local board are really not so much to blame for that, because the state force of inspectors is inadequate, and for this reason, although every licensee pays \$100 per year for the purpose of creating a fund to enforce the license law, the total collection amounting to over \$600,000 per annum. Yet for some reason or another the state administrations have taken \$400,000 annually from this fund and transferred it to another. It follows, of course, that the state and local licensing boards have not sufficient funds to thoroughly enforce the law, as Mr. O'Dwyer points out when he places the blame on the Willis administration."

Canal Fulton, Stark County, has returned to the license column.

Chief Rutledge of the Anti-Saloon League in Cleveland

has announced that the fall campaign, starting to-day, will be principally conducted against beer, of which he says that it is far "more deadly" than whiskey, adding that "when our soldier boys return from France they will find that at least in Ohio the beer bacillus has been destroyed ever."

Oklahoma. Otto Wiley, son of the so-called "reverend" J. M. Wiley, one of the most ferocious and sordid anti-saloon leaders in Oklahoma, is now in the state penitentiary in company with a notorious bootlegger for stealing automobiles and selling whiskey.

Pennsylvania. According to an opinion by Attorney General Brown, of Pennsylvania, the contract of insurance or indemnity bond issued by the Retailers' Indemnity Company of Grand Rapids, Mich., to retail liquor dealers of Pennsylvania is issued in violation of an act of 1911. The agreement of the company, the opinion says, is to indemnify the indemnities against certain losses through unlawful knowledge.

The Moose convention recently held in Pittsburgh has hooted down a Prohibition resolution.

Free lunch having been abolished in this State, saloonmen now sell "sandwiches" at 5 cents each and give customers a glass of beer "for nothing."

At the rooms of the West Philadelphia Democratic Club 2,400 bottles of beer were confiscated by Mayor Smith's newly organized Anti-Vice Squad.

South Carolina. When Governor Richard I. Manning was recently reproached by a lady for enforcing the "dry" laws of South Carolina and he asked her why she opposed the enforcement, she answered: "Well, it is this way, I wouldn't use liquor myself, but sometimes we find it helpful to have a bottle of whiskey in the house for cooking purposes. I have been accustomed to ringing up my grocer and asking him if a certain man is in town. The name of the man is the name of the brand of whiskey that we used. The grocer would reply 'he is in, madam.' I would then direct him to tell 'the man' to call at my home at a certain hour, and to come alone. At the appointed hour I would find on my doorstep a basket containing one quart. If I should have said, 'tell Mr. So and So to come and bring a friend,' there would have been two quarts."

South Dakota. This State permits druggists to sell non-potable alcohol. When one of them was recently arrested in Sioux Falls and the judge asked him how the stuff sold by him was compounded, he blandly replied:

"Denatured alcohol, one gallon; carbolic acid, two drams; wintergreen, one dram."

The South Dakota Food and Drug Department has investigated 162 samples of "near" beer and other "soft drinks," sold in this State, finding that of 65 samples of "near" beer 11 contained no alcohol; of 51 soda waters, 6 contained no alcohol; of 11 samples of grape juice, 1 contained no alcohol, and of 23 ciders, genuine and imitation, 1 contained no alcohol.

Tennessee. The sale of alleged "wine for sacramental purposes" is phenomenally increasing in Tennessee. It is peddled in half pints by persons wearing clothes that make them look like clergymen. But they are merely bootleggers.

Prohibitionist intrigues have resulted in the resignations from office of the Mayor of Memphis, T. C. Ashcroft, and his Chief of Police, W. H. Hayes.

Texas. From San Antonio we have this: "Whether two breweries in San Antonio are located within a half mile bone-dry zone around army posts is being discussed here by Federal authorities and it has been announced that an official survey might have to be made to decide the

question. The first map presented to the Federal authorities did not show the breweries to be within the zone, but a second map, obtained from army officers, purported to show that the breweries were within half a mile of privately owned property which is used by the Government. The question whether saloons within half a mile of the arsenal here are affected by the President's order was referred to Washington by District Attorney J. L. Camp. Pending final decision, the saloons near the arsenal will be allowed to remain open. Other questions referred to Washington related to the keeping of wines by churches for sacramental purposes and of grain alcohol by drug stores for filling prescriptions."

Utah. Since August 1st the Utah "bone-dry" law has been operative. It provides penalties for the sale, giving away, or possession of intoxicants. Any person who drinks in a public place, on the streets, or is intoxicated is to be deemed guilty of a misdemeanor.

Arrangements have been made in a number of counties of the State to have test cases of the State-wide prohibition law in order that the Supreme Court may rule upon sections which are said to be ambiguous. One of these sections forbids the sale of brewed or malted beverages. It is claimed that the Legislature exceeded its powers in trying to declare certain beverages intoxicating through the brewed and malt clause. Whether outside breweries are to begin tests of the law could not be learned.

The State chemist who tested a large number of samples of "near" beer produced and sold in Utah and other States, has found them to be complying with the law.

Virginia. This State is about to become safe and sane once more, as Westmoreland Davis, farmer and lawyer, will be the next Governor of Virginia. J. Taylor Ellison, his closest opponent in the democratic primary, has conceded Mr. Davis' nomination and sent his congratulations to the successful candidate. Mr. Davis' plurality over Mr. Ellison is about ten thousand. John Garland Pollard, the third man in the race, ran twenty thousand votes behind the nominee. Mr. Davis' nomination is a blow to the democratic "machine" of Virginia, headed by Senators Swanson and Martin, and the anti-saloon league forces, headed by the Rev. James Cannon, who heretofore was regarded as the political "boss" of Virginia. Mr. Cannon and the State "machine" supported Mr. Ellison, who is at present Lieutenant Governor. Mr. Pollard, a prohibitionist, advocated a constitutional amendment forever forbidding the sale of whiskey in Virginia. Mr. Cannon urged the Anti-Saloon League to support Mr. Ellison, declaring he was stronger than Mr. Pollard, and recommended the "elimination" of the latter in order to accomplish the defeat of Mr. Davis, who voted "wet" in the election that made Virginia dry two years ago.

Washington. Lumbermen and other employers of labor in the State of Washington blame Prohibition for the increasing unrest of workmen and the rapid spreading of the organization of the I. W. W., asserting that when laborers can no longer spend their wages for alcohol they commence to think, and thinking makes Social Revolutionists of them.

West Virginia. Soldiers now guarding bridges and other public property in this State are being misused for the purpose of enforcing the West Virginia prohibition law, orders having been given to the militia to shoot bootleggers on sight!

Dan Montague and John De Ford, prohibition officers, were recently arrested in Charleston for having smuggled whiskey in suit cases.

Wisconsin. A limit of sixty saloons, with an annual license fee of \$1,000, has been decided upon at the annual meeting of the Superior city commission. A drastic ordinance under which the saloons will be regulated was also adopted.

Canada. British Columbia will become Prohibition territory on October 1 under a law passed by the Provincial Legislature August 18th and signed by the Governor. The law is a re-enactment of the measure of a year ago. The latter was passed by a majority of 5,000. A vote of British Columbia soldiers overseas was taken and the verdict was upset. The Prohibitionists contended frauds had occurred in taking the vote among the soldiers. A Government commission found many soldiers had voted two or three times and that dead and missing men were also entered as having cast ballots.

Drunkenness has been increasing in Ontario since 1916, when the Prohibition law of that Province became operative. The breweries and distilleries are running as before. They had a license to do business under the Dominion which cannot be curtailed by provincial legislation. They do an export trade. They cannot sell a drop directly in the province. A weakness of the law is that they have agents outside the province to whom anyone wanting their goods can send an order. The agent in turn sends it back to the brewery or the distillery, and the customer's order is filled. Any resident of the province of Ontario desiring to buy liquor can do so by sending outside the province and have it brought in, but he must not let it go out of his house. Moreover, if a guest in a house of a friend becomes intoxicated and going out does any damage, the man who gave the drinks is held responsible and must settle. That makes them careful.

Bermuda. The Bermuda Legislature has passed a law whereby "during the continuance of the present war the sale or supply of intoxicating liquor in all clubs and licensed premises is prohibited between the hours of 9 o'clock at night and 9 o'clock on the following morning."

Australia. The Prohibitionists of South Australia are again disturbing that State by their vicious agitation for a referendum, but the people, having their hands full with the war, do not pay any attention to them.

New Zealand. "Shouting"—or treating—being prohibited in New Zealand, saloons are now visited by spies who arrest men violating the ridiculous new law. "An amusing incident happened recently in a city hotel (says the Wellington "Times"). A man with two friends went into the hotel and ordered three glasses of beer, for which he paid. Two informers standing by immediately disclosed themselves. 'You have spoken too soon,' said the purchaser of the drinks. 'I am not shouting—I am going to have three drinks myself,' which he did, his two friends looking on. After disposing of the contents of the three glasses, he further explained: 'You know, my two friends are teetotallers, and they are following me about endeavoring to get me to give up drink.' The two informers disappeared, completely disconcerted."

SCIENTISTS MODERATE DRINKERS. The overwhelming number of scientists whom we have known have been moderate drinkers, and we have heard some of their discourses after they had been drinking; and if it be true that their drinking did retard their thinking while discoursing, it was doubtless a blessed thing, for otherwise we might not have been able to take in all that they had to say. It is a fact well known to all but total abstainers that some persons seem to be able to do better work after moderate indulgence in alcohol than without such indulgence."—(Rochester [N. Y.] "Herald.")

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building
Randolph and 5th Avenue.

CHICAGO, August 29th, 1917.

The Internal Revenue Collector of the Chicago district has received from the brewers in this city during July the beer-taxes for 483,181 barrels, a decrease of 154,860 barrels.

Mayor Thompson is again the butt of denunciation and ridicule. He continues his anti-American activity and, while some say that he is a dangerous enemy of universal Democracy, others regard him simply as a clown whose funny antics are merely amusing and grotesque. One of our local newspapers has this to say about him: "This fat recalcitrant uses the words of Washington to prove that his position is that of an American patriot, when it is that of an American copperhead. Thompson is a stupid example of the kind of Americanism which filled Washington's life with despair. This is not a part of our municipal comedy. Thompson's rebellious criticism of government policy, determined upon and in process of execution, is a stimulus to every rebellious mood which may make the men of the new national army perverse, stubborn and hard to handle. He is trying to fill their minds with the idea that they are imposed upon and dealt with not only unwisely but unjustly." Thompson has betrayed the trade, after he had promised to protect it and now thousands consider him even a traitor to this country. His "reward" will come in time. We can wait for it!

It is feared here that when the Food Control bill becomes operative next month, the city authorities will have to request the governor of Illinois to call a special session of the State Legislature to pass measures enabling them to increase the municipal revenue, as in consequence of the closing of about 800 saloons the city will lose \$800,000 per year, and through the prohibition of selling liquors in bond additional 700 saloons would have to go out of business, thus increasing the city's loss an additional \$700,000. Not only will the tax rate have to be raised, but new taxes upon many trades and occupations must be provided. But this cannot be done without the Legislature sanctioning such a serious step.

From the order against saloons within a five-mile zone from a military camp the trade has not yet suffered, as Secretary of War Baker has ruled: "The five-mile saloon zone does not apply to temporary camps in Chicago and other cities, where national guard troops are mobilized awaiting orders to move to regularly established camps." But the trouble may come later on. Who knows?

"Get the saloons in Cook County to close on Sunday unless you wish to see the whole country dry."

This word has been passed to the Chicago brewers by an attaché of the State's Attorney's office after last night.

Sheriff Traeger had submitted to State's Attorney Hoyne evidence that ninety-five Cook County saloons violated the closing law Sunday. He asked for quick action. Mr. Hoyne said he would transmit the evidence to the officials

of the towns in which the violators are located, and if they did not promptly revoke the licenses of the offenders he would ask that the officials be indicted for malfeasance. "I shall send detectives into the county every Sunday to see whether the law is obeyed," he said. He has been advised that the Chicago Brewers' Association will cooperate in enforcing the law.

The American Society of Brewing Technology has sent out a circular to its members urging them "to read and re-read every word contained in the addresses appearing in our Journal, delivered by men of international prominence, such as Professor Geo. B. Foster of the University of Chicago, and Mr. Chas. A. Windle of the Iconoclast. Do this, whether you are a brewery owner, director, master brewer, chief engineer, bottling superintendent or journeyman. Every word will give you renewed thought and much needed renewed vigor. Obtain additional copies of these articles which have appeared in the Independent and the Iconoclast and distribute them among your merchants, ministers, citizens, etc. Urge subscription to these publications which foster our interests, and show your unlimited support to men of such prominence who, as former prohibitionists, have come to our cause not through financial reasons, but entirely and exclusively through their own better judgment. They are thinkers and students, and applied reason and logic to the study which they have given this subject. This Society can merely provide the material. It is up to those, you and I, who are vitally interested, to make the best use of it, and what is more, do not allow those who have an established international reputation, and who make great sacrifices for the benefit of reason, logic and principle, to suffer through apparent indifference and non-support by those who are directly concerned."

During the weeks when Congress was discussing the Food Control Law and the Sheppard Prohibition resolution, the Manufacturers' and Merchants' Association circulated an immense amount of enlightening literature, appeals to business men to protest to their Representatives and Senators in Washington, and carefully collected views and opinions of the public press, all denouncing the sinister attempt to cripple, or even destroy, the brewing industry and its affiliated trades. The Association has thereby rendered invaluable service to the trade.

The Illinois Branch of the Industrial Service League, with offices in Chicago, has unmasked itself as a faithful servant of the Prohibition outfit. It recently sent out letters to business men in this city saying: "Where actual tests have been made it has been found that so small an amount of beer as a single glass per day has reduced the output an average of seven per cent., while invariably the men thought they were doing more and better work. The industrial service system adopted by many large industries helps to overcome this difficulty."

How THE DICKENS DID THAT HAPPEN? The airplane bill was passed without any attempt to load it with prohibition as a rider.—(Knoxville [Tenn.] "Journal and Tribune.")

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, August 22nd, 1917.

By an almost two to one vote the California Grape Protective Association at their State meeting held at Lodi August 11th voted to put the Rominger bill on the ballot in 1918. This is the same bill that was defeated at the last session of the Legislature and it seems to please no one except a couple of hundred wine men. The bill has caused endless discussion and dissension in the ranks of the trade and is again a live issue, as the grape growers will have to obtain something over 76,000 signatures to it before it can be placed on the ballot. Our interests are opposed to it because it would close every saloon in the State and limit the retail sales to only those beverages containing fourteen or less per cent. of alcohol. The prohibitionists oppose the bill because they consider it a half-way measure. They are making their attack now entirely on California wine, claiming that it does "more harm" in the world than any other beverage.

California is seething with prohibition agitation. Instead of this being an off-year, as was hoped it would be, it is an election year. The State election did not settle anything. Modesto, a thriving city in San Joaquin Valley, with only four saloons and those strictly regulated, went "bone-dry" yesterday by 225 votes.

San Diego is to have an election early in October, and it is rumored that Los Angeles will have an election a few weeks later. "Billy" Sunday is to be there this fall for a series of meetings. San Jose is to have an election soon on the same question.

The election in San Jose is being called by the women of the Red Cross who are saying that as long as Uncle Sam is protecting his soldier boys by not allowing them to be served liquor the women should close the saloons so as to protect the boys staying at home.

The Brewers' Protective Association held a State director's meeting in San Francisco August 13th, which was well attended by the directors from all over the State.

Hops are now being harvested in the Sacramento district and are selling for thirty-one cents a pound!

This year, as always, the labor problem becomes very acute at this time. On account of the war the schools in the country will be opened for a month later than usual so as to give the children a chance to help harvest the crops.

Different devices are being tried by employers of labor to attract workers to their ranches. Many of them are giving wine or beer with their meals to laborers as an inducement to them to stay and have found that it helps to keep the men contented.

E. Clemens Horst is trying an experiment on his ranches that is being watched with a good deal of interest. He is giving to those who want it beer with their noon day meal and during the afternoon. The beer is being given out only in a limited quantity to those accustomed to drinking it. As it is very hot in the hop fields and the water is not cold or good, this should prove an inducement to workers. If the experiment is a success it will be tried in other harvest fields. The farmers are waking up to the fact that something must be done to make things comfortable for the farm laborer if they hope to get labor at all to harvest their crops. The farmers are trying to close the saloons, because they think that if it wasn't for the saloons they would be able to get more labor to leave the cities and the laborers resent it and that adds to the endless friction.

Our London Letter.

OFFICE of THE BREWERS' JOURNAL,

46 Cannon St., E. C., August 17th, 1917.

The State Purchase Committees are still at work, investigating, figuring, estimating and speculating in regard to taking over by the Government the breweries in the United Kingdom. But the interesting work is done in the dark, the committees carefully closing the doors of their meeting-rooms and imposing dire silence upon the witnesses they interrogate. So nothing definite has so far become known about the doings and the intentions of the committees. What is all this secrecy for? The general public do not know. They have only been told by the Home Secretary that State purchase "may shortly be necessary as an urgent war measure." That was nearly three months ago. If then there was no urgency and nothing has been said as to urgency at present, we may have to wait still some more to see matters coming to a head. Those who know something about running breweries and making good beer, economically, do not believe at all that State purchase will be resorted to for a good long while; it would undoubtedly result in a costly and all round unsatisfactory experiment. But what is all important in this connection is the fact that the Prime Minister appears to have arrived at the conclusion that whatever is undertaken in regard to controlling or operating the breweries in this country must be done as a war measure and "not merely for ulterior purposes associated with some theory or conception of how the world ought to be run under normal conditions." This undoubtedly shows that Mr. Lloyd George has cut loose from his teetotal appendix, or he would not have intimated to the faddists that this is not the time to carry out their scheme of making the world a beerless and wineless desert. He knows the people of Great Britain would not stand for it. He also knows that, what the schemers have asserted, the munition workers are intemperate and, therefore, less efficient than the needs of the hour require, is false, as it has been demonstrated that the output of ammunition, machine guns and small arms is steadily increasing, although the terrific drives at the German lines in France and Belgium are using up more war material than ever since the war began. So there is no peg left for the faddists on which to hang their fraudulent rag for frightening the fools.

All of this is also the reason why the Government has decided to permit an increase in the output of beer by 33 1/3 per cent. over and above the food controller's previous order to reduce the annual barrelage from 26,000,000 to 10,000,000 barrels; also that brewers not having enough malt, sugar and other brewing materials may be supplied by the malt Clearing House Advisory Committee. The Government is returning rapidly to safe and sane methods in the treatment of the brewing industry.

That the trade is energetically opposed to State purchase and whatever foolishness may be connected with it, goes without saying. The Brewers' Society, all of its affiliated branches as well as the retail trade organizations, have passed resolutions to that effect. The Allied Brewery Traders' Association has also demanded compensation for all losses sustained by its members through war measures, prohibitions and restrictions.

Arthur Hartley, of Emsworth, recently published an article in which he said:

"At last the people have turned upon the prohibitionist and have forced the Government to consider the wishes of the majority. For years we have been the victims of minority influence and legislation. Our parties have been composed of groups, each with a fad or axe to grind. Take

only three questions: the Church, Ireland and Temperance. There never was a majority of the people in favor of Welsh disestablishment. Comparatively few Englishmen and Scotsmen were interested in Irish Home Rule; and most emphatically there has never been any majority in favor of prohibition or fanatical teetotalism. And yet owing to our log-rolling system of politics our Governments have been outrageously influenced by minorities on all these and many other questions."

The turning of the tide has greatly stimulated the market in brewery shares and the reports of most of the big brewing corporations are very encouraging and enthusiastic. Dividends amounting from 2 to 16 per cent. and over are being distributed by some of the concerns.

Two vicious Prohibition publications, "Defeat" and the "Fiddlers" have been excluded from the mails in Canada because they contained false statements in regard to the effect of alcohol upon the outcome of the war, the publishers asserting that the Allies would be beaten unless all alcohol were kept from their troops.

As this year's barley crop is more abundant, proportionally, than any other cereal crop in the United Kingdom, we shall not need any barley imports from abroad.

New agreements have been made by the Army and Navy Canteen Board with the Military Brewer's committee according to which the sale of mild beer has been discontinued and all beer supplied is now a better ale of a specific gravity of 1036 and of a special hopped character improving its keeping qualities. In the Irish canteens a dark beer of 1047 gravity is still supplied at 5 d. per pint.

Lieut. J. H. M. Yeomans, son of A. H. Yeomans, managing director of Marston, Thompson & Evershed, Ltd., Burton-on-Trent, has been awarded the Military Cross. Lieut. Yeomans has been twice wounded, on the first occasion seriously at Loos.

Captain F. Eliot Hotblack, who has been wounded, was prior to the war brewer to Kidd & Hotblack, Ltd., Cannon Brewery, Brighton. He has been mentioned on several occasions in despatches.

Mr. and Mrs. Edward Cheshire, of Edgbaston, recently celebrated their golden wedding. Mr. Cheshire was the founder of the Windmill Brewery, Smethwick, which was amalgamated with Mitchells & Butlers, Ltd.

LET US BE VIGILANT. "No greater truism was ever uttered than that eternal vigilance is the price of liberty. The human story is but the recital of man's achievements of various forms of freedom, interwoven with the attempt of an unscrupulous or bigoted few to deprive their fellowmen of some cherished and inalienable right. Man has seen his civil rights denied and abridged by the few, he has seen his religious rights frustrated and confined, and through it all he has come out victorious only to find in the present day the foundation of his personal liberty shaken by the repeated assaults of the fanatic and bigot."—"The Other Side.")

HARSH AND UNJUST. "Many millions, many hundreds of millions, of dollars, I suppose, are invested in beer-making plants. A very great number of people get their living by labor in brewing plants. It would be a harsh, unjust thing for Congress to enact a law destroying a legitimate industry. Morally it would have just as much right to destroy all the cattle, swine and sheep at the command of vegetarians and to forbid the raising of more, or to say that American citizens shall not grow tobacco for market. Indeed, there is already in existence an important organization which is working to secure laws forbidding the use of tobacco."—(James L. Slayden, M. C., Texas.)

Brewing News from the European Continent.

From Germany we had no news about the brewing industry last month, except that in Bavaria almost all of the small breweries had to be closed owing to the universal shortage in Germany of brewing materials and manual labor. Only a few large Bavarian breweries are still being operated and the beer produced by them is partly distributed among some of the retailers of closed breweries. The frantic demand for "peace" throughout Germany almost exclusively occupies the attention of the newspapers, and that is the reason why but little news about other matters is being published by them.

The output of the French breweries received a new impetus last May, as it appears from the beer-taxes paid in that country during that month amounted to 2,073,000 francs, or 517,000 francs more than usually in June before 1914. The total of the beer-tax paid in the first six months of 1917 was 8,229,000 francs, or 269,000 francs in excess of the amount paid during the corresponding period of normal years, and 3,445,000 francs more than during the first six months of 1916. This year's grain crop, particularly barley and maize, is excellent throughout France.

According to latest advices the beer-tax paid last June amounted to 2,073,000 francs, an increase of 1,027,000 francs, as compared with June, 1916.

The war has made the French brewing industry to undergo a great transformation. Its methods have been modernized and they more and more approach American methods and the result has been that profits are increasing while the quality of the product has been greatly improved. There is now but little waste, brewing methods having been changed according to scientific and more practical principles. One of the results of the transformation has also been the concentration of capital and the consolidation of many small concerns into larger and more comprehensive ones. That the price of beer had to be raised, owing to the prevailing conditions of war, is considered to be merely a temporary feature which the brewing industry has in common with all other industries. At present 45 francs is being paid for one hectoliter of beer, instead of 30 francs, and retailers are charging from 55 to 60 centimes per liter, and 15 centimes per glass. However, as general conditions are improving with the continued success of the French and British armies, it is expected that the wholesale price of beer will soon again drop to 40 francs per hectoliter.

Malt, which at one time rose to 200 francs per 100 kilos, is receding again, as large quantities of barley have commenced to arrive from the United States, and it will not take long until malt may again sell at 40 to 50 francs.

The beer furnished to the French, British and Belgian armies is improving in quantity and quality. It is of 3.5 deg. hectoliter and costs the brewer an average of 46.60 francs, the administrations of the three armies paying the regular market rates between 50 and 60 francs.

One of the great drawbacks at present is the difficulty to properly ship and distribute beer in France as the means of transportation by rail, horse or motor truck are almost entirely monopolized for the carrying of troops and war material.

The 300,000,000 francs which the French government has set aside for the reconstruction of breweries in the invaded regions are now being spent for new buildings and machinery, the latter having been ordered principally from the United States.

In regard to the necessity of supplying wine to soldiers, Dr. Armand Gautier, Dr. Landouzy, Dr. E. Vidal and other scientists have announced that wine is not only a desirable

food for the troops, but necessary to secure efficiency. The addition of a pint of wine to the daily ration is, therefore, regarded as indispensable for soldiers who are called upon to undergo the excessive physical strain which is inevitable in the fighting lines. After an experience which is not excelled by any physician in France, Dr. Landouzy makes the following emphatic declaration: "I refuse as a physiologist, as a medical man, as a dentist, the taboo of wine." Dr. Regis, professor at the Faculty of Medicine, Paris, states that the prohibition of wine under present circumstances would be "almost a crime against the nation from the economic point of view, and a heresy from the hygienic point of view." Pure wine is found to be especially suited to those who derive insufficient nourishment from the ordinary daily food, as well as to the adult who works hard and eats badly; to the convalescent who is recuperating, to the aged who are failing in strength, to the sailor and to others who are exposed to cold and trying conditions of weather, it is a generous and precious tonic.

The brewing industry of Holland is greatly excited over the decision of the United States government to stop imports of grain to neutral countries from which it is again exported to Germany. In consequence of this the Netherlandsche Browersbond recently held a special meeting at which it was resolved to establish a central Cooperative Association for the Importation and Distribution of Brewing Materials, the business of the organization to be carried on under the control of the Government of Holland.

The retailer's boycott against the brewers of Switzerland, consequent upon the price of beer having been raised 12 francs per hectoliter, has resulted in reducing the consumption of beer to a minimum, wine, cider and "soft drinks" having taken its place. The Grand Council of Geneva is discussing the subject of Prohibition, but the outcome will probably be only some additional and stricter measures against the sale of spirits by unlicensed persons.

The Norwegian Storting is considering a proposition to prohibit the brewing of common strong beer, allowing only those brews which contain so low a percentage of alcohol as to make them practically non-intoxicating. The proposition has met with strong opposition from the breweries and all others opposed to teetotalism. The main arguments are that the taxes—amounting to 17,000,000 kroner—will be lost to the public revenue; that the capital invested in the trade will be lost, and that the workmen employed in breweries will be pauperized.

From Denmark, Consul General E. D. Winslow, Copenhagen, has written to the State Department in Washington: "There were 316 breweries in operation in Denmark during 1916. Of the beer manufactured subject to an internal-revenue tax (2½ per cent. or over of alcohol), there were brewed 1,188,000 hectoliters, as against 1,077,000 hectoliters in 1915. According to these figures the consumption per capita of beer containing 2½ per cent. or more alcohol was 34 liters (8.98 gallons), as against 32 liters in 1915. For the production of the beer there were used 18,900 tons of barley malt, 18,500 tons of rice, 1,700 tons of corn, sugar and hops. Of the beer containing less than 2½ per cent. alcohol and subject to no tax there were brewed 1,393,000 hectoliters, or about 47 liters (12.42 gallons) per inhabitant. These so-called non-alcoholic beverages are made almost entirely of barley malt, and 11,900 tons of malt were used in making these beers and only 1,200 tons of corn and a small quantity of wheat malt, rice and wheat were combined. Sugar was used to the amount of about 2,000 tons."

Mid-Summer Re-Union and Clambake of the Graduates of The National Brewers' Academy.

Unless all indications fail, this year's Re-union is going to be a grand success. About thirty visitors were expected when arrangements were first discussed, then as reports came in this number was increased to forty. Now we are arranging for fifty visitors and might have to raise this estimate before final arrangements are completed.

Among those to be there are the following: J. J. O'Meara, John Andresen, Albany; Emil Schlichting and two friends, Edward Bold, A. Koenig, E. J. Beggs, J. Carey, W. Mortensen, O. J. Brockert, M. Thoma, W. Bertschinger, W. J. Knecht, Christian Jetter, and four, A. M. Groh, Fred Kreusler, H. Winther, all of New York; A. Neschke, Portsmouth, N. H.; J. K. Carroll, Geo. Gracie, Providence, R. I.; E. A. Engler, Newark, N. J.; R. Nevin, F. Feltes, John Neu and three, Buffalo, N. Y.; J. M. Key, Hudson, N. Y.; P. Stammberger and two, Utica, N. Y.; F. Steger, Erie, Pa.; J. A. Bain and one, Philadelphia, Pa.; G. Bieberback, Worcester, Mass.; E. Neschke, Waterbury, Conn.; E. Loeb, C. Fromm, E. Neschke, Aug. Moeller and five, Rochester, N. Y.

Corbet's Glen, the place where we are to have our bake, is an ideal spot for such an occasion. It lies at the foot of high hills, along the side of a babbling brook which runs pell-mell down the hill-sides on its everlasting journey. It is reached only by automobiles, through a winding roadway not far off the main road. It is private property, there being no hotel or public place on the grounds. There are plenty of conveniences for a bake, including a large dining hall, kitchen, barroom, pavilion for card playing, quoit grounds, and a fine baseball diamond. Attention is called to the program which does not include boat rides of any description.

Friday night, Sept. 14th—Reception at Powers Hotel.

Saturday Morning, Sept. 15th—Kommers, Genesee Brew. Co.

Saturday Noon—Auto ride to Corbet's Glen.

Saturday Afternoon—Clambake.

Saturday Night—Reception, American Brew. Co.

Sunday, Sept. 16th—Sightseeing and Auto trips.

This is a Re-union of the graduates of the Academy whether members of the Alumni Association or not. In case any one did not receive their notice and return postal card, come anyhow, you will be welcome. All aboard for Rochester on Sept. 15th, to the biggest and greatest Re-union of all.

LOUIS A. WEHLE, President.

ARE WE ENAMORED OF "KULTUR"? "Unless we are frantically enamored of Kultur applied to the human spirit we do not want prohibition. It is easy to see the futility of such an idea as legislation seeking to enforce sufficiency of sleep. Prohibition is not a whit more sane."—(N. Y. "Medical Times.")

PRODUCING TEMPERANCE?—OF COURSE NOT! "It is contended that prohibition produces temperance where it is on the statute books, but I find on an examination of the bulletins issued by the Bureau of the Census that the improved conditions which we may naturally expect to find in the lives of men who practice real temperance are not found to predominate in the States where prohibition laws have been on the statute books for many years, as compared to those where liquor is sold under a license system or where temperance laws are controlled by the sentiment of the local communities."—(Representative Underwood, Alabama.)

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Acme Brewing Co., Macon, Ga., are making a packing plant of their brewery, to have a capacity of 1,000 hogs and 100 cattle per day. It will be in operation by October 1st.

—Antigo Brewing Co., Antigo, Wis., have installed new up-to-date machinery in their bottling department.

—Atlas Brewing Co., Chicago, recently installed additional 20th Century machinery and a 100-bottle-per-minute Zahm sterilizer.

—P. Ballantine & Sons, Newark, N. J., recently installed additional 20th Century machinery, one of the washing outfits being connected with a B. B. B. low pressure carbonator. They have also built a large addition to their bottling department and have installed four 20th century automatic soakers with double brush conveyors and progressive washers; also three Scarborough pasteurizers, each of which has a capacity of 100 bottles per minute. One of the washing outfits is used in connection with a Bishop-Babcock-Becker low pressure carbonating outfit. This plant has five 20th Century outfits. One outfit is being used in conjunction with a Bishop-Babcock-Becker low pressure system for ginger ale.

—Magnus Beck Brewing Co., Buffalo, N. Y., have equipped their new bottling works with 20th Century machinery and a Zahm beer sterilizer.

—Becker Brewing & Malting Co., Ogden, Utah, are continuing the operation of their plant which has been remodeled for the manufacture of artificial ice and a non-intoxicating beverage known as Becker. The company also operate a brewery at Evanston, Wyoming, and part of the Ogden equipment is being used in the Evanston plant.

—Black Hills Brewing Co., Central City, S. D., have altered their plant for the manufacture of non-alcoholic beverages.

—Calgary Brewing & Malting Co., Ltd., Calgary, Canada, have enlarged their bottling department and equipped it with 20th Century machinery.

—Castanea Brewery, Lock Haven, Pa., recently installed one 20-in. x 8-ft. ammonia drier-cooler-purifier, furnished by the York Manufacturing Company, York, Pa.

—Cleveland & Sandusky Brewing Co., Cleveland, Ohio, have installed additional 20th Century machinery.

—Consumers' Brewing Co., Philadelphia, have installed a new automatic bottling equipment, the machines having been supplied by the 20th Century Machinery Co.

—F. W. Cook Brewing Co., Evansville, Ind., are equipping part of their plant for the manufacture of non-alcoholic beverages.

—Dick & Bros. Quincy Brewery Co., Quincy, Ill., have installed a 20-bbl. per hour floor style Ruff Simplex Pasteurizer, also a complete Conveying System, furnished by A. Magnus Sons Co., Chicago.

—Dubois Brewing Co., Dubois, Pa., recently added new 20th Century machines to their bottling house equipment.

—Duluth Brewing & Malting Co., Duluth, Minn., are about to erect a large malting plant at Yokohama, Japan. Their maltmaster, August Groeschel, who is to superintend the work, is now on his way to Japan.

—Fenway Breweries Co., Boston, have a new automatic bottling outfit installed by the 20th Century Machinery Co.; also a Zahm beer sterilizer. They have also installed three "Shipley" flooded atmospheric ammonia condensers, each 20 ft. long, 12 pipes high, made of 2-in. pipe; also two 14-in. x 20-in. vertical single-acting ammonia compressors for their machine, replacing those of another make, all furnished by the York Mfg. Co., York, Pa. Two similar compressors were replaced by the York Mfg. Co. about a year ago.

—Fort Pitt Brewing Co., Sharpsburg, Pa., have equipped their new bottling works with 20th Century machinery; also a Zahm sterilizer.

—Fuhrmann & Schmidt Brewing Co., Shamokin, Pa., whose brewery has been purchased by a \$200,000 syndicate who propose to remodel the plant for the manufacture of cider and vinegar.

—Haffenreffer & Co., Boylston Brewery, Boston, Mass., have added to the equipment of their bottling department up-to-date machinery furnished by the 20th Century Machinery Co.

—Theodore Hamm Brewing Co., St. Paul, Minn., are making improvements estimated at about \$25,000.

—Joseph Hensler Brewing Co., Newark, N. J., have added to their bottling outfit 20th Century machinery and a Zahm beer sterilizer of 100 bottles capacity per minute.

—Otto Huber Brewery, Brooklyn, N. Y., has installed a 20th Century soaker-washer-sterilizer of 20-barrel capacity per hour.

—Independent Brewing Co., Chicago, have increased the capacity of their bottling works by the installation of 20th Century machinery and a Zahm beer sterilizer. They have also installed a 34-spout Henes & Keller Automatic Counter-pressure Revolving Bottle Filler, ordered through A. Magnus Sons Co., Chicago.

—Independent Breweries Co., St. Louis, Mo., have installed in their Columbia Branch an Arrow Outside Bottle Brusher with Automatic Bottle Transfer and Arrow Type C. Bottle Washer, furnished through A. Magnus Sons Co., Chicago.

—Independent Brewing Co., Pittsburgh, recently installed in their Butler and Duquesne plants additional bottling machinery made by the 20th Century Machinery Co.

—Iroquois Brewing Co., Buffalo, N. Y., have installed three Arrow Type C. Bottle Washers, furnished through A. Magnus Sons Co., Chicago.

—Jackson Brewing Co., New Orleans, La., have installed a 100-ton ammonia drier-cooler-purifier, furnished by the York Mfg. Co., York, Pa.

—Kamm & Schellinger Brewing Co., Mishawaka, Ind., have installed a 20-bbl. per hour Magnus A-B Pocket Soaker, Arrow Automatic Outside Brusher and Bottle Transfer and Arrow Type C. Washer, furnished by A. Magnus Sons., Chicago.

—Kirin Brewery, Yokohama, Japan, are making up-to-date improvements. The 20th Century Machinery Company have sold them a 20-bottle-per-hour 4 compartment soaker with double brush conveyor and Progressive washer; also 200-bottle-per-hour 20th Century pasteurizer.

—Kuntz Brewery, Ltd., Waterloo, Ont., Canada, have added to their equipment a Magnus A-B Pocket Soaker, Arrow Automatic Outside Brusher and Bottle Transfer and Arrow Inverted Type C. Bottle Washer to their bottling equipment, furnished by A. Magnus Sons Co., Chicago.

—McAvoy Brewing Co., Chicago, have installed a "double" bottling unit, capacity 30 bbls. per hour, consisting of Magnus A-B Pocket Soaker, Arrow Outside Bottle Brusher, two Arrow Inverted Type C Bottle Washers, two 34-spout Henes & Keller Fillers, two Adriance Duplex Crowners and Ruff Simplex Pasteurizer, all furnished by A. Magnus Sons Company, Chicago; they also ordered another 30-bbl. per hour Ruff Simplex Pasteurizer from A. Magnus Sons Co., making the second one this year.

—Melbourne Cooperative Brewing Co., Melbourne, Australia, have built a modern bottling department which has been equipped with a 20th Century 4 compartment soaker, double brush conveyor and Progressive washer with automatic attachments conveying the bottles to Eureka filler, Advance crowner and 20th Century pasteurizer installed by the 20th Century Machinery Company.

—Muessel Brewing Co., South Bend, Ind., have installed an Arrow Inverted Type C Washer, ordered through A. Magnus Sons Co., Chicago.

—National Brewing Co., Chicago, have added another complete automatic 12½-bbl. per hour bottling unit to their bottling equipment. A. Magnus Sons Co. furnished and installed the machinery.

—Niagara Falls Brewing Co., Niagara Falls, N. Y., have greatly increased the capacity of their bottling department, the new outfit being installed by the 20th Century Machinery Co. They also have a new Zahm sterilizer.

—Old Colony Breweries Co., Fall River, Mass., have largely increased the capacity of their bottling works and added to its equipment 20th Century machines and a Zahm sterilizer.

—Orange Brewery, Orange, N. J., recently added to their bottling works a 20th Century soaker-washer-sterilizer and a Zahm sterilizer of 20-barrel-per-hour capacity.

—Paterson Brewing & Malting Co., Paterson, N. J., are to erect a large new cold storage house and an ice manufacturing plant of 100 tons daily capacity.

—Piel Brothers, Inc., Brooklyn, N. Y., have enlarged their bottling works and installed additional 20th Century machinery; also a Zahm beer sterilizer.

—Pittsburgh Brewing Co., Pittsburgh, have added 20th Century machines and the Zahm sterilizer to their bottling works in the Keystone plant.

—E. Porter Brewing Co., Joliet, Ill., have installed a 34-spout Henes & Keller Bottle Filler and No. 10 Basement Type Ruff Simplex Pasteurizer, furnished by a Magnus Sons Co., Chicago.

—William Rahr's Sons Co., Manitowoc, Wis., are ready to expend \$500,000 to enlarge their new cut feed plant, provided the city vacates part of the street adjacent the Rahr property.

—Reisch Brewing Co., Springfield, Ill., have installed a complete automatic 20-bbl. per hour bottling unit, consisting of Magnus A-B Pocket Soaker, Arrow Outside Brusher, Arrow Inverted Type C. Bottle Washer, 34-spout Henes & Keller Filler, Adriance Duplex Crowner and Ruff Simplex Pasteurizer, all electrically driven, furnished by A. Magnus Sons Co., Chicago.

—Rubicon Malting Co., Rubicon, Wis., recently installed a large Fairbanks-Morse combination fire engine and pump for the protection of their plant from fire.

—Ruff Brewing Co., Quincy, Ill., have installed a Magnus A-B Pocket Soaker, Outside Bruhser and Conveying system.

—Jacob Ruppert, Inc., have installed additional bottling apparatus bought from the 20th Century Machinery Co.; also a 20-barrel-per-hour Zahm pasteurizer.

—Peter Schoenhofen Brewing Co., Chicago, have added to their equipment a 20-barrel-per-hour Zahm beer sterilizer.

—Conrad Seipp Brewing Co., Chicago, have installed three 20-bbls. per hour Four-Compartment Magnus A-B Pocket Soakers, three Arrow Outside Brushers with Automatic Bottle Transfers, three Arrow Inverted or Type C. Bottle Washers and a 35-bbls. per hour floor type Ruff Simplex Pasteurizer, each machine driven by individual electric motor, all furnished by A. Magnus Sons Co., Chicago.

—Standard Brewing Co., Baltimore, Md., are erecting a brick and concrete addition, to cost about \$20,000.

—Standard Brewing Co., Cleveland, Ohio, have added 20th Century machinery and a Zahm beer sterilizer to the equipment of their bottling works.

—Thieme & Wagner Brewing Co., Ind., are experimenting with the manufacture of a pure fruit juice drink, part of their plant being remodeled for that purpose.

—Tube City Brewing Co., McKeesport, Pa., have increased the capacity of their bottling department by installing a complete automatic unit, including a 10-bbl. per hour Zahm beer sterilizer and 20th Century bottle soaker washer sterilizer.

—West Bend Brewing Co., West Bend, Wis., are remodeling their malt house, which is also being provided with a new roof, shafts and additional modern malting machinery.

—William Stoffel and Kamofsky Brothers have purchased the property and good will of the Lion Brewing Co., Wilkes-Barre, Pa.

—Hugo Kropp's brewery at Hermann, Mo., closed several years ago, has been dismantled and upon the site cottages are being erected.

—Grand Rapids Brewing Co. intend establishing a chain of grocery stores should the Michigan Legislature's stupid Prohibition law become operative.

—John Hallgren, proprietor of the Mount Joy Brewery, Mount Joy, Pa., has suspended operations. The brewery was founded and operated for many years by the late Alois Bube.

—The Gottfried Krueger Brewing Co., Newark, N. J., have contributed \$300 to the \$150,000 fund now being raised for the Beth Israel Hospital in Newark, and the Joseph Hensler Brewing Co., of the same city, subscribed \$200.

—The Star Brewery Co., Belleville, Ill., is suing the city of East St. Louis to recover \$1,008 damages caused by the recent race riot in East St. Louis when two of the brewery company's retail places were partly wrecked by the rioters.

—Joseph Robert, alias "Mike" Caputo, a dissolute young Italian, is awaiting trial in Buffalo, N. Y., for the murder of Charles Spang, collector for the Broadway Brewing & Malting Co., Buffalo. He was apprehended in Holyoke, Mass.

—The property of the Congress Brewing Co., Lim., Brooklyn, N. Y., which ceased operations several months ago, has been sold to Weisberg, Gordon & Wasserman for \$250,000. The plant is to be converted for the production of artificial ice.

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

NEW INCORPORATIONS. The Becker Brewing & Malting Co., Ogden, Utah, have amended their charter, changing their name to Becker Manufacturing Co., and increasing their capital from \$250,000 to \$500,000. For their plant at Evanston, Wyo., the company have taken out a separate charter, the capital being \$250,000.

Reedsburg Brewing Co., Reedsburg, Wis.; capital, \$10,000. Incorporators, H. H. Thomas, R. M. Rieser and Normal Quale.

Officers have been elected by brewery companies as follows:

Aberdeen Brewing Co., Aberdeen, Wash.: President and treasurer, Alvin Hemrich; vice-president, secretary and general manager, Elmer Hemrich.

Akron Brewing Co., Akron, Ohio: President and treasurer, Jacob Dettling; vice-president, E. J. Alderfer; secretary, William H. Garter; general manager, Walter Gruner; additional directors, J. M. Gayer, J. A. Rohner and William H. Evans.

Alliance Brewing Co., Alliance, Ohio: Brewmaster, Emil Hirzel.

Anaconda Brewing Co., Anaconda, Mont.: President and general manager, A. J. Tuchscherer; vice-president, A. H. Mueller; secretary and treasurer, W. H. Tuchscherer; brewmaster, Charles Laier.

Becker Brewing & Malting Co., Evanston, Wyo.: President and treasurer, G. L. Becker; vice-president, A. E. Becker; secretary, J. S. Becker; additional director, E. M. Allison.

Carson Brewing Co., Carson City, Nevada: President, general manager and treasurer, Max Stinz; secretary, M. E. Stinz, Jr.; brewmaster, H. Kilian.

Consumers' Brewing Co., Cranston, R. I.: President, Thomas F. Burke; vice-president, James Hanley; treasurer and general manager, Max E. Naumann; secretary, Louis H. Meyer; brewmaster, George J. Gracie.

Duluth Brewing & Malting Co., Duluth, Minn.: President, Reiner Hoch; vice-president, Charles Meske; secretary and treasurer, Walter J. Hoch; assistant manager, E. G. Johnson; brewmaster, John Lingelbach.

Froedert Malting Co., Milwaukee: President and treasurer, K. R. Froedert; vice-president and secretary, C. H. Kinneke; general manager, John Fluck.

Goebel Brewing Co., Detroit, Mich.: President and general manager, August Goebel, Jr.; vice-president, Theo. P. Goebel; treasurer, Fred W. Brede; secretary, Jules A. Martin; brewmaster, August Nessler; additional directors, Ralph Phelps, Jr., and Fritz Goebel.

Halifax Breweries, Ltd., Dartmouth, N. S., Canada: President, William G. T. Moody; general manager, G. H. Hooper; brewmaster, C. G. Oland.

Hemrich Staff Products Co., Seattle, Wash.: President and treasurer, Alvin Hemrich; vice-president, Louis Hemrich; secretary and general manager, Paul F. Glaser. The brewmaster is William Koch.

Home Brewing Co., Toledo, Ohio: President and general manager, A. J. Smith; vice-president, Joseph Kesting; treasurer, Charles A. Hipp; secretary, M. G. Smith; additional director, Owen Davis. The brewmaster is Fred Krauss.

Independent Brewing Co., Pittsburgh: President, W. P. Hansell; vice-president and sales manager, James P. Mulvihill; vice-president, C. H. Friend; treasurer, J. H. Friday; secretary, H. C. Baxmeier.

Independent Milwaukee Brewery, Milwaukee: President, Emil Czarnecki; secretary and treasurer, Henry N. Bills; general manager, Otto A. Kassulke; brewmaster, Charles Brehsmer.

Indian Brewing Co., Indiana, Pa.: President, Robert E. Young; treasurer and general manager, J. P. Mack; secretary, James A. Taylor; additional directors, Griffith Ellis, J. C. McGregor, C. H. Huyuckberger; brewmaster, Henry Sutter.

Jordan Brewing Association, Jordan, Minn.: President and general manager, E. G. Kill; vice-president, Bernhard Müller; secretary and treasurer, G. M. Kill.

Maier Brewing Co., Los Angeles, Cal.: President, treasurer and general manager, Edward R. Maier; vice-president, Frank Rademacher; secretary, G. A. Thurner; brewmaster, Jacob Steinemann.

Theodore Menk, Lexington Street Brewery, Louisville, Ky.: Brewmaster, A. L. Hunkler, late with Victor Oberling, Garnier Brewery, Lawrenceburg, Ind.

Meyersdale Brewing Co., Meyersdale, Pa.: President, John R. Scott; vice-president, Dr. John C. Dixon; secretary and treasurer, James L. Dixon; brewmaster, John Hartung.

Millstadt Brewery Co., Millstadt, Ill.: Brewmaster and manager, William Baer.

Milwaukee Malting Co., Milwaukee: President, George J. Zimmerman; vice-president, A. W. Asmuth; secretary, Bruno E. Fink; additional director, Gertrude Asmuth.

Milwaukee Malting Co., Milwaukee: President, George Zimmerman; vice-president, A. W. Asmuth; secretary, Bruno E. Fink; superintendent, Joseph Stolz.

Montana Brewing Co., Great Falls, Mont.: President, Fred G. Johnson; vice-president, Emma Johnson; secretary-treasurer and general manager, S. R. Jensen; additional directors, F. L. Johnson, W. H. Jensen and Selma S. Jensen; brewmaster, G. J. Siebel.

Mountain Spring Brewing Co., Ltd., Calgary, Alberta, Canada: Brewmaster, William Graafls, formerly with the Golden West Brewing Co., Calgary.

New England Brewing Co., Hartford, Conn.: President and treasurer, A. C. Wagner; vice-president, Thomas Ryan and Thomas McNiery; general manager and secretary, G. F. Groot; brewmaster, L. H. Zimmer, Jr.

Pilsener Brewing Co., Cleveland, Ohio: President, Vaclav Snajdr; vice-president, Carl Anders; treasurer and general manager, James C. Wolf; secretary, Frank Kratochvil; brewmaster, F. Knopp.

Pittsburgh Brewing Co., Pittsburgh: President, C. H. Ridall; vice-president, E. J. Vilsack; treasurer, E. H. Strank; secretary, W. P. Heckman.

Richter Brewing Co., Escanaba, Mich.: President and general manager, Richard Hoyler; vice-president, John Richter; secretary, F. J. Defnet; treasurer and brewmaster, A. Beshorner; additional director, M. Perron.

Silver Spring Brewery, Ltd., Victoria, B. C., Canada: President and general manager, Harry Maynard; secretary, L. Cumberbatch; brewmaster, A. Brahart; additional di-

rectors, John E. Day, Chris Wenger, G. Andrews, Phil Crombie, George Stokes and Thomas L. McManus.

Standard Brewing Co., Scranton, Pa.: Additional directors, T. V. Judge, John Carroll, Jas. J. O'Malley, Thos. John, W. H. Cusick, W. H. Loftus, A. Kabacinski, John J. Gallagher.

Tonawanda Brewing Co., Tonawanda, N. Y.: President, general manager and treasurer, Bernhard Voelcker; vice-president, Margareth Voelcker; secretary, Peter Buerger; brewmaster, Henry Reser.

Upper Peninsula Brewing Co., Marquette, Mich.: President, treasurer and general manager, Charles Meeske; vice-president, Reiner Hoch; secretary, Albert S. Heinemann; additional directors, Edward M. Breitung and Nathan M. Kaufmann; brewmaster, Eugene Schaer.

Weibel Brewing Co., New Haven, Conn.: President, Charles R. Nicklas; treasurer, Mrs. T. F. H. Weibel; secretary, Jos. A. Weibel. The brewmaster is Leonhard Hartmann.

BRITISH-AMERICAN BREWERIES. The New York Breweries Co., Ltd. (Clausen-Flanagan), have asked their debenture-holders to help by agreeing to defer for a period of a year the compulsory payment of their interest in cash, as the accounts for the past fiscal year are not likely to show a profit to meet the year's interest of £19,500 on the debentures and debenture stock.

—The Brewers' and Coopers' Sick Benefit Association, founded in Brooklyn, N. Y., sixty years ago by Joseph and Henry Liebmann, Joseph Burger and William Kramm, has been dissolved and its funds were distributed among the twenty-two members, each of whom received \$200.

—The plant of the Joseph Schlitz Brewing Co., Milwaukee, was recently visited by the members and guests attending the fifty annual meeting of the American Society of Refrigerating Engineers, who inspected the bottling department, plate ice manufacturing plant and refrigerating machine room. After the tour of inspection an opulent luncheon was served.

"THE SO-CALLED SALOON EVIL may be lessened in rural communities, but not one of all the many prohibitory laws that have been passed in the last decade can show that strong liquors have diminished as a consequence."—(Manufacturers' and Merchants' Association of New Jersey.)

UNWILLING TO ADMIT THAT THEY ARE WRONG. "Since prohibition does not, and cannot, prevent the use of intoxicating liquors by those desiring them, why is it maintained by the various States that have adopted it? Chiefly because of the hypocrisy of its advocates, who are unwilling to admit that their scheme for regulating the personal tastes and habits of their fellow-citizens will not work."—"Catechism of Prohibition.")

"WHEN THE CHURCHES EXPEL THE CHARLATANS who pose as evangelists and worship above all else the almighty dollar; when they put the Bible back on the pulpit instead of the year book of the Anti-Saloon League and preach the Gospel as Christ preached it instead of trying to surpass Eva Tanguay in their gyrations they will learn that the influence of religion, potent as ever is deep-rooted in the heart of man and no great campaign of newspaper advertising will be necessary to fill the pews, now so painfully empty, at the services. The minister who drives half his congregation from church by preaching constantly a false economic theory is false to his trust."—"North American Wine and Spirit Journal.")

Personal Mention.

Walter Becherer, son of Gustave Becherer, president, treasurer and general manager of the Milwaukee Brewery Co., is at present at Camp Curry, in the Yosemite Valley, California.

Hon. John A. Cervenka, president of the Pilsen Brewing Co., Chicago, recently met with an accident, when, two blocks from his home at 26th and Albany Avenue, he was knocked down by an automobile, breaking his left leg. The careless driver was arrested.

Austin J. Doyle, manager of the Illinois Brewers' Association, Chicago, has three sons in the army. His eldest son, Frank Doyle, is a First Lieutenant at the Rockford training camp, while the two other sons, Frederick W. and Paul A. Doyle, have enlisted in the National Army.

Arthur Edward Duerr, treasurer of the Henry Elias Brewing Co., New York, celebrated his fortieth birthday on Friday, August 10th.

Oscar Gebler has resigned his position as manager of the Jenner Brewing Co., Boswell, Pa., and accepted the position of superintendent for the Lion Brewing Co., Wilkes-Barre, Pa., for which he had formerly been brewmaster for five years. Mr. Gebler is a well known and popular member of the Master Brewers' Association of the United States.

John R. Kauffman, president and general manager of the Kauffman Brewing Co., Cincinnati, on August 2nd was presented with a handsome flag by the Central Vine Street Business Association as a prize for the Kauffman brewery's efforts to make the association's annual outing a grand social and financial success.

H. A. Langhorst, president of Albert Schwill & Co., maltsters, Chicago, one of the largest firms in that industry, celebrated his eightieth birthday on Friday, July 13th, in the full vigor of his long and laborious life which he has devoted with rare energy and enviable success to his trade. He has been connected with Albert Schwill & Co. for more than thirty-six years and occupies his present position since 1905, being the successor to the firm's founder, Albert Schwill.

C. A. Nowak, whose resignation as Secretary of the Master Brewers' Association of the United States was tendered and accepted last month, has associated himself with S. J. Heiberg of the Pacific Extract Co. of Fresno, Cal., and will manage the St. Louis office, 2027 Railway Exchange, formerly the Secretary's headquarters, under the name of Heiberg & Nowak. We also understand that Mr. Nowak has been retained by the Master Brewers' Association as editor of the monthly "Communications."

John S. O'Connell, secretary of the Hagerstown Brewing Co., Hagerstown, Md., was recently injured in an automobile accident when at a railroad crossing on Antietam Street, Hagerstown, his machine was demolished by the locomotive of a freight train of the Western Maryland Railroad, Mr. O'Connell suffering the fracture of one of his legs, while his son Wilson had both legs broken. Both of the patients are doing well and their rapid recovery is expected.

William Peter, the venerable president of the Wm. Peter Brewing Co., Union Hill, N. J., and his wife, who spent the Summer in the Catskills, are now at one of the pleasant New Jersey watering places.

Maximilian Rahr, president of the William Rahr's Sons Company, brewers, Manitowoc, Wis., was recently bereaved by the death of his amiable and esteemed wife.

Reinhart Remmer, who recently resigned from his position of brewmaster for the Walter Trinidad Brewing Co., Port of Spain, Trinidad, W. I., is now with us again, and we had a pleasant chat with him at this office, talking over old times and recollections. Mr. Remmer, who is open for an engagement, is a graduate of the Versuchs- und Lehranstalt für Brauerei in Berlin, and of the National Brewers' Academy, having been one of the first students who became brewmasters under the tutelage of the late Dr. Francis Wyatt. He has had many years of experience in American breweries.

Colonel Jacob Ruppert, New York, celebrated his fifty-first birthday on Sunday, August 5th, receiving congratulations and appropriate gifts from innumerable friends, relatives, employés and other well-wishers, who admire and esteem this popular and meritorious representative of the American brewing industry.

Henry Uihlein, president of the Joseph Schlitz Brewing Co., Milwaukee, and his wife celebrated their forty-seventh wedding anniversary on July 26th, being the recipients of untold written and oral congratulations from their relatives and friends, who wished the distinguished couple "many returns" of the happy occasion.

Hon. Charles J. Vopicka, one of the founders and late president of the Atlas Brewing Co., Chicago, has returned to Europe to represent the United States as Minister in the Balkan States. He will temporarily take his residence in Jassy, the present seat of the Roumanian Government. After his return to Chicago to stay, Mr. Vopicka will publish his memoirs of the War in the Balkans.

Dr. Max Wallerstein, president of the Wallerstein Laboratories, 171 Madison Avenue, New York, has joined the ranks of the Merchants' Association.

Among the Brewmasters.

MASTER BREWERS' ASSOCIATION OF THE UNITED STATES. In assuming the office of President of the Master Brewers' Association of the United States, Mr. Robert Weigel has issued an address to the members of that organization, saying: "You all are aware of the fact that it will be very hard for me to satisfy our membership after the splendid work shown by our previous President and his administration. It is my wish to express to you that I am fully aware of this fact, and that it will be my desire to handle the Association matters in a businesslike way, showing no partiality, and taking the full responsibility for the communications as well as for any other correspondence. Therefore I ask the Districts to use in all correspondence or communications respectable language and not to get personal, as to myself or the Secretary or anyone of the officers. I ask and expect that the Districts will cooperate with their Administration, and hope that my term will be a peaceful, harmonious cooperation of members and their officers, and a success as to the welfare of the members, as well as to the Association."

Mr. Weigel has also appointed Carl A. Nowak to temporarily act as secretary until his successor may be appointed. Accepting the office, and addressing the members, Mr. Nowak said, among other things: "The question has been asked: 'What will become of the Association in case nation-wide Prohibition should eventually become law?' Some of the members do not even wait for this to realize—they want to step out now in order to save the membership dues—they ask for withdrawal cards while still in position, a request which, according to our laws, cannot be granted. The activities of the Association should by no means be permitted to come to an end at this critical time. It has taken

years to build up this organization, and the Association should be in a position to assist the members individually and collectively in successfully accomplishing the readjustments necessitated by recent and pending legislation. One of the most effective ways of reaching the individual and talking to him is through the medium of the press. Our Association is so fortunate as to possess a publication issued monthly which reaches every member, and while only, as it were, in its infancy, it is capable of development into one of the leading trade and scientific journals published in this country."

District Meetings.

Baltimore. The members of the Baltimore District have expressed their deepest regret with reference to the resignation of Wm. F. Carthaus and Carl A. Nowak, as president, respectively secretary, of the National Association. Colleague John Merzbacher, formerly with the New York District, has rejoined the Baltimore organization, and colleague Charles Kummerlaender, late with the C. Heurich Brewing Co., Washington, D. C., has withdrawn to join the Chicago District.

Chicago. Withdrawal cards have been granted to Colleagues Arnold Bloedt and Adolph Berschomer. Colleagues A. Boehme and John Buck have left the organization.

Cincinnati. The members of the Cincinnati District have discussed the subject of "The Profitable Utilization of Brewery By-products," particularly the value of yeast for feeding poultry and live stock.

New York. The regular monthly meeting of the New York District was held Saturday evening, August 11th, President Robert Weigel presiding. Colleague John Kayan was called upon to report on the recent Board of Trustees meeting held in Detroit, which he did, not forgetting to mention the splendid hospitality shown by the Detroit colleagues to the visiting trustees. New National President Robert Weigel then addressed the meeting, outlining his plans, and promised to do his utmost for the welfare and success of the Association. The following resolution was passed and ordered spread upon the minutes: "The District New York herewith expresses to ex-President Carthaus and the retiring Technical Committee its sincere appreciation and thanks for their untiring efforts in behalf of our Association."

JOHN KOENIG, Secretary.

Philadelphia. The Philadelphia District, in requesting Colleagues Carthaus and Nowak to reconsider their resignations as National officers, have written to them: "In view of the fact that the aim of you two gentlemen has been the elevation of our National Association and profession upon a higher level and considering the progress you have already made under the existing unfavorable conditions, the District Philadelphia feels very much aggrieved upon you offering your resignation to the Association. We fully understand the task you have had, which has been anything but pleasant, but ask you two gentlemen for the benefit of the Association to reconsider your actions and continue the good work you have so ably started. We feel assured that in the end your endeavors will be crowned with success and your able and wellmeant efforts highly appreciated. We admire the standard established by you in the "Communications" and consider same a credit not only to our Association but the entire brewing industry."

San Francisco. Colleague Max Wallner has been granted a withdrawal card by the San Francisco District. The names of Carl Klevesahl and Tony Hessel were dropped from the roll for non-payment of dues.

Obituary.

Alfred N. Beadleston, president of Beadleston & Woerz, New York, died suddenly August 9th while at Mount Washington, N. H., where he used to spend his summer vacation. When the end came, his wife and his two grandchildren, Miss Mary Osgood Field and T. Pearsall Field, were at the bedside. Mr. Beadleston, who was one of the best known brewers in the United States, was born sixty-nine years ago, his father being one of the pioneers who established the brewing industry of America on a firm basis. The Beadleston brewery was founded in 1845 upon the site of the old State prison in Washington Street, the firm's name then being Nash & Co. Ebenezer Beadleston, father of the deceased, joined the firm, which then assumed the name of Beadleston, Nash & Co. When Mr. Nash had retired, in 1860, the brewery was managed by E. G. W. Woerz, the partnership consisting of the latter, the elder and younger Beadleston, and W. Rice, who retired in 1878. Mr. Beadleston was very popular and highly esteemed in financial and social circles, and in many organizations he held an honored membership. He also was a devoted sportsman, and his horses won many valuable prizes on the turf. In 1909 Mr. Beadleston married Miss Helen F. Hazard, daughter of the late E. C. Hazard and sister of Princess Auersperg of Austria. His first wife, whom he married in 1869, was Miss Mary Elizabeth Phipps.

Dr. Eduard Buchner, Professor of Chemistry at the University of Wuerzburg, Bavaria, who was at the front as a Major, has died from wounds received in battle. Professor Buchner was known throughout the world as a specialist in fermentology. He was born at Munich, May 20th, 1860, and in 1893 he was made chief chemist of the Laboratory of the University of Kiel; from there he went to the Imperial Agricultural School in Berlin. In 1905 the Association of German Chemists gave him the golden Liebig Medal, and in 1907 the Swedish Academy of Sciences conferred upon him the Nobel prize for chemistry. In his research work he demonstrated that yeast fermentation is caused by an enzyme contained in the yeast and he called it zymase. Professor Buchner's numerous works on chemistry are quoted everywhere as first class scientific authorities.

Joseph L. Fieweger, one of the directors of the Milwaukee Malting Co., Milwaukee, died at his home in Menasha, Wis., August 10th.

Alderman John Szymkowski, treasurer of the Eagle Brewing Co., Chicago, died of pneumonia July 14th at the St. Elizabeth Hospital in Chicago, having been ill only a few days. He was forty-one years of age. His widow, one daughter and a son survive him.

Henri Van Laer, Phil. D., the celebrated Belgian scientist, to whose investigations and discoveries upon the field of fermentology the brewing industry throughout the world owes a debt of gratitude which can never be paid except by undying admiration for the untiring zeal of this great man, has recently been removed by death from the sphere of his activity in Brussels. He was the author of hundreds of books and essays upon the subject of brewing technology and chemistry and, at the time of his demise, he was director of the celebrated School of Brewing and Fermentation Industries at Ghent, Belgium, also an honorary member of many scientific organizations, among them the Institute of Brewing in London, England. In the United States Doctor Van Laer was a familiar figure, having visited this country several times, the last time when the International Brewers' Congress met in Chicago. His death is to the brewing industry a loss that cannot be replaced.

Adolf von Baeyer, the eminent Professor of Organic Chemistry, best known as the discoverer of synthetic indigo, is reported by cable from Amsterdam, August 24th, to have died at Starnberg, Bavaria. He was born in Berlin October 31st, 1835, son of Joseph Jakob Baeyer, a Prussian officer and prominent Geodetic. In 1875 he became the successor of the immortal Justus von Liebig at the Laboratory of Munich University. In 1885 he was elevated to nobility.

Deaths in Foreign Countries.

Henry Beaglehole, president of the South Australian Lion Brewing & Malting Co., founder of the Waverly Brewery, Waverly, South Australia, and member of the Australian Parliament, aged 84.

Paul Beguwe, proprietor of brewery at Bourbourg, France; killed in action; aged 32.

H. A. Evans, accountant for James Boag & Son, Ltd., brewers, Launceston and Hobart, Australia.

E. R. Groom, head brewer of the Worksop & Retford Brewery Co., Ltd., Worksop, England; died from injuries sustained when falling from his motor cycle.

Henri Gryson, proprietor of brewery at Montataire, Department Oise, France, aged 73.

Lieut. Raymond Langlais, son of Henri Langlais, editor of "La Brauerie du Nord," killed in air-battle at Enghien-les-Bains, France.

Harry Loe, manager of the Farnham United Breweries, Ltd., Farnham, England.

John Molony, of Tooheys Ltd., Sidney, Australia, aged 56.

Lieut.-Col. George Herbert St. Hill, London, director of Mackie & Co., Ltd., Glasgow, Scotland; killed in action.

Alderman T. B. Tong, directors of W. Tong & Sons, Bolton, England, aged 68.

ILLOGIC OF PROHIBITION. "No man with sense will argue that the spectacle of a drunkard or a whole troop of drunkards, in a ditch, should be used as an argument to deprive the whole race of the kindly blessing that maketh glad the heart of man, saint and sinner alike."—(Prof. John Stuart Blackie.)

A CORRECTION. Mr. H. B. Sickie, of the Peoples Brewing Co., Trenton, N. J., writes us what follows: "In your Journal of August first, page 404, you have the following:— 'Brewers Doing their Bit.' 'Liberty bonds have been taken by the Peoples Brewing Company of Trenton, New Jersey, \$1,000.' This \$1,000 we gave to the Red Cross Fund and we purchased \$10,000 worth of Liberty Bonds. We simply call your attention to this; if you think it advisable to correct it in your next issue, well and good."

"MOST THINKERS CONCEDE that the average normal man has an innate or instinctive desire for such substances as alcohol, and history teaches us that it has been indulged in by all tribes and nations with but few exceptions, from the earliest of ages. Where it has been apparently abolished among the great nations and tribes of the earth it has been so accomplished through purely mechanical and compulsory devices. It seems fair, therefore, to assume that if through coercive measures the use of alcohol should be inhibited for one or more generations, that in succeeding generations its use would probably again be indulged in, and the human system having lost its resistance and tolerance, there would ensue a far greater destruction than would result if instead of prohibition the same effects were directed to a rational temperance program.'— (Professor Oscar W. Ehrhorn, New York.)

Horst's Advice to Farmers.

Replying to a circular in which the California Association of Practical Farmers complains of a shortage in farm labor, The E. Clemens Horst Company, the San Francisco hop merchants, who are known to the trade throughout the world, say this:

"Perhaps our many years of experience in handling annually many thousands of harvest hands on over a dozen different ranches, may be of value in your arriving at a plan for securing from San Francisco and neighboring cities an unlimited supply of people that would go and do excellent work in the interior harvests if they were given the accommodations and privileges they deserve.

"You are, of course, aware that in San Francisco and in fact all large cities of California, the population is overwhelmingly 'wet.' This makes it practically impossible to get people who are accustomed to moderate drinking to go to work or stay at work in places where they cannot get a refreshing drink as a relief from hard work in the heat of the day. Furthermore, as San Francisco and vicinity is cool and comfortable in the harvest season and the farming districts are as hot as hades, the San Francisco people suffer more from heat and thirst than the interior people who are used to it.

"Suppose employers were to include, free of charge, a small bottle of cool beer with employees' dinner and supper and perhaps also in the middle of the afternoon, we feel sure that the contentment and efficiency of the employees could be greatly increased and that a vast number of desirable people, that otherwise remain in the cities, would go to work in the country and be glad to go back for every year's harvest.

"The above plan would eliminate the problems arising from the use of distilled liquors and would also be free from any objections to the saloon, and keep the employees on the farms during their period of employment.

"This plan should be given a fair trial in California. Harvest hands in Europe get their rations of beer and wine. This causes no ill effects in Europe, and can cause none in California.

"A trial of the plan should readily show that the farmers will work in their own best interest when they cater to the legitimate wants of their employees, and the farmers will have a sufficiency of satisfied and efficient labor, while the labor shortage will be passed up to those farmers that expect laborers to come from the cool climate of San Francisco to do heavy work in the heat of our interior valleys, and get nothing to drink but luke-warm water, or, if you please, the unheard of 'ice water on the ranch.'

"The practical farmers of California must realize that it is not now a question of what the farmer wants, but what the laborer wants, and if the farmers will meet the reasonable customs of the laborers, the California crops can all easily be harvested, provided, of course, that farmers in ample time let the people of the cities know that their proper comforts and requirements will be met.

"May we suggest that the above plan be given trials in a number of districts by large employers in your Association. It will be our pleasure to cooperate with you on these lines or on any improvements thereof."

When D. O. Lively, president of the California Association of Practical Farmers, in reply to the Horst Co.'s suggestion, interposed the query: "If the California Association of Practical Farmers should recommend the offering of a bottle of beer at a meal as the means of securing and holding labor, might it not result in a competition as between

farmers in which the man who offered the greatest amount of beer would secure the most laborers." Mr. Horst answered: "Your question suggests the possibility of danger from a combination of two conditions, neither of which exists. The two conditions are that the farmer is over-liberal to his help, and that farm laborers are excessive drinkers. Of course, the farmer that is more liberal in the treatment of his employees, whether in wages, food, drink, housing, entertainment, friendliness or anything else, will get more laborers and more efficiency from laborers, than the less liberal employers. To my mind, the lives of many men and women that have been lost on harvest work from heat prostrations, might have been saved if farmers made a practice of serving, without charge, cool and refreshing drinks to their workers during the heat of the day. Such workers as prefer some cool drink other than beer, should be given the alternative and without change. It is easy to conduct a sufficient number of good-sized comparative trials to see the full advantages and disadvantages and cost of the plan. From a practical viewpoint, the comparative trials should be made by men whose minds are open on the question."

"De Profundis Clamavi."

From Tigerton, Wis., the Reverend H. Stubenvoll writes us: "Gentlemen:—Enclosed please find a poem. (It is in German and we have translated it as well as we could. Ed.) For many years I have been ill and cannot preach any more. I now am living with my wife in dire and dreadful poverty. For God's sake send me 50c. or \$1 to relieve our distress. God will reward you for it. We live in a small log cabin and tears are our daily bread."

The "poem" follows:

Many a man denounces Beer
And yet he knows not why;
He is a whiskey guzzler sheer,
His flask runs never dry.
He also likes fake medicine,
But it must have lots of alcohol,
That fellow is a hypocrite,
I say it with regret,
He is a very foolish man,
Fanatical—you bet!
Away with all hypocrisy!
How can it do you good?
Fake medicines are deadly stuff
While beer gives strength and health.
And yet they want the working man
To go without his beer!
If that pulls through, you might as well,
Just lay him on his bier.
Of course, we hate intemperance,
But not the moderate drinker,
For, he that drinks a good glass beer,
Is not a hideous stinker.
Dear *Brewers' Journal*, tell them all,
What I have told you here:
Who wants to have his health and strength
Should daily drink his beer!

We are confident that those of our readers who sympathize with this venerable clergyman, and appreciate his sentiments, will send him whatever their benevolence may dictate. We have paid him for his laudable effort in the poetic praise of the national beverage, which other so-called theologians, to save themselves from poverty, would banish from the economy of civilized nations.

Why Breweries Should Not Be Closed.

Beer carries very little alcohol—about 4 per cent. If we abolished all the breweries, several things would follow besides preventing people from drinking beer. In the first place, we should lose in revenue for the ensuing year about one hundred and thirty million or one hundred and forty million dollars. Then we would lose all the taxes which we now receive on the profits and income of the breweries themselves. About a billion dollars are now invested in the breweries.

There were employed directly in the breweries in 1914, 62,000 people and the malt producers aggregated 2,000 more. Since that time the number has increased. There are those who are engaged in making machinery and so forth, for the breweries, and it is estimated by the experts that something over 100,000 people would be thrown upon the streets if the breweries were closed.

It is proposed to abolish all the breweries at a stroke. There may be people who think that the men who are employed in the breweries and engaged in making machinery for them are a class that deserves no mercy. I cannot regard in that way any of my fellow citizens engaged in what is an honest employment. I think they deserve consideration. It will cause great dissatisfaction among those people; but there are hundreds of thousands of people in this country to-day, particularly among the working classes and among the labor unions—whom I am beginning to hear from very strongly—who drink a glass of beer, and think it is, as it is, an innocent drink. Suddenly we enter the field and stop all that. Some we drive back to drinking whisky and probably very bad whisky, made in illicit stills; others we shall anger and annoy. They build our ships, they weave our clothes, they make our shoes, and our munitions. They will help largely to fill our armies. Is it wise to anger and chill them needlessly? It is not well to kindle such resentments in time of war.

We have a great German-American population in this country. I believe the great mass of them to be thoroughly loyal, and loyal at an expense of personal feelings that the descendants of other nations do not have to encounter. We know that light beer is their national drink. They all drink it; they think it absolutely innocent and harmless.—(Senator Henry Cabot Lodge, in *Leslie's*.)

BIGGER THAN NIAGARA FALLS. The average flow of water over Niagara Falls is 231,000 cubic feet, or about 1,500,000 gallons a second. The total quantity of alcoholic drinks made in the United States in a year is about 2,000,000 gallons. If this were turned into the Falls it would take ten minutes to flow over.

PROVOKING ENMITY AND DISUNION. "Any man who, for the satisfaction of his personal hates and grudges, provokes enmity and disunion among the American people, is infinitely more to be dreaded than an enemy in the uniform of the Kaiser, or even a spy plotting to give helpful information to the Kaiser's armies. He is giving aid and comfort to the enemy, and his aid is more effective than theirs."—("Hartford Currant.")

LABOR, BEWARE! "You know that the prohibition agitation is encouraged and supported by those who wish to sidetrack the great organized movement for the betterment of labor conditions. You know that if the prohibition advocates succeed in convincing the people of the United States that the evils of which you complain are due to intemperance in your own ranks you will never be able to achieve the results you hope to accomplish."—(New Orleans "Labor Record.")

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

25045.—A man in Italy desires to be placed in communication with exporters of malt, or maltsters who are in a position to do an export business. Quotations should be f. o. b. American port, to be shipped via Mediterranean route. References.

25067.—An agency is desired by a man in Norway for the sale of rice. Correspondence may be in English. Reference.

25100.—A dealer in England wishes to be placed in communication with American manufacturers and exporters of malt and hops. Complete information in regard to commission allowed, conditions of shipment, payment, etc., should be submitted in first communication.

25132.—A firm in India is in the market for first quality light beer in monthly shipments of 1,000 cases. "Crown" corks are preferred to the ordinary ones. Samples should be submitted free of charge. Quotations should be made f. o. b. shipping port. Payment will be made against documents. The beer should be shipped in cases containing 4 dozen quarts or 6 dozen pints, each bottle to be wrapped in straw. Correspondence may be in English. References.

25183.—An agency is desired by a man in British Guiana for the sale of bottled beer. Payment will be made by sight draft 10, 15 and 30 days, or cash against documents in New York. Correspondence may be in English. References.

25199.—An agency is desired by a firm in Spain for the sale of maize in lots of 200 or 300 tons. Quotations should include agent's commission. Payment will be made by bank credit in New York or sight draft against delivery of documents. Goods may be put up in 100-kilo sacks or sent by shiploads in bulk. Correspondence may be in English. References.

Malt Liquors in Siam.—By Vice-Consul Carl C. Hansen, Bangkok. There are no breweries in Siam but considerable quantities of beer are imported yearly from abroad. The quantities and values of the beer imports for each of the last three fiscal years ended March 31 were: 189,152 gallons, valued at \$116,453, for 1914; 150,573 gallons, valued at \$99,583, for 1915; and 155,873 gallons, valued at \$122,340, for 1916. The origin of the beer imports into this country for the fiscal year ended March 31, 1916, was: 33,639 gallons from the United Kingdom, 13,335 gallons from British dependencies, 77,942 gallons from Denmark, 10,250 gallons from Holland, 11,762 gallons from Netherland India, 5,797 gallons from China, 2,010 gallons from Japan, and 1,138 gallons from all other countries. During the past year Danish, English, Dutch and French beers have been extensively advertised in the local Bangkok press. The beer imports for the first three months of 1917 amounted to 21,603 gallons, valued at \$22,334. The import duty on beer is 5 per cent. ad valorem. A list of dealers in beer, wine and other alcoholic beverages in Bangkok can be obtained at the Bureau of Foreign and Domestic Commerce or its district or cooperative offices by referring to file No. 90027.

Market for Beer in Madras, India.—Consul Lucien Memminger reports that beer, ale and porter are imported in normal years in the Madras Presidency to the amount of about 420,000 gallons, none of which came from the United States, the bulk being supplied by England and Germany.

There are three breweries in the Nilgiris, and a new brewery at Neduvakari, Chingleput district. Statistics of output for the past year are not available, but in 1914-15 the amount of beer produced at the Hill breweries and the new brewery was 592,834 gallons and 115,462 gallons, respectively, a total of 708,296. At present manufacturers and exporters of beer in Japan appear to be making a determined effort to increase their sales in this market, and only recently a large number of pictorial advertisements of a Japanese beer described as "Kirin" have appeared in all parts of the city. Previously a Japanese beer made at Aschi was handled by an English firm, but this concern seems now to handle only English beers. Formerly also a Japanese "Anchor Brand" bottled by the Imperial Brewery, Japan, was handled by an English firm which has since gone out of existence, the price per case, containing 4 dozen quarts, being 19.8 rupees (\$6.42) at godowns in Madras. The beer now used here retails from \$1.86 to \$3.24 per dozen quarts, according to quality. The customs tariff on ale, beer and porter is 4 annas 6 pies (\$0.9) per imperial gallon. With reference to port trust landing charges, in case these are not arranged for by importer here, full information may be obtained by consulting Madras Port Trust scale of rates obtainable from Traffic Manager, Madras Port Trust, Madras, India, upon remittance of \$0.10. A list of dealers in ale, beer and porter and other liquors at Madras, India, may be obtained from the Bureau of Foreign and Domestic Commerce or its district and cooperative offices by referring to file No. 88716.

FIRES. Philip Binzel's brewery at Oconomowoc, Wis., was partly destroyed by fire August 2nd, the total damage being estimated at about \$30,000.

Slight damage was done August 13th, by fire in the malt house of the Bartholomay Brewery Co., Rochester, N. Y.

Theodore Menk's brewery stables, Louisville, Ky., were destroyed by fire August 22nd, nine horses perishing in the flames; damage about \$5,000.

ESSENTIAL IN MILITARY SUCCESS. "We believe that impartial investigation will reveal the fact that the warring nations of Europe recognize in a moderate and reasonable use of alcohol a potent factor in the development of energy and fortitude and that morale so essential in successful warfare."—(A. G. Barr in "The Boston Herald.")

LAPSING TO LYNCH LAW. "Prohibition by constitutional amendment will not remedy the fatal lapse to lynch law. It would only tend to render lynch law constitutional, and destroy the basic principles of the constitution as expressed in the Bill of Rights. For whatever has been recognized as property from time immemorial is property, and no mere expression of sentiment, upon which some judges have based circuitous reasoning to remove liquor from the equal protection of the law, will alter the true situation."—(Henry C. Maine.)

FATHER OF MISCHIEF. "Anti-saloonism and prohibition no doubt cause much of the crime, unrest and systematic striking in this country during a time when peace and plenty should be written over every man's door. As this paper has frequently stated, the introduction of anti-saloonism and its false doctrine into the politics of this country was the cause of nearly all the bad influences and the bad laws which now harass the people. This band of destroyers selected men of both older parties, who would be willing to sacrifice every principle of decency and right in order to secure offices for which they were absolutely unfitted."—("The Beacon.")

Prohibition Hypocrisy Due to Job-Chasing "Statesmen."

By H. L. MENCKEN.

In a previous article I spoke with some sniffishness of the courage and intelligence of the average congressman, and ascribed the success of the Anti-Saloon League, and particularly its immunity to legislative inquiry and attack, to the low development of both qualities. Let me now apologize for too much politeness. My old vice of oleaginuousness seduced me into flattering the gentlemen. The truth is that the Senate, of late years, has filled up with a crowd of cheap ear-bumpers and eye-rollers from the rural chautauquas, and that the mean intelligence of all save a few bright stars in the present House is scarcely to be distinguished from that on view at a Billy Sunday meeting or in a tramp steamer's forecabin.

If you don't believe it, send \$1.50 to the public printer for a month's subscription to the "Congressional Record." What you will read therein, of bosh and tosh, of balderdash and flapdoodle, of bad grammar and worse syntax, will fill you with pity for the newspaper reporters who have to boil it down and translate it into English. It is not a battle of wits that goes on down there; it is not even a debate; it is simply a Festa Asinoria. Sham patriotism, sham learning, sham honesty, some industry, sham ideas, sham men—this is what is on tap.

In part, the direct primary is to blame. It has put a premium upon the sort of sophistry that catches boobs; it has driven the self-respecting man out of politics; it has brought in a host of snide rabble-rousers of the general order of neighborhood uplifter and fraternal-order magnate. But the spoiling started long before the direct primary came in. It goes back, indeed, to Jackson's time, and it is visible today in the general tawdriness and childishness of our politics, local and State, State and National, National and International. The business of running the government is no longer the charge of the man of mark, nor even the trained hack; it is the charge of the loudest gabbler and silliest ass, the professional yap-shocker and job-chaser. Look through the biographies of Congressmen (all written by themselves). You will not find twenty who have not leaped incessantly from job to job, beginning in their non-age and continuing to the present instant. And you will not find thirty who, aside from their job-holding, have ever attained to the slightest distinction in any legitimate field of human endeavor. There are in the lot, amid many shysters, half a dozen good lawyers. There is scarcely a good anything else.

These professional job-chasers are shining marks for such adept and unconscionable manipulators as the whips and lobbyists of the Anti-Saloon League. Don't, as I have before warned, underestimate our brothers of the grape juice. They are shrewd; they are clever; they are capital judges of men, and in particular, of inferior men; they know exactly what's what. And among the things they know are these: That the average American politician has no conscience, no principles and no self-respect; that his sole object in life is to get and keep a job, and that he will sacrifice any ideal or idea, jump through any hoop, turn any flip-flop, roll over any number of times, to attain his desire. Here we have the genesis of the "dry" statesman, the affecting burbler for "our boys" and "the home" in legislative halls, the shameless hypocrite upon whom the whole prosperity of the Anti-Saloon League depends. He is a job chaser who has discovered that the support of the "drys" helps him in his business, as their extraordinarily malignant and effective opposition hinders him. He is the fellow upon whom they chiefly depend, in Congress as in

the State Legislatures, to put over cocoa-cola and the blind pig, the jitney millennium and the jug-behind-the-door.

But why depend upon such a person? Why not, if they are so powerful, elect their own men—men who honestly believe in prohibition, and perhaps yearn for good jobs, too? The answer is simple: they seldom can. That is to say, the number of voters in any given Congressional or Assembly district, or other voting arena, who actually believe in prohibition is seldom enough to make a majority. If a straightout Prohibition candidate were put up, he would get less votes than either of the candidates of the two regular parties, and so one of those candidates would be selected. This is where the old Prohibition party made its mistake. It tried to beat both Democrats and Republicans, and was always beaten itself; in thirty years it never elected a Congressman, and seldom, even in Kansas, got through an Assemblyman.

The Anti-Saloon League gladiators know a trick worth ten of that. Instead of putting up a candidate of their own, they seek out the easiest and most eager mark among the candidates of the other parties. It is in the primaries that they get in their earliest and most effective work. Almost always on one side or the other—and usually on both—there is some aspirant who is willing to do anything to get votes. His actual platform is simple—he wants the job. But over that actual (and esoteric) platform, he is willing to erect a campaign platform made up of the planks of all the bands of enthusiasts who can deliver votes.

Thus he gets himself "converted" to woman suffrage, the single tax, vice crusading, the initiative and referendum, the recall of judges, the eight-hour day, mothers' pensions, preparedness, the parole system, child labor laws, conservation, efficiency, trust-busting—in brief, to any cause or mania or political peruna that has any organization behind it, and money to pay for campaigning, and enough votes to make an impression in the ballot box. And thus, in particular, he gets himself converted to prohibition, which has the best organization of them all behind it, and the sharpest leaders, and the most docile voters, and the readiest facilities for concentrating its huge strength in a small area, and to the benefit of a chosen set.

In the early days the job-chasers laughed at the Anti-Saloon League. Then they saw brilliantly before their eyes just what it could do. Now they all court it, flirt with it, fawn over it. Its bloc of voters may be, and usually is, relatively small—but it can deliver them. They march to the polls with the fire of a great enthusiasm in their eyes, and they vote unanimously for the candidates bearing the league's high imprimatur. They are enough to swing a primary nearly everywhere. They are enough to swing a general election in perhaps three election districts out of five. The two great parties (or, in the South, the two factions of Democrats) are commonly nearly equally divided. The weight of the prohibition vote, small as it is, is sufficient to bear down the scales. It was precisely by this process, bit by bit, that the Anti-Saloon League conquered in such States as Virginia, Colorado and Washington. It is by the same process that it is gradually preparing for the final struggle in Ohio, Maryland and California and laying its pipes for the future in Pennsylvania and New York.

There are of course, perils in the game. The job-chasers brought up to grace by such frank trading are not always to be trusted. When it comes to the showdown the Rum Demon often snatches them from under the eyes of the "drys." In various southern States, in Legislature after Legislature, these worthies sold out, at the last minute, to the whiskey men. This happened, too, in the West. It

will happen again, and yet again. But year after year it is harder to get away with.

The Anti-Saloon League not only knows how to reward; it knows how to punish. The rascal who thus betrays it, after it has delivered its goods to him, is pursued relentlessly and with all arms. The league press agents see to it that every farmer in the whole State hears of his treason. Terrible tales about him are whispered from Sunday school to Sunday school. He is held up to universal obloquy and ignominy. Pious mothers use his name to frighten their young. A few such examples, and the other occupants of the mourners' bench stay put. Not infrequently, indeed, the recreant job-chaser, tasting the steel, steps up, confesses and promises to sin no more. I emit no theories. The thing has happened often, and more than once under my very nose.

It is by such votes that "bone dry" prohibition measures are rammed through the Legislatures of State after State, and it is by such methods that the Anti-Saloon League has acquired its present gigantic power in both houses of Congress—a power so vast that its lobby is more than equal to a third house. At each end of the capitol, of course, there are stray members who actually believe in the prohibition rumble-bumble—fanatics who are ready to swallow anything that looks pious, or shrewder fellows who have genuinely convinced themselves that whatever is so potent must have merit. But the number of such authentic whoopers is not nearly so large as the unsophisticated imagine. The typical Anti-Saloon League legislator is one who is in it for his political health—one who knows, perhaps by experience, that it is much easier to hold on with the league wire pullers in favor of him than with them against him.

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,234,219. Preserving-receptacle for Micro-organisms. Louis Charles Rosenberg, Washington, D. C.
- 1,234,255. Process of treating beer. Charles S. Ash, San Francisco, assignor to Gould & Ash, San Francisco, Cal.
- 1,234,373. Bottle washing and sterilizing machine. John C. Miller, Canton, Ohio.
- 1,234,438 and 1,234,639. Condenser for ice-making and refrigerating machines. Thomas Shipley, York, Pa.
- 1,234,611. Bottle-soaking machine. Richard F. Beutlich, Chicago, assignor to The 20th Century Machinery Co., Chicago, Ill.
- 1,234,680. Machine for setting bung-bushings. Albert Lowy, Newark, N. J., assignor to National Bush Co.
- 1,234,729. Feeding mechanism for bottling machines. Joseph H. Clamp, Cleveland, Ohio.
- 1,235,146. Sealing-machine. Robert Magrane, New York, assignor to Anchor Cap & Closure Corporation, Brooklyn, N. Y.
- 1,235,231. Apparatus for coaling and rousing beer-wort and for precipitating sludge from same. Leopold Nathan, Zurich, Switzerland.
- 1,235,291. Cooling-tower. Charles W. E. Clarke, Brookline, Mass.
- 1,235,429. Bottle-stopping machine. Harry M. Brown, Brooklyn, N. Y., assignor to Spring Stopper Co., Brooklyn, N. Y.
- 1,235,448. Chain-link. James M. Dodge, Philadelphia, assignor to Link-Belt Co., Chicago.
- 1,235,672. Apparatus for straining liquid. John F. Fisch and Floyd C. Stephens, Buffalo, N. Y., assignors to Rudolph A. Witteman, Buffalo, N. Y.
- 1,235,881. Process of preparing beverages. George Defren, Newton, Mass.
- 1,235,535. Refrigeration. Samuel C. Bloom, Elizabeth, N. J.
- 1,236,570. Process of producing chlorin gas. Louis C. Jones and George N. Terzier, Syracuse, N. Y., assignor to the Solway Process Company, Solway, N. Y.
- 1,236,645. Water-purifying apparatus. Henry A. Allen, Chicago, Ill.

Prepared specially for the BREWERS' JOURNAL by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C., London, England, and 10 Gray's Inn Place, W. C., London, England.

Specifications Published
1916.

106,747. N. L. Rees. Table or stand for use when labelling bottles and other receptacles.

101,406. Wahl-Henius Research Laboratory. Manufacture of worts, fermented and distilled beverages, and other products resulting from the mashing of starchy materials.

106,847. E. Greene. Non-refillable bottles.

For copies of published specifications of Foreign Patents (25 cents each), address Messrs. Redfern & Co., 15 South Street, Finsbury, E. C., London, England.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.

Snappy

Ser. No. 104,592. The Neef Bros. Brewing Company, Denver, Colo. Filed June 21, 1917.

Particular description of goods.—Near Beer.

Claims use since January, 1916.

HeK

Ser. No. 103,326. Griesedieck Beverage Company, St. Louis, Mo. Filed April 26, 1917.

Particular description of goods.—A non-intoxicating beverage of a malt nature of the kind commonly known as soft drinks and containing less than one-half of one per cent. of alcohol.

Claims use since April 19, 1917.

BUSCH



Ser. No. 104,208. John B. Busch Brewing Co., Washington, Mo. Filed June 2, 1917.

Particular description of goods.—A non-intoxicating beverage of a malt nature having an alcohol content of twelve one-hundredths of one per cent. by weight.

Claims use since on or about May 1, 1917.



Ser. No. 105,188. P. Ballantine & Sons, Newark, N. J. Filed July 23, 1917.

Particular description of goods.—Ginger-ale, sarsaparilla, root-beer, lemon-soda, club-soda, birch-beer, carbonic water, soda-water, seltzer, and other mineral waters.

Claims use since April 12, 1917.

The following Trade Marks have been definitely Registered:

117,710. Preparation for clarifying beer. G. Rottenkolber, Scranton, Pa. Filed March 10, 1917. Serial No. 102,050. Published May 8, 1917. Registration granted, July 24, 1917.

Market Review.

OFFICE OF THE BREWERS' JOURNAL,
NEW YORK, August 30th, 1917.

Barley. According to the crop estimates reported August 8th by the United States Department of Agriculture, the 1917 Barley crop now promises to amount to 203,000,000 bushels, or 22,000,000 bushels more than estimated in December, 1916, and 6,000,000 bushels over the annual average since 1911. The condition of the Barley has receded from 80, in August, 1916, to 77.9, or 2.10 points. The price of Barley, August 1st, was \$1.44½ per bushel, as compared with 59.3 cents, August 1st, 1916.

The local Barley market is unchanged and no important demand has of late been made. Quotations: Malting Barley nominal; New California Barley, \$1.40 c. i. f. New York to arrive.

Arrivals are a good deal better than expected in values. All maltsters have not been buying, consequently prices went off rather sharply the last ten days, but are strong and steady now. Wonderfully large and good crop indicated.

BUFFALO, August 29th: "New Barley is offered here at \$1.28@ \$1.45, according to quality."

CHICAGO, August 28th: "The receipts of new Barley have been larger than was anticipated, in fact, harvesting began sooner than was expected as the seeding was late on account of the backward spring. However, apparently, there was enough good weather to ripen the crop in a shorter time than usual. The quality of the new barley marketed has been very good, especially the initial run, which was practically all from Iowa and Illinois, of large berry, sound and dry and averaging a good color. At the present time the quality is not so good, the condition not being quite up to early receipts and with more oat mixed cars appearing. We quote: low-grade at \$1.15@ \$1.20; fair-to-good \$1.21@ \$1.24; good-to-choice \$1.25@ \$1.28; with fancy \$1.30."

Malt. The Malt market is quiet, prices continuing fairly steady. Quotations: \$1.70@ \$1.76.

On account of general conditions too numerous to mention prices have fagged. All brewers are covered until about October 1st, and expect next month to see the maltsters start in to buy Barley to get their plants going about September for buying orders about October 1st. Prices: Standard, \$1.50 Chicago, for new Malt.

BUFFALO, August 29th: "New Malt has not yet been offered here. Old Malt sells at \$1.70@ \$1.75."

CHICAGO, August 28th: Brewers are holding back. Standard Malt is quoted here at \$1.62; Bottle Beer Malt, \$1.68; Extra Bottle Beer Malt, \$1.76."

Corn Goods. Grits are quoted to-day at \$5.25; Meal, \$5.24; Corn Sugar, \$5.91 in barrels; and \$5.98 in bags; corn syrup, \$5.89.

CHICAGO, August 28th: "Quotations: Grits, \$4.85; Meal, \$4.84. Few sales to brewers."

Rice. Brewers Rice quotations to-day are nominal, there being absolutely no Imported or Domestic Rice on hand in this country. The prices indicated are \$6.00 to \$6.50 per 100 lbs., f. o. b. New York and Chicago, and really represent the values of export grades of broken Rice, these being the only Rice supplies which the brewers are able to use. Importation of Asiatic Brewers Rice across the Pacific is impossible for lack of steamers and freight room. But new crop domestic supplies are expected to arrive during October, on which there may possibly be a small recession in price if the present export embargoes are continued.

Hops. There was a great advance in the hop market in August for all kinds as well as contracts. The crop is coming down much lighter than expected; both in Oregon and California they had drought for some time and the yield will be smaller. It is now estimated that the crop in the United States will be only about 140,000 bales, against 265,000 bales last year. The requirements of hops for home consumption as well as exports, are about 200,000 bales, and this deficiency of 60,000 bales will have to be made up from the 1914, 1915 and 1916 stocks carried by growers, dealers and brewers. While there will be no famine, these stocks will be considerably reduced, and also calculating that some hops are always carried into the new season, as some growers never sell, no matter how good the price is, the situation, as far as prices are concerned, is an unusually strong one. The N. Y. State crop cuts hardly any figure, since probably only 8,000 to 9,000 bales will be harvested, and growers are expecting fancy prices for them. Most of them will not sell until after the hops are harvested. We quote: 1916 Pacific coast hops, 22@26c.; 1915 Pacific coast hops, 15@18c.; 1914 Pacific coast hops, 12@14c. All N. Y. State hops are more or less nominal.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Brewers' Refining Company.

The Brewers Refining Company, 11 Broadway, New York City, offer to the trade their highest grade Body Sugar, which is widely used throughout this and other countries. When ordered, shipments are guaranteed to be prompt. Quotations will be given to all inquirers.

How to Increase the Earning Power of Your Plant.

This question is answered by a trade announcement which the Henry Bower Chemical Manufacturing Co., Philadelphia, publish in another column. They advise brewers to use Anhydrous Ammonia which, they state, will increase the earning power of any refrigerating or ice-making plant. The Bower Brand of this ammonia is used extensively here and abroad.

The company also announce that their outstanding stocks have been temporarily discontinued and, therefore, all orders should be sent to their address in Philadelphia.

Pfaudler Works Visited by Ceramic Society.

Thirty-one members of the American Ceramic Society, who had included Rochester in the itinerary of their annual summer meeting, recently visited the plant of The Pfaudler Company, in Lincoln Park, Rochester, N. Y., and were conducted through the works by Dr. W. J. Zimmerli, chief chemist, and other officers of the company, accompanied by F. L. Craddock and E. B. Kilmer, of the New York and Chicago offices.

The Pfaudler plant was of particular interest to the visitors for the reason that the Pfaudler Company is credited with having originated the process of fusing "glass" enamels into large, steel tanks; their Rochester plant is said to be the largest in the world devoted to such work. Its present activities reflect the great strides made by the chemical industry of this country during recent years in the fact that the production of acid-resisting kettles, mixing tanks, stills and similar apparatus for corrosive work now predominates over that of the large sectional storage tanks upon which the company previously had specialized.

After a trip to the Taylor Instrument Companies' factory, the visitors were again the guests of The Pfaudler Company at a luncheon served at the Powers Hotel. E. G. Miner, president and general manager of the company, acted as host, assisted by N. G. Williams, vice-president and general sales manager; A. I. Jones, superintendent; E. J. Bayle, production engineer; Dr. Zimmerli, and others connected with the company.

York Manufacturing Company.

Since their last report to *The Brewers' Journal* the York Mfg. Co., York, Pa., have made installations of their refrigerating machinery in several hundred industrial, public and private establishments, here and abroad, among them the Hudson Consumers Ice Co., Hoboken, N. J. a 250-ton complete York improved raw water ice making plant, including two 187½-ton, one 85-ton and one 8-ton high speed vertical single-acting enclosed type refrigerating machines, each direct connected to a uniflow poppet valve engine. Citizens Artificial Ice Co., Cincinnati, Ohio; one 40-ton vertical single-acting belt driven high speed enclosed type refrigerating machine and high pressure side complete. Supplee Milk Company, Philadelphia; one 55-ton raw water flooded freezing system for freezing crystal ice, and one 75-ton raw water flooded freezing system for freezing opaque ice, also 12 coils of "Shipley" Flooded atmospheric ammonia condensers. Crystal Ice & Coal Corp., Erwin, Tenn.; one 25-ton horizontal double-acting refrigerating machine, direct connected to Corliss valve engine and condensing side, also a 15-ton flooded freezing system and a 15-ton distilling system, together with 500 ft. of 1¼-in. brine piping for ice storage room. Castner Electrolytic Alkali Co., Niagara Falls, N. Y.; one 50-ton vertical single-acting high speed enclosed type belt driven refrigerating machine. Durham Traction Co. (Ice), Durham, N. C.; one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and miscellaneous material for changing their freezing

system so as to operate on the flooded principle and increasing same to 98 tons capacity. Newark Milk & Cream Co., Newark, N. J.; one 50-ton horizontal double-acting refrigerating machine, direct connected to a Corliss engine, and condensing side complete, also a 6-ton flooded freezing system. Dolfingers Standard Dairies, Philadelphia; one 92-ton horizontal double-acting refrigerating machine, belt driven, and condensing side complete, including "Shipley" Flooded double pipe ammonia condensers. Saluda Public Service Corp., Saluda, S. C.; one 17-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side, also a 10-ton raw water flooded freezing system. Forbes & Wallace, Springfield, Mass.; a 25-ton absorption refrigerating machine complete. J. M. Fries, Reading, Pa.; two 16-ton vertical single-acting belt driven enclosed type refrigerating machines and condensing side, also a 6-ton flooded freezing system and direct expansion piping for ice cream hardening and storage rooms. Drexel Ice Cream Co., Chicago; one 20-ton raw water flooded freezing system complete and miscellaneous material, including three coils of double pipe countercurrent ammonia condensers, ammonia receiver, ammonia separator, etc. General Chemical Co., Marcus Hook, Pa.; one 177-ton and one 180-ton vertical single-acting high speed belt driven enclosed type refrigerating machines and condensing side complete, including 16 "Shipley" Flooded atmospheric ammonia condensers, also 8 Baudelot Water coolers and miscellaneous material. Flory & Flory, Eaton, Ohio; one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side, also a 10-ton raw water flooded freezing system and 2200 feet of 2-in. direct expansion piping for ice storage room. Loose-Wiles Biscuit Co., Long Island City, N. Y.; a 150-ton vertical single-acting high speed enclosed type refrigerating machine, direct connected to a uniflow poppet valve engine, and condensing side complete, also a refrigerating system, including a 150-ton shell and tube brine cooler. Imperial Ice Cream Co., Cumberland, Md.; two 20-ton vertical single-acting belt driven enclosed type refrigerating machines and condensing side, including two "Shipley" Flooded atmospheric ammonia condensers, also a 10-ton flooded freezing system and miscellaneous material. Lee Wilson & Co., Wilson, Ark. (Ice and Fuel); two 12-ton vertical single-acting belt driven enclosed type refrigerating machines and condensing side, also a 20-ton York improved raw water flooded freezing system. Cap. F. Bourland, Ft. Smith, Ark. (Ice); one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side, also a 12-ton raw water flooded freezing system and three "Shipley" Flooded atmospheric ammonia condensers. Trenton Gas & Electric Co., Trenton, Mo.; one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and condensing side, including one "Shipley" Flooded double pipe ammonia condenser, also a 12-ton raw water flooded freezing system. This is a duplicate of the plant we installed for them last year. H. E. Koontz (Creamery), Westminster, Md.; one 20-ton vertical single-acting enclosed type refrigerating machine, direct connected to a slide valve engine. Consolidated Cold Storage Co., Inc., Auburn, N. Y.; one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and 1,700 feet of 1¼-in. direct expansion piping for ice cream hardening room. Bay State Film Co., Sharon, Mass.; a 35-ton vertical single-acting refrigerating machine, direct connected to a Corliss valve engine and condensing side, including three "Shipley" Flooded atmospheric ammonia condensers, also miscellaneous material. Midland Water, Light & Ice Co., Dodge City, Kan.; one 50-ton vertical single-acting high speed belt driven enclosed type machine and miscellaneous material. J. F. Grennan Produce Co., Garnett, Kan.; one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Libby, McNeill & Libby (Packers), Loleta, Cal.; one 20-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Boston Land Co., Huron, Cal.; a complete portable refrigerating outfit for storage of kitchen supplies, including a ¾-ton vertical single-acting belt driven enclosed type refrigerating machine. Gold Medal Creamery Co., Olney, Ill.; one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Transfer Meat Co.,

St. Joseph, Mo.; one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Dick Thompson, Edinburg, Pa.; one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. French Cafe, Fresno, Cal.; one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Dibble Grocery Co., Topeka, Kansas; one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. H. N. Miller, Pittsburgh; one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Ray Nussbaumer, Montpelier, Ind.; one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Hayfield Creamery Co., Hayfield, Minn.; one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. J. H. E. Nagel, Sharpsburg, Pa.; a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. J. L. Westbrook, Huntingdon, Pa.; one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Somerset Dairy Co-operation, Johnstown, Pa.; one 12-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Cody Creamery Co., Cody, Wyo.; one 2-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Theo. Gutscher, Cleveland, Ohio; one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Litchfield Creamery Co., Litchfield, Ill.; one 15-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Tidal Gasoline Co., Drumright, Okla.; three 12-ton and one 15-ton vertical single-acting belt driven enclosed type refrigerating machines and high pressure side complete. Huskin Run Supply Co., Huskin Run, Pa.; a one-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. Machinery installed by the York Mfg. Co. in breweries is mentioned elsewhere in these columns.

Sterling Body Sugar.

Contributed by the Sterling Refining Company at Evansville, Ind.: "This Company is offering in Sterling body sugar a product of proved excellence. With a magnificent quarter million dollar plant with all latest improvements in manufacturing equipment and transportation facilities, this company is able not only to produce a brewing sugar which, on account of its high percentage of dextrine is especially desirable for the production of beers and beverages of low alcoholic content or no alcohol, but is also in position to make prompt shipments. Sterling body sugar is at the present time being used in some of the best known beers and beverages in America. It is made in either light or amber shade."

Edison Storage Batteries for Transportation.

The Edison Storage Battery Co., Orange, N. J., have just published their copiously illustrated Bulletin 600 which contains a highly interesting treatise entitled "Edison Storage Batteries for Industrial Transportation," showing the gigantic progress in modern methods of carrying manufactured goods and raw materials, and saying, among other things:

"Few words are necessary. The superiority of storage battery industrial trucks, storage battery baggage trucks and storage battery tractors over man-power or mule-power is demonstrated daily in thousands of installations and leaves no room for argument. It is now possible for any user of hand trucking methods to thoroughly investigate the actual working of these time and money-saving equipments under actual working conditions at manufacturing plants, foundries, mills, railway and steamship terminals, lumber mills, warehouses and in many widely varying industries. And, in making such investigation he is almost certain to find that problems like his own are being solved efficiently and economically. One important point to consider after a decision to adopt electric industrial trucks or electric tractors is, "What kind of storage battery?" Electric industrial trucks and electric tractors are built to withstand hard usage. In their travels over rough pavements, cobble stones, railroad crossings, etc., they get hard usage. Collisions will be encountered; falls from platforms will occur; loads will be dropped heavily on the truck deck; and in this experience of bangs and bumps and jolts, what about the storage battery?"

"Obviously a storage battery built throughout of steel—steel plates; steel poles; steel container—and having nothing about it to break or crack is the logical battery for this service. And this conclusion is why Edison Alkaline Storage Batteries have been specified as the equipment for thousands of electric industrial trucks and tractors in daily service throughout the world.

"The Edison Alkaline Storage Battery is the only storage battery that has any iron or steel in its construction. It is the same nickel-iron-alkaline storage battery construction that is withstanding the rough service encountered by storage battery locomotives in coal and metal mines, where it has proved to be the storage battery with lowest yearly depreciation and maximum number of days per annum in service.

"A careful review of the installations illustrated in this book will serve to emphasize another important point, namely, that there are different types of trucks and tractors with different sizes of battery equipment depending on the kind of work to be done and the nature of the working conditions. It is therefore recommended that the complete problem be laid before our Engineering Department. Having ascertained data covering the weight of load, length of haul, number of round trips a day, percentage of grade, length of grade, grade in favor of or against the load, operating surface, speed desired, etc., our Engineering Department will bring wide and varied experience to bear on your problem with the certainty that the Edison Storage Batteries specified will, as in thousands of other cases, do the work required and do it in a manner completely satisfactory."

Another Bulletin, No. 608, shows the advantage of using Edison Storage Batteries in Locomotives, particularly in the mining, lumber and other industries.

The Edison Electric Portable Lighting Outfit is described in Bulletin 819. It is a splendid contrivance for work that must be done underground, or in any other dark places.

Par-O-Lac.

Hirsh & Schofield, Inc., 50 Broad Street, New York, in a trade announcement published elsewhere in these columns, direct the trade's attention to their Par-O-Lac, of which they say that its "tremendous success, and the fact that it has supplanted Brewers' Varnish and other materials used for coating the interior of vats indicate the remarkable quality" of their product.

Par-O-Lac is a new article containing ingredients said to have been "never before used in a varnish substitute," and it is claimed that it gives perfect results, doing away with the scraping out of casks and producing a permanent coating.

The firm have a large list of brewers using it.

CLASSIFIED ADVERTISEMENTS.

Wanted.

Second-hand glass enameled steel tanks, state condition, capacity dimensions and price. Address:

S. P., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Five hundred, more or less, galvanized, union made, new, beer quarters—\$2.00 each shipping point. Address:

J. C. B., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Wanted.

One 100-barrel Soaker.
One 100-barrel Pasteurizer.

Second-hand, in first-class condition. State price, kind and how long in use. Address:

Leisen & Henes Brewing Co.,
Menominee, Mich.

Brewmaster Wishes to Change Position.

Brewmaster, graduate of European and American Brewers' Schools, with wide theoretical and practical experience, desires to change his position. Guarantees to make finest quality beer and ale. Success means more than salary. Address:

L. R. 13, care of THE BREWERS' JOURNAL,
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For Sale.

Brewery plant, bottling house, valuable properties in good condition, in Northern Wisconsin town with population of 10,000 surrounding territory 75,000, large percentage Bohemian and Polish; has large, growing bottling business. Controlling interest can be secured at a reasonable price. If interested, write:

M. & T., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Position Wanted.

Brewmaster, practically and theoretically trained, with 30 years' experience in Germany and America, seeks position. Excellent references, graduated with high standing from U. S. Brewers' Academy, New York, and also of Lehmann's Brewers' School in Worms. Competent to produce economically all kinds of pure and palatable lager beers, ales, and porter, as well as the finest bottle, export, and temperance beers. Address:

Gambrinus 42, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

THE BREWERS' JOURNAL

AND

BARLEY, MALT AND HOP TRADES' REPORTER,

AND AMERICAN BREWERS' GAZETTE, CONSOLIDATED.

Established in 1876 by A. E. J. TOVEY, Honorary Member of the United States Brewers' Association.

Grand Prize, Paris Exposition, 1900.

Medal and Diploma, Antwerp Exposition, 1889.

Honorable Mention, Paris Exposition, 1878.

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57th Convention of the United States Brewers' Association in Atlantic City, N. J.

The Convention Committee, 50 Union Square, New York, has addressed the following letter to the members of the U. S. Brewers' Association:

Gentlemen: You have been duly informed of the 57th Annual Convention of the United States Brewers' Association to be held at Atlantic City, beginning October 2nd. The Board of Trustees, the Executive Committee and the Nominating Committee will meet on October 2nd, and the convention will be called to order on the morning of the 3rd. It is hoped that the proceedings can be concluded in two days, certainly not later than the 5th of October.

This convention will possibly be the most important in the history of the industry. Every brewer ought to realize at once the dangers and the opportunities that the immediate future hold forth for the trade, and should not let anything interfere with his attendance at the convention, in order that he may get in touch with all aspects of the situation and in harmonious accord with his business colleagues.

The Hotel Traymore will be the official headquarters of the convention, and will be able to accommodate all who apply for rooms. For your benefit, however, we quote the rates at this and several other leading hotels, on the page following.

Atlantic City is full of hotels and every member has the opportunity to make reservations at his favorite house. Please write direct to the hotel at which you desire to stop, and notify this office of your plans.

Let nothing interfere with your attendance at the convention.

Respectfully yours,

The Convention Committee,
James R. Nicholson,
Wm. J. F. Piel,
Peter Doelger,
Hugh F. Fox, Secretary.

Science and Practice of Brewing.

Valuable Information from all Fields of Scientific Research. Practical Essays on Brewing, Malting and Hops.

The Pasteurization of Beer.*

There is an important factor in the pasteurization of beer which is generally ignored, yet it is one which may be the determining factor as regards the success or non-success of the pasteurizing process.

We are referring to the normal acidity of the beer undergoing this treatment. The importance of the acidity of any medium in determining the sensitiveness of microorganisms to heat is well known to bacteriologists, and in fact in ordinary culture media a definite limitation of the acid reaction is a necessity for standardizing tests, quite slight differences in this respect producing greatly varying results. This sensitiveness to acidity of micro-organisms occurring in fermentation products is well illustrated by some experiments on pasteurizing cider, published in the annual report of the Agricultural and Horticultural Research Station of the University of Bristol.

In respect to flavor, cider suffers more than beer by heating, and the pasteurization temperatures applicable to beer are not applicable to cider, a cooked flavor supervening as low as 140 F. But it has now been proved not only that cider can be pasteurized successfully at a much lower temperature, but that the higher the acidity of the cider the more easily can it be pasteurized. Thus a temperature of 113 F. for one hour was not sufficient for ciders containing .36 and .41 per cent. of acid calculated as malic acid, but a cider containing .65 per cent. of such acid was efficiently pasteurized. A temperature of 122 F. for half an hour was effective for all three ciders.

Further experiments were made by seeding media containing varying quantities of malic acid, from 0.1 to 0.6 per cent., with cultures of acetic bacteria and "sickness" bacteria, and trying various pasteurizing temperatures on these; for practical purposes 0.3 per cent. of malic acid at 122 F. for one hour was effective, although some specially strong bacteria might require a bit more.

Beer of course is not such an acid liquid as cider, and furthermore, its acidity is of mixed origin. On the other hand it is, generally speaking, rather more alcoholic than the average cider and contains antiseptic hop extract which undoubtedly helps the pasteurization process. As regards the acidity of beer, we think this is lower on the average than it used to be. In the original gravity estimations, as originally laid down, the normal acidity of a beer was assumed to be 0.1 per cent. calculated as acetic acid; but beers nowadays are generally much below this, 0.06 and 0.07 being normal quantities.

Probably lower hop rates, cooler made malt, and extra aeration of fermentations account for this decrease, but the point is that such low acidities as are now met with mean that a higher temperature is required for efficient pasteurization. If a brewer took steps to attain an acidity of 0.1 per cent. in beer intended for pasteurization, it is probable that he would attain an efficient result at a temperature sufficiently low to insure his beer from suffering any alteration in flavor.

* London "Brewing Trade Review."

An acid which has had a certain limited vogue for adding to brewing liquor or mash tun is lactic acid, but this acid has an objectionable flavor which is liable to come through in the beer even when used in quite small quantities. The acid which we believe would more likely meet the case is citric acid, one which is already frequently used in the popular drink, ginger beer.

Estimation of Mixtures of Four or More Carbohydrates Involving Oxidation with Bromine.

By E. G. WILSON and W. R. G. ATKINS.

If allowed to stand for some time at the ordinary temperature in a saturated solution of bromine, dextrose and maltose are quantitatively oxidized, but a slight reducing power is retained. Lævulose under similar conditions is oxidized not at all, or only to a slight extent, whilst in presence of N/10 sulphuric acid and bromine there is a slight loss of lævulose in 66 hours.

A mixture of sucrose, maltose, dextrose, and lævulose may be analyzed as follows:—The sucrose is estimated from the difference in polarisation or reducing power before and after hydrolysis by invertase. In the inverted solution the reducing power of all sugars besides lævulose is destroyed by bromine under standard conditions, and the amount of lævulose is then estimated. The rotation and reducing power of the original solution can then be corrected for the effects of the sucrose and lævulose, and the residual rotation and reducing power, due jointly to the maltose and dextrose, suffice for the calculation of the amounts of these two sugars.

The authors state that addition of dilute alkali to a solution of dextrose, lævulose, or maltose causes a large temporary increase in the reducing power of the sugar. Two per cent. solutions of each of these sugars were mixed with equal volumes of N/1 caustic soda solution, and the reducing power was determined at intervals after mixing, the solutions being allowed to stand in flasks at the ordinary temperature meanwhile. The reducing powers of all three sugars increased by approximately one-third of their original value within a quarter of an hour, and only slowly fell to their normal value (and beyond it in the case of dextrose and lævulose) in the course of a day or two. In a similar experiment in which the concentration of dextrose in the alkaline liquid was 3 per cent., only a comparatively slight increase (5 per cent.) in the reducing power was produced.

The authors point out that, in view of these observations, it is highly important that in analytical work sugar solutions should be kept neutral or faintly acid.—("Biochem. Journal.")

THE FOUNDATION upon which a wagon rests is one of the most important factors in maintaining the accuracy of the scale. Competent authorities have stated that 90 per cent. of all trouble with wagon or track scales arises from defective foundations. Concrete is the best material for scale foundations. Hard stone or brick laid in cement mortar will prove satisfactory, but wood should never be used.—("Grain Dealers' Journal.")

Malt Grinding.

Before the actual grinding process, it is of some importance to consider the condition in which the malt comes to the grinding rolls. It is obvious that any difficulties connected with actual milling will be increased by unevenness of the grain and by the presence of dust or dirt. Hence it is necessary if good results are to be obtained to employ a good screening and separating machine in conjunction with the malt mills. Although numerous patents have been taken out at various times for improvements in malt-grinding machinery, the essential feature in all is the provision of two or more sets of grinding rolls. These rolls are constructed of steel and have either a smooth or a fluted surface. In the latter case the malt corns are cut, and in the former crushed. Among practical men there is a considerable difference of opinion as to the best form of roll to employ, but in general the character of the malt is the factor deciding whether one form is better than another. As regards the extract obtainable from either form of grinding, it is generally conceded that no difference is noticeable between the two systems if the malt has been properly graded before being ground. The drainage of the goods in the mash-tun is important. In breweries where large percentages of raw or flaked grain are employed, it is considered that better drainage is secured when the malt is ground with fluted rolls than by crushing it by smooth rolls. Foreign malts, which have a larger proportion of husk, and of a tougher character, are more effectively dealt with by fluted rolls. Much may be said as to the degree of fineness of grinding. Undoubtedly, the ideal would be to grind the material to a fine powder if extract alone is the objective. Unfortunately, fine grinding of malt leads to difficulties in the subsequent processes of mashing, etc. Dead mashes and bad drainage frequently result from grinding too finely. There is no doubt that a medium course is desirable between obtaining a high extract and a low one. The aim of the brewer should be to set his rolls so that each corn is properly crushed without breaking up or disintegrating the husk too much. In this connection, the reason for good screening and grading machinery in conjunction with the grinding process becomes obvious. With efficient machines, the corns of different size are conveyed into separate receptacles. Each sort is run through properly adjusted rolls, so that both large and small corns are milled to an even degree.

Revolving malt screens have been brought to a high state of excellence. When fitted with a cylinder for removing stones and foreign matters, a magnetic separator for removing metallic particles, such as iron nails, etc., and an exhaust fan for carrying away the dust, they are great aids in grinding. It is not only that the foreign matters, which may be prejudicial to the brewing of sound beer, are removed. The separation has the effect of preventing undue wear and tear of the rolls. Apart from prolonging the life of the rolls, efficiency can be maintained at a higher standard.

Screens are usually graded for separating the large and the small corns. When this is done, the mills usually consist of a double set of malt rolls, one large pair for the bulk of the grist and a small pair to deal with the portion containing the corns which would in the ordinary way pass through a single-pair mill.

When good screens are not employed and all the malt goes direct through one set of rolls, these are usually adjusted to deal with the average corns which form the bulk of the material. This, of course, results in the small corns passing through without grinding or crushing, and the extract from such corns is entirely lost. On the other hand, if the rolls are set so close as to deal with the small-

est corns, the larger corns will be too much disintegrated to give satisfactory drainage in the mash-tun. Some difference of opinion exists as to the proper time to screen and grade the malt. It is a convenient plan, however, to perform the screening and grading operation just previous to grinding. There is no disadvantage in storing malt in bins in the brewery just as it is received from the maltings, so that no attempt should be made to do this part of the work on delivery. It is an advantage to deal with the smaller quantities used daily in the brewery.

Another point in connection with grinding deserves mention. Very often the position of the mills in relation to the mash-tun is an important matter. The ideal arrangement is to deliver the ground malt direct into a hopper or grist case which dominates the mash-tun. Sometimes, however, the grinding machinery does not occupy this favorable position. It is sometimes below or on the same level as the mash-tun, and in such case an elevator is necessary. Many brewers object to this arrangement, and their objection is well founded. Undoubtedly the elevator arrangement causes some separation of the flour and the husk after grinding, and this results in difficulty in mashing arising from the inequality of the grist.—(The "Brewers' Gazette.")

Wild Hops in Denmark.

By JOHANNES SCHMIDT.

By means of sending inquiry forms throughout the country I obtained a quantity of information as to the occurrence of the wild hop in the various districts, showing that the wild hop is most common in Funen, most rare in West Jutland, the order for all divisions being as follows: (1) Funen, (2) Lolland-Falster, (3) Sealand, (4) Bornholm, (5) East Jutland, (6) West Jutland. It is lacking on several small islands, as, for instance, a number of islands to the south of Funen.

The wild hop is as a rule of little value for brewing purposes, its resins content being but poor. Examination of a number of plants from North Sealand revealed, however, some plants with up to about 14 per cent. of bitter resins. Apart from the vegetative process, the wild hop also propagates regularly by seeding. The seedlings grow slowly, and do not flower the first year, and probably also but rarely in the second. In North Sealand the flowering time of the wild hop is early in August or late in July, the male plants commencing to flower a little earlier than the female.

It is uncertain whether the hop existed in Denmark prior to human habitation; possibly it may have been first introduced by man for practical purposes, and subsequently running wild, have spread over the country. It has not hitherto been found in pre-historic deposits in Denmark.

In the woods the hop is regarded as a troublesome weed, and is kept down as far as possible by the forest officials, some of whom report that the hop is growing less common in Danish woods owing to the rational methods of forest culture.

Experimenting with a male American cluster hop and a female plant of the late Hallerton variety from Weihestephan, J. Schmidt obtained hybrid plants the flowers of which exhibited the characteristic aroma of the American variety to which the male parent belonged, although the flowers of the female plant were destitute of this aroma. These results demonstrate that the aroma is, nevertheless, genotypically present in the male plant.—(Comptes Rendus du Laboratoire de Carlsberg.)

Monthly Report from the Laboratories of the National Brewers' Academy & Consulting Bureau, New York.

Under the above heading the staff of the National Brewers' Academy publish every month a short review of all the samples examined in their laboratories, accompanied by such comment as may be deemed of interest to the practical brewer and maltster.

In the case of specially interesting incidents of either chemical or biological nature a brief description of the entire case will be presented in the form of a short paper.

In order that the manuscript may reach the printer in time for publication, the report begins on the 15th of every month.

Aug. 15th—Sept. 15th.

During the month the following samples were received:

Malts	130
Malt Adjuncts.....	41
Colorants	15
Hops	3
Grains	5
Waters	12
Worts	54
Yeasts	219
Beers and Ales.....	306
Temperance Beverages	30
Fuels	23
Miscellaneous	42

880

Malts.

An unusually large number of Malts from Pacific Coast barleys were received during the last month; of 130 samples analyzed 52 were of this type, while 78 were Western Malts. The moistures were very high in both, the average for the Pacific Coast Malts being 6.22 per cent., and for the Western Malts 6.14 per cent. The yields of extract were accordingly low and averaged 69.2 per cent. and 67.5 per cent. respectively, which calculated on dry basis corresponded to 74.0 per cent. and 72.0 per cent. Many of the Western Malts contained slight admixtures of Pacific Coast Malt.

Malt Adjuncts.

Forty-one samples of cereals and cereal products were classified as follows:

Corn Grits.....	13
Corn Meal	8
Refined Grits.....	6
Brewing Sugar.....	2
Brewers' Syrup	4

These materials were all of satisfactory composition, with the exception of high moistures in one sample of Grits and one of Meal. There was also received two samples of Oats for the determination of their feeding value.

Colorants.

Fifteen samples of Sugar and Malt Colors were tested in beer or ale and all were found to be satisfactory for their respective purposes.

Hops.

Three samples of 1916 Pacific Coast Hops were examined; two of these were considered satisfactory brewing materials, while one sample had suffered materially by mould growth.

Grains.

Five samples of mash tun residue were analyzed; three of these contained excessive amounts of water soluble extract, indicating insufficient sparging, while two samples were of satisfactory composition.

Waters.

A biological examination was made of all samples submitted in order to ascertain their suitability for cleaning

purposes. A complete chemical analysis was made of 6 samples for their mineral constituents.

Worts.

Among the samples received were 48 lager beer worts, 4 ale worts and 2 worts for the production of beers with less than 0.5 per cent. of alcohol. All samples were of satisfactory composition and well suited for the production of the beer and ale type desired. A biological examination was made of 4 samples, taken from the cooler in order to control the sanitary condition prevailing during cooling operations.

Yeasts.

Two hundred and nineteen samples of yeast were examined; 50 samples were Ale Yeast and 169 Lager Yeasts. The Ale Yeasts were in satisfactory condition, with the exception of 3 samples which contained excessive amounts of lactic acid ferments. Six samples of Lager Beer Yeast were received from our Pure Yeast Department; these were all in excellent condition of health, purity and flavor. Among the brewery yeasts 7 were infected above the limit of safety, necessitating the introduction of new pure cultivated yeast. The remaining samples were in satisfactory condition generally.

Beers and Ales.

One hundred and thirty-five samples of Ale and 171 samples of Lager Beer were received. These samples were all examined in the Biological as well as Chemical Laboratories. The average chemical composition was as follows:

Ales.

Original Gravity	12.6 deg. B.
Alcohol by weight.....	4.10 per cent.

Lager Beers.

Original Gravity	11.4 deg. B.
Alcohol by weight.....	3.12 per cent.

These figures are very approximately the same as found for the last month.

Temperance Beverages.

Under this heading are classified 28 samples of Temperance Beers and Ales and also 2 samples of so-called Fruit Juices. The Temperance Beers and Ales showed the following composition:

Original Gravity	6.0 deg. B.
Alcohol by weight.....	0.25 per cent.
Alcohol by volume.....	0.31 per cent.

The two samples of Fruit Juices were evidently artificially flavored beverages, containing respectively 2.00 per cent. and 0.72 per cent. of alcohol by weight.

Fuels.

There was submitted to the Fuel Laboratory 23 samples of Coal. Of these 6 contained excessive amounts of ash, while 17 samples were of satisfactory composition and heating value.

Miscellaneous.

The 42 samples under this heading comprise, as usual, mainly, cleansers, pitch, varnish, soaking solutions and filtermass materials.

TESTILUPIN, NEW BEER YEAST PRODUCT. By E. Moufang and A. Mayer, in "Allgem. Ztschr. für Bierbrauerei u. Malzfabrikation." These authors isolated from beer yeast a substance which has very strongly decolorizing and reducing properties. They called it Testilupin. It decolorizes neutral aqueous solutions of methylene blue without changing itself, nor losing its decolorizing power and it reduces potassium permanganate to manganate; also Fehling's solution, hydrogen peroxide and phenylhydrazine. It accelerates fermentation by yeast and yeast juice.

Manufacture of Corn Syrup and Corn Sugar.

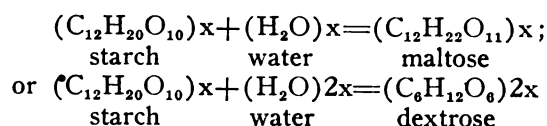
From a paper by Dr. A. P. BRYANT, Directing Chemist of the Clinton Sugar Refining Co., Clinton, Iowa.

If to a starch paste is added saliva or pancreatic juice, it soon becomes quite fluid and finally ceases to give a blue color when tested with iodine. If the fluid is now tested for reducing sugars, they will be found present. The starch has been chemically changed by the action of the enzymes in the saliva and pancreatic juice. This change we call hydrolysis because it means the chemical union of starch and water, thus forming, in this case, a sugar—maltose. In other words, digestion of starch means its hydrolysis, with the formation first of maltose and finally dextrose, in which form it reaches the blood stream.

If malt extract is allowed to act on moderately warm starch paste a similar change takes place, the final product being malt sugar (maltose) and dextrin. If the starch be boiled with water, to which a trace of acid has been added, a similar transformation occurs and the starch is changed, hydrolyzed, with the formation of sugars (maltose and dextrose) and dextrin, the relative amounts depending upon the temperature, time of cooking and strength of acid used.

In each of the above cases the change, hydrolysis, has been brought about by the presence of a very small amount of some agent, enzyme or acid, which in itself does not enter into the final product, but the presence of which is necessary to induce the change.

Intermediate between starch and sugars there will be found in either of the cases just described a considerable quantity of dextrans, the proportion constantly growing less as the chemical changes advance, until practically the whole of the starch is changed to maltose, maltose and dextrose, and finally dextrose. Expressed in the form of a chemical equation these changes are:



In the form of percentage 100 parts of starch takes up 5.6 parts of water to form maltose and 11.1 parts to form dextrose.

The starch molecule is very large and complex and when acted upon by enzymes or dilute acid it splits up, first, into smaller molecules still possessing most of the characteristics of starch, then into a series of dextrans and finally these simpler dextrans are acted upon by the hydrolytic agent, which drives into chemical composition with the starch one or two molecules of water, forming maltose or dextrose, respectively.

After the corn starch has been separated from the other constituents of the corn, it is mixed with water acidified with a small amount of hydrochloric acid, the proportion of acid being considerably less than that found in the digestive juices of the stomach. The acidified starch and water is then drawn into a "converter," a large copper vessel holding about four tons of starch, where it is cooked with live steam until tests show that hydrolysis has been carried to the desired degree. In the manufacture of corn syrup this is at a point where from 40 to 50 per cent. of starch has been actually hydrolyzed into maltose and dextrose, the remainder being split up into dextrans. In the manufacture of corn sugar, it is the point where hydrolysis has been carried practically to completion with the formation of dextrose as the final product.

The change once having been brought to the desired test, the charge is released into a neutralizer, where sufficient

sodium carbonate is added to neutralize exactly the hydrochloric acid, with the formation of common salt. Once exact neutralization has been reached the syrup "breaks" and the trace of corn gluten still present in the starch going into the converter separates and can be removed by filtering. This neutralization is, in a way, fool-proof, because the presence of even the faintest amount of free acid or free alkali prevents the break. The syrup is then repeatedly purified by passing over charred bone or bone black in much the same way that cane sugar is finally refined.

Purification is carried out in large vertical cylinders from 6 to 10 feet in diameter and some 20 feet high which are filled with bone black, i. e., bone burned in such a way that only the bone phosphate of lime and the carbon are left. The syrup is slowly run through these bone black filters and the impurities (traces of gluten and other constituents of the corn) which still remain in the starch are removed, after which the purified liquor is ready for concentration *in vacuo* to the desired specific gravity. The vacuum pans in which the syrup is concentrated are built on the same principle as those used in concentration of sugar liquors and the boiling is carried on in the same way except that in the manufacture of sugar the syrup is dropped at a point where it will give the maximum yield of sugar crystals, while in the manufacture of corn syrup the whole mass is evaporated to a syrup of 42 to 45 degrees Beaumé, as desired; in fact, it is the non-crystallizable property of corn syrup which is one of its valuable characteristics.

In the manufacture of corn sugar, on the other hand, crystallization is desired and the manipulation is somewhat different. Two general classes of corn sugar are found on the market—cake and granular. If a syrup in which the hydrolysis has been carried to a point at which about 86 to 90 per cent. of the starch appears as sugar (dextrose), in other words, where it has a purity of 86 to 90, and the syrup is evaporated to the proper point, there will be produced a cake made up of "cauliflower" shaped masses of hydrous dextrose which hold entangled the 10 to 14 per cent. of non-crystallizable matter in the form of syrup. Sugar in this form is called "70 sugar," "80 sugar," "Brewers' sugar," etc. If, now, this sugar is subjected to hydraulic pressure, the non-crystallizable syrup is squeezed out and there is left a dry sugar known as "bread sugar," because of its peculiar value in bread making. If the hydrolysis of the starch is carried to a point where practically 100 per cent. sugar (dextrose) is formed and the syrup after the usual purification is boiled to an exact point, a crop of needle-like crystals of anhydrous dextrose can be obtained. This product is called "anhydrous sugar."

Just as in the manufacture of cane sugar and beet sugar the efficient working of the factory and desired quality of the product is obtained through laboratory control, so in the manufacture of corn starch and corn sugar the laboratory plays a most important part. Samples of the corn used and in process at various points and the finished products are drawn at frequent intervals and tested in the laboratory. The results thus obtained serve as a guide for the efficient operation of the plant, and the production of finished products of uniform composition and quality.

The more important determinations made include those of moisture, protein, starch, reducing sugar, oil and mineral matter. In addition to these determinations, tests will be made on waste waters in order to make sure that there is no avoidable loss. In other words, a most comprehensive system of watchfulness is exercised from start to finish to see that production is carried on efficiently and that the finished products shall be absolutely pure.

The Capacity of Brewing Vessels.

By FRED M. MAYNARD.

It is surprising to find at the present day so many instances in which the proportions and arrangement of the plant are so curiously unsuited to the lengths brewed and the requirements of modern brewing; wherefore, a few practical notes on the subject may prove of use to those firms who have experienced trouble with their beers and disappointment in the yield of their materials—irregularities which may often be entirely attributed to this cause.

These shortcomings are usually in the direction of vessels being unduly large for the lengths produced, which has obviously been occasioned by a material reduction in the trade since the various items of plant were installed. In the case of the mash tun it is not uncommon to find that only half the quantities of malt are brewed for which this vessel was originally designed, this being also partly on account of the larger proportions of sugar in use at the present day. The material loss in extract due to this factor is, however, quite lost sight of.

In one instance a new tun had recently been erected, but no thought had been given to the fact that a vessel of only one-third the size of the old one was needed, the solitary guiding factor in determining its dimensions having been the utilization again of the old rakes and false bottom, notwithstanding that in a tun of the correct dimensions the former would have been quite unnecessary and could well have been dispensed with altogether, while the cost of a small new false bottom would have been wiped out very quickly by the better extracts obtained in a properly proportioned tun.

A contributory cause of the poor yield from such shallow mashes is the great drop in temperature which takes place while the goods are standing, which sadly interferes with conversion and is evidenced by the cloudiness of the tap-worts, which continues for some time after taps have been set, this having a marked influence upon the brilliancy and stability of the finished beer, the fining capacity of which will be poor; in fact, ales brewed under such conditions never exhibit that "finish" which is only found with properly brewed beers, while their keeping properties are far from satisfactory.

It is also a fairly well accepted practical fact that a very much more thorough exhaustion of the goods takes place during sparging when they exist at a fair depth in the tun than if their area is too great, and in breweries where the quantities of malt mashed vary to any appreciable extent it is distinctly desirable, on this score, to have two mash tuns of different capacities, their dimensions being strictly proportionate to the quantities mashed, so that on the one hand an unduly greater depth of goods, which might prevent the early use of the sparger, is not obtained, while on the other the unsatisfactory results of incomplete exhaustion and swamping of the goods by the sparge water falling on to them from too great a height is avoided. In this connection a very useful arrangement is the telescopic attachment to the sparge supply pipe, which permits the sparger to be adjusted to the varying level of the mash, which in properly regulated sparging operations should fall as sparging proceeds.

Although the necessity of raising the temperature of the wort immediately it leaves the mash tun is fully appreciated by all experienced brewers, it is quite common in many of the older breweries still to find underbacks devoid of any means of heating the wort lying in them, such wort subsequently being pumped perhaps long distances to a cold copper, whereby its temperature is further greatly

lowered—a state of affairs which again does not make for brilliancy or stability.

In the copper the detrimental results of shortened lengths are once more felt, since, when a vessel is designed to provide for a suitable depth of wort, in order to ensure its thorough boiling, if this quantity be cut down the shallowness of the volume will seriously militate against that perfect cooking which is so essential, the inadequacy of which goes such a long way to account for the poorer quality of beers turned out from many breweries that have suffered by loss of trade, and where it has, therefore, been compulsory to brew in lesser quantities, while the unmistakable inferiority of the product in many cases has contributed to a still further diminution of the output. In order to overcome this difficulty, in cases where the beers have hitherto been boiled in two lengths, it would be infinitely better to boil the whole brew at once, if the capacity of the copper permit, when, instead of showing any inferiority, the character of the beers would be correspondingly improved and would fully justify a deep ring being put round the copper should the increased length prove greater than could be comfortably boiled in the pan as it was.

Another very serious trouble experienced in such cases is that resulting from the excessive areas of the hop-back and cooler, for it is by no means rare to find a portion of the bottom of the former not even covered with the hops, with the result that the amorphous matters thrown out of solution during boiling are in no sense filtered from the worts, but pass forward with them in a state of suspension into the fermenting tun, where they clog the yeast and provide nourishment for bacteria, since much of what should be kept back by the hops never settles on the cooler and is frequently the cause of an opalescence in the beers, which no finings will completely remove, and which is similar to that observed when slack and inferior malts are in use—in fact, the one accentuates the other if both factors exist together. The evil of the absence or inadequacy of hop-back filtration is particularly serious when the worts are refrigerated direct from that vessel, and whatever it might cost to reduce its area, or to put in a deeper one, would be fully warranted, eliminating, as it would, one of the most serious handicaps to the brilliancy of the beers and the cleanliness and vigor of the yeast.

But if excessive hop-back area is dangerous, in the case of the cooler it is absolutely fatal, and it is utterly incomprehensible how firms can go on year after year suffering from abnormal "returns" directly attributable to employing coolers so shallow that the lengths run on to them never even cover the bottom. The writer has in mind one such vessel, which measured about 60 feet in length by 30 feet in width, in which even the longest length covered only three-quarters of the bottom, the other quarter remaining "high and dry." The refrigerator, it is true, was abnormally powerful and well shut in, but the unsatisfactory character of the beers had already been determined by the inevitable infection which had taken place on the cooler, and it afforded a typical example of the old adage of "shutting the stable door after the horse had fled."

A simple way to overcome such difficulties is to put in a deep hop-back with a small pumping back, and to pump from that to a small vessel commanding the refrigerator, this little reservoir being fitted with two stand pipes, one leading to the refrigerator and the other acting as an overflow pipe, down which any excess wort raised by the pump beyond what the refrigerator could deal with, would return to the pumping back. By such a method only perfectly filtered wort, and that at a temperature well above the dan-

ger point, would reach the refrigerator. In breweries where this arrangement has been installed and the shallow cooler thrown out of use the improvement in the beers has been very marked, the most fruitful source of infection having thereby been eliminated.—(London "Brewers' Journal.")

Mutation in Yeast.

Being somewhat doubtful as to the reality of the mutation assumed by certain bacteriologists to exist in bacteria, Bonzomski experimented with yeasts, as being of more complex structure, and also capable of rapid reproduction.

The chief property of yeast being to ferment sugar by means of its zymase, the author endeavored to find a nutrient solution in which yeast could grow without producing any zymase, and also to ascertain how to transmit this lack of fermentative material to succeeding generations, in addition to studying the influence of changes in the environment of the reproduction of the cells and on the formation of enzymes other than zymase. A standard mineral solution was used throughout, with asparagin or peptone as the source of nitrogen, and glycerol, mannitol, succinic acid, malic acid, d-tartaric acid, citric acid, and quinic acid as sources of carbon.

The conclusions formed as the result of trials extending over two years are that, on mineral substrata, with peptone and organic acids, yeast produces no zymase; but, on the other hand, the quantity of the oxidizing ferments is increased, especially by succinic acid. In the absence of sugar the yeast gradually becomes habituated to the new conditions, and the velocity of reproduction increases from one month at the start to ten days later on. On transference to media containing sugar the rate of reproduction is maintained, but the crop is increased owing to the abundant carbon available, and a slight fermentation is observed, indicating that not all the cells have lost the power of producing zymase.

Even when the capacity of fermenting sugar has been lost, it can be recovered by cultivation for several generations in a saccharine medium. Then minute dimensions and simple method of reproduction renders yeast cell far more sensitive than higher plants to the influence of environment, so that a longer series of generations is required for the restoration of a lost faculty; but in time the cells again become accustomed to the new surroundings, and once more produce zymase. This reversion, however, does not take place in all the cells simultaneously, but only in those least adapted to retain the newly acquired properties.

From all the circumstances observed, the author concludes that micro-organisms do not exhibit mutation in the sense expressed by De Vysence; they do not manifest either the requisite willingness to develop new properties or the faculty of transmitting these to succeeding generations. They merely adapt themselves to the new conditions of nutrition and other phases of environment.

In consequence of a change in one or more of these conditions the activity of the micro-organism is gradually diverted into other directions, and an effort is made, by the production of new ferments, to overcome the difficulties, and thus enable existence to be maintained.—("Yearbook, Agricultural Ins. &., Moskow, Russia.")

"DISCONTENT is neither unifying nor constructive. If a nation is to be regenerated, it must have fixed before it ideals of justice, and clearly formulated plans for carrying those ideals into execution."—(Michelet, Historian of French Liberty.)

Dr. Abraham Jacobi on the Value of Alcohol.

The value of alcohol should not be estimated or supposed, but studied and demonstrated. A prohibition movement kept up by "400,000 women" is no proof. Nor are 600 Congressmen capable of deciding a scientific problem, though fortified by a caucus. Great scientists, fortified by the results of their experience extending over a century of studies in the laboratories or at the bedsides, are required to furnish proofs. They are numerous. I give you only a few names. I quote F. Penzoldt's seventh edition (1908) of "Clinical (Medicinal) Treatment" and the sixth edition (1915) of Arthur R. Cushing's "Pharmacology and Therapeutics." They are standards. Penzoldt says:

"Alcohol, in the shape of alcoholic beverages in individualizing administration, is an invaluable remedy in the treatment of numerous, mostly feverish, diseases, particularly in cardiac debility; it is very much administered externally."

And again: "Alcohol dilates the blood vessels. In that way the sense of warmth is a regular occurrence. Still, the body temperature caused by the dilation of blood vessels. Alcohol introduced into the body is burned up into carbon dioxide and water. Another positive effect of alcohol is its saving of fat, and also of protein. Direct stimulation of the nerve centers increases the amount of respiration. Experiments have proved that moderate doses of alcohol impair the action of the muscle when in its normal condition, but repair it at once when totally incapacitated for work. Medicinal doses reduce the sensitiveness for pain and worry. The local application of alcohol is frequent. It results rapidly in coolness and secondary hyperaemia which is very extensive. Alcohol is a disinfectant. It acts favorably as an application to furuncles (boils), phlegmons, inflammations, erysipelas, and as a preparation to general disinfection with tincture of iodine. It removes fat from soiled skin, and for that purpose, when its application is temporary only, it may be used undiluted. Otherwise, diluted with equal parts of water, it is in common use, and appreciated."

I hope in "prohibition" camps also. Arthur R. Cushing, page 181: "Alcohol as a food. It has been shown that only 5 per cent. or less of the ingested alcohol is excreted, while the rest of that absorbed from the stomach and bowel, amounting to over 95 per cent., undergo combustion in the tissues. * * * In undergoing combustion alcohol gives up energy, and therefore is technically a food. * * * It acts as a substitute for carbohydrates in the food."

There are recoveries which will set in without treatment, but we do not know beforehand which they will be. No alleged mild case is safe until recovery has taken place. When heart failure has once set in—and it frequently does in apparently mild cases—our efforts are too often in vain. Thus alcoholic stimulants ought to be given early and often, and in large quantities, thoroughly diluted. There is no such thing as danger from them or intoxication in septic diseases. Three ounces daily may suffice, but I have often seen nine ounces or more of brandy or whiskey save children who had been doing badly with three.

In the treatment of infant diarrhoea and dysentery small and frequent doses of alcohol will certainly stimulate the nervous system, digestion, and circulation, and they also stimulate the skin and increase perspiration. Alcohol given in this manner certainly arrests fermentation. Moreover, it takes the place of food, and will act favorably as food where no solid carbohydrates are tolerated by the intestinal tract. As it is absorbed in the stomach, so does it protect the intestinal tract. It has been found that when only small quantities of milk and pure alcohol and water are given as food the body increases in weight. But it is

absolutely necessary that the alcohol or the alcoholic preparation should be pure. Fusel oil will dilate blood vessels, produce and increase congestion, and prove dangerous. Where no good brandy or whiskey can be provided it is better to use alcohol in substance diluted with water.

Backing Up the Product.

By ALBERT H. WEHR, President

G. B. S. Brewing Co., Baltimore, Md.

A nationally known and successful merchandising authority recently made the statement that making a product is a comparatively easy proposition, but selling it is a horse of another color.

"Given a formula," said he, "it ought to be comparatively simple to produce a uniformly good product and the chief duty of those interested in its production resolves itself into seeing to it that the materials used are standard and the conditions necessary to the carrying out of the formula are maintained.

"Upon the other hand, when you come to sell your product you're not dealing with a formula that can be worked out in terms of raw materials but with the complex characteristics of the great human family."

There has been an ever constant effort upon the part of the industry generally to improve and maintain the quality of its product—materials are selected with scrupulous care by highly trained experts—the water used is divorced from every vestige of impurity—every known sanitary device for the protection of the product's purity is installed—the latest word in bottle filling and sealing is adopted and every known method of efficient inspection is employed.

But can we afford to stop there? Can we afford to make a quality product and let the selling take care of itself?

It's a matter of common record that a product must have merit to make good, but by no matter of means is it a fact that all meritorious products bring success to their producers.

It seems, then, that the Bottler of Beer, however fine the quality of his product, cannot spend too much time in working out his distribution problems.

Wouldn't it be well, for instance, for those of us who are selling to the housewife to carefully analyze whether the same type of representative who successfully handles the saloon, hotel and restaurant trade is suitable for home solicitation?

Wouldn't it be an excellent thing for more of us to bring our selling organization together as often as possible, having them meet, listen and talk to men in other lines who are successfully solving the problems of selling?

Shouldn't we constantly impress our entire selling and delivery organizations with the fact that the individual's personality and mode of conducting business with the public is a tremendously important factor, not only in selling but in building up "good will" for the industry generally.

There's no business anywhere that requires that more attention be given to its selling campaign—every point of contact with the public should be diplomatically, pleasantly and efficiently covered, whether it be through the medium of the personal representative—the advertising—the wagon or truck that carries your product to the consumer or the man who actually delivers the goods into the home.—("The Crown of Baltimore.")

Conservation of Fermentative Organisms in Nutritive Media.*

By A. KLOCKER

The author's experiments, which in many cases were carried on with the same vegetations as were used by Hansen in 1898, confirm the excellence of a 10 per cent. aqueous solution of saccharose as a medium for conserving yeasts and moulds, though many of these fungi retain their virility for a considerable time in beer wort, which moreover, is even better than saccharose solution in some cases, such as *Saccharomyces Ludwigi* and certain *Schizosaccharomycetes*.

In all, 820 vegetations were examined, of which 461 were conserved in saccharose solution, 290 in beer wort and 69 in other media. Of those kept in saccharose, 403 specimens, or 87 per cent., were still alive, whilst 58, or 13 per cent., had perished; of those kept in wort 268, or 92 per cent., were alive, and 22, or 8 per cent., dead. It is thus evident that both media are well adapted for conserving the life of yeasts and moulds, the fungi being able to retain their vitality therein for over 30 years.

Exceptions to this rule are afforded by:

(1) The asporogenic varieties of *Saccharomyces*, only 13 (44 per cent.) of the (32) cultures in saccharose having survived, whereas 18 (56 per cent.) perished, and out of 14 wort cultures, 11 (78.6 per cent.) were dead. The oldest of the living wort cultures had attained ages of 15-20 years.

(2) *Saccharomyces Ludwigi*, only one of which, out of a total of 9 cultures in saccharose, survived, the remainder having died off after 3 to 7½ years. All the 5 wort cultures were still living, after 25 years.

(3) *Schizosaccharomyces*, only 2 of which—*Schizosaccharomyces*, 17¾ years, and *Schiz-sp.*, 11 years—out of 5 saccharose cultures, survived, though 10 out of 11 wort cultures were still living. On rice, these forms seem able to retain their vitality for at least 9 years.

(4) *Aspergillus glaucus*, which differed from all the other species of this genus. Of 6 saccharose cultures only one remained alive at the end of 2 years.

Hansen's 3 acetic acid bacteria were able to keep alive for 5 to 9 years in double beer.

A few of the specimens had perished in consequence of the evaporation of the liquid, but this can be prevented by the use of Pasteur flasks, which are the best vessels for protracted storage, though they have the two-fold drawback that they take up a deal of room and that the rubber stoppers harden and break easily in course of time. A remedy for this latter defect is to close the lateral tube with a plug of asbestos and seal with wax. To reduce the evaporation in Freudenberg flasks, an S capillary is attached by means of a small rubber tube.

Generally speaking, saccharose solution is preferable to wort, as being of more uniform composition, the variations in the latter medium being capable of exerting a destructive influence on the organisms, some of which occasionally die off from no apparent cause—one *Saccharomyces*, for instance, having perished in 2 months, whilst two others sown at the same time survived (all three were from wort cultures 26 to 28 years old).

EVER GROWING TYRANNY. "The prohibitive tyranny grows and becomes bolder with use, and each shackle that it imposes on the community is an encouragement and an incentive to devise another. There is no end to it."—(N. Y. "Sun.")

* Comptes rendus des travaux du laboratoire de Carlsberg.

Influence of Ammonium Salts on Growth of Barley.*

By G. SÖDERBAUM.

In conjunction with phosphate fertilizers of low solubility (tricalcium phosphate, phosphorite, bone-meal), ammonium salts give better results than Chili saltpetre with Gramineæ generally, but barley is an exception, since it appears to be able to adopt itself better to nitrate manures.

The author has studied this peculiarity of barley; 84 pots each containing 28 kilos. of sand soil were used for comparative experiments. Each was treated with 0.5 gram of sodium chloride and 1.17 gram of potassium chloride (corresponding to a dressing of 132 lb. of potash per acre); 27 were treated with 3.65 grams of superphosphate each, another 27 with 7.27 grams of Thomas slag each, and another 27 with 3.45 grams of bone-meal, these amounts all corresponding to a phosphate dressing of 132 lb. P_2O_5 per acre. Each group of 27 was further divided into three groups of nine each, which received respectively amounts of Chili saltpetre, ammonium chloride, and ammonium sulphate equivalent to 132 lb. of nitrogen per acre. In each of these sub-groups of nine pots each, three pots received 1 gram of magnesium sulphate, and another three pots 3.44 grams of magnesium carbonate each. The barleys were sown on May 4th, and the first shoots appeared a week later. By the end of the month it was observed that in the pots treated with superphosphate, ammonium salt and magnesium sulphate the leaves turned yellow, growth stopped, and in some cases the plants died. This was more pronounced with the pots containing ammonium chloride than with those containing ammonium sulphate. Those plants which survived this crisis afterwards began growing again in a normal manner. No such trouble was apparent in the pots containing superphosphate, ammonium salt, and magnesium carbonate.

The weights of the crops obtained confirmed what had been apparent three weeks after sowing. In the series with superphosphate, as well as that with bone-meal, the crops obtained with ammonium salts were only 80—90 per cent. or, in some cases, as low as 60 per cent. of those obtained with nitrate. It is noteworthy also that, on the whole, better results were obtained with ammonium chloride than with ammonium sulphate, in spite of the more pronounced symptoms of poisoning noted during the early stages of growth in the former case. In the series with bone-meal and ammonium salt the yield was increased by magnesium carbonate, but the latter produced a considerable reduction in the yield in the series with bone-meal and Chili saltpetre.

The relations were altogether different in the series with Thomas slag. No marked distinction was found between ammonium salts and nitrate, or between magnesium sulphate and carbonate, or between different ammonium salts. In certain cases ammoniacal manure may give as good a crop as nitrate, and if under other and frequently occurring conditions the nitrate gives better results, this is probably to be attributed to a toxic action of the ammonium salts on the tender plantlets at an early stage.

Attempts have been made to account for the specific unfavorable action of ammonium salts by assuming that, in consequence of the assimilation of ammonia, the acid (hydrochloric or sulphuric) with which it was originally combined remains to a large extent in the free state, and raises the acidity of the plant tissues. This would account for the favorable influence of magnesium carbonate in the series with phosphate and ammonium salt, and also for the better results with the lime-rich slags as compared with the phos-

phate fertilizers; it would simply be a matter of neutralizing capacity of calcium and magnesium carbonates. The author rejects this explanation, however, and considers that ammonium salts must exert a direct, toxic action on the plant. According to recent investigations calcium and magnesium carbonates appear to favor the nitrification processes in the soil and thus promote the transformation of injurious ammonium salts into harmless nitrates; this would account for the favorable action of these carbonates.

NITROGEN-SYRUP. By E. Jalowetz, in "Chem. Ztg." When yeast is permitted to act for some time on solutions of sucrose at a temperature of 50-55 deg., the sucrose undergoes inversion. Experiments were made, using varying amounts of yeast and definite concentrations of sucrose, and it was found that when the concentration of the sucrose is maintained constant, and the amount of yeast used is increased, more invert sugar is obtained, while when the concentration of the sucrose is increased, and the amount of yeast used kept constant, the amount of inversion is decreased almost in direct proportion to the rise in concentration of the sucrose solution. The nitrogen syrup was obtained by dissolving the sucrose in water at a temperature of 40 deg., and stirring well-washed brewers' yeast into the solution. The mixture was kept at a temperature of 53-54 deg. for 4 hours and then evaporated to syrupy consistency. The finished product had a protein content of 2.4 per cent. and the taste and appearance were similar to that of a malt extract. By adding larger amounts of yeast the albumin content of the syrups obtained was raised without changing the taste of the product appreciably. The use of the syrup offers great nutritive value, since, besides the carbohydrate content, it contains protein matter.

CONSUMPTION OF WATER FOR WASHING BOTTLES AND CASKS. The application of waste steam to the heating of water for washing casks and bottles is a widely practised brewing economy; but even where the whole of the waste steam is thus utilized there may still be room for further saving of fuel if the amount of warm water used for washing is unnecessarily great. In order to ascertain to what extent the consumption of water for washing varies under ordinary working conditions, the author, E. Haack, made daily records of the amounts used for cask-washing and bottle-washing in a brewery. The records for bottle-washing extended over 18 days, during which the number of bottles treated ranged from 6,000 to 20,000 per day. An ordinary washing plant with soaking trough was used, and the temperature of the water varied from 93 deg. to 129 deg. F. The daily consumption of water, in relation to the number of bottles washed, showed very wide fluctuations, ranging from one to four pints per bottle (capacity about half a pint). In the cask-washing department much greater variations were found. An automatic cask-washing machine was not used, but the casks were rinsed with a jet of water from a spraying head. The number of casks washed per day ranged from 30 to 63, and their average capacity was about 18 gallons. The records extended over 41 days, and showed fluctuations in the amount of water used ranging from 2.6 to 26 gallons per cask, i. e., from 1-6 to nearly 1½ times the actual capacity of the casks. The amount of water required must naturally depend upon the condition of the bottles and casks, but the wide fluctuations observed, representing as they do daily averages for a large number of bottles or casks, show that there is need of a better control of the amount of water used for cleaning, since all this water has to be warmed.—("Wochensch. Brau.")

* "Kungl. Landtbruks-Akademies Handlinger och Tidskrift."

Testing Refrigerating Agents.*

If the refrigerating machinery is to develop its full output capacity, it is absolutely essential that the refrigerating agents—ammonia or carbonic acid—which circulate therein should be free from all harmful constituents. When the output of such machinery diminishes while running, the general tendency is to suspect the compressor; but when this is taken apart for examination, nothing abnormal can be discovered. Too often the user ignores the consideration that other factors may intervene to influence the working of the machine.

Chief among these factors is the impurity of the refrigerating agents to be evaporated. Now, such impurity exerts a predominating influence on the output, which has been found, in many instances, to be impaired to the extent of 20 per cent. from this cause. Naturally the machinery cannot then work at full capacity, and it will therefore be recognised that the point merits attention, and that the purity of the refrigerants employed should be ascertained by careful preliminary tests, it being borne in mind that these refrigerating agents can, nowadays, be manufactured in a high state of purity.

The following are the simplest methods of testing the purity of the various refrigerating agents, taking first those used in connection with the ammonia machine, this being the system most extensively used. The chief impurity in ammonia is water, and it is therefore necessary to test for this latter before the bottles are used. To apply the test the bottle is tilted so as to pour out a small portion of the contents into a dish, taking care that none of the liquid touches the fingers. As the ammonia evaporates, it should not leave any appreciable residue of liquid (water). To measure this residue accurately, the evaporating tube is provided at the lower end with a small tubular extension which is graduated. The yellowish liquid remaining in the tube should not exceed 0.5-1 per cent., otherwise the ammonia is not suitable for use. The ammonia circulating in the machine should also be tested for moisture from time to time, test samples being drawn from a tap provided for that purpose.

Another cause of reduced efficiency arises from the presence of a large percentage of oil—which is a bad conductor of heat—in the vaporising coils. When the machine is running, the piston rod is continually drawing a little oil into the cylinder, whence it passes into the condenser and vaporiser, so that great care should be bestowed on watching the consumption of oil and on separating this latter. When the proportion of oil in the vaporising coils attains a certain extent, the intake gauge will record temperature appreciably below the normal, and the valve chests will become coated with hoar frost. Oil is sometimes removed from the vaporiser by aspiration.

In sulphurous acid machines the acid itself lubricates the piston rod and the cylinder; but in this case the mixture of acid and water is still more injurious, owing to the formation of sulphuric acid which corrodes the vaporiser and condenser tubes. The contents of each bottle of acid should therefore be carefully tested, the method being the same as for ammonia. The pure acid, suitable for refrigeration purposes, should be water-clear, a cloudy or milky appearance indicating the presence of water. Whereas the pure acid will evaporate quickly, leaving no residue, this is not the case when it forms aqueous solutions, and in such event it is unsuitable.

The compressor of the carbonic acid machine is lubricated with glycerine. It is necessary, in this case also, that the refrigerating agent should be pure, and the contents of each cylinder therefore require careful examination. Seeing that water is heavier than carbonic acid, the cylinder must be inverted, and left in that position for several hours, before the sample is taken. If water is present, it will then issue from the cock first. A very small quantity of water is sufficient to thin the glycerine so that the coils congeal and the efficiency of the machine is lowered, even if the latter does not stop altogether. A useful test for the presence of moisture is to hold a piece of white cloth under the aperture of the junction valve. If the carbonic acid is pure, the cloth, which rapidly becomes frozen and stiff under the action of the gas, remains quite dry when the acid has evaporated; but if it is found to be wet or damp, the gas contains water. In the event of the glycerine being found to have liquefied, it should be drawn off into the glycerine separator, and replaced by a fresh quantity.

BEHAVIOR OF YEASTS AND MOULDS TOWARDS HETEROCYCLIC NITROGEN COMPOUNDS AND ALKALOIDS. By F. Ehrlich, in "Biochem. Zeitschr." Nitrogen ring compounds, like pyridine, piperidine, conine, nicotine, quinine, cocaine, morphine, etc., were tested with various organisms, among them *Willia anomala* Hansen, *oidium lactis*, *Aspergillus niger*, and *Penicillium glaucum*, in all cases considerable growth occurred, but after some time was checked by poisonous by-products.

ACID-RESISTING PROPERTIES OF SOME IRON-SILICON ALLOYS. By O. L. Kowalke in "Proceedings of the American Electrochemical Society." Various acid-resisting alloys of commercial importance have been produced within recent years, and among these the iron-silicon alloys seem to give satisfactory service in many operations. Little information, however, seems to have been published on the acid-resisting properties of the iron-silicon alloys, and an investigation was undertaken to determine their resistance to several common acids. Eighteen low-carbon iron-silicon alloys, containing 1.2 to 19.8 per cent. of silicon, were immersed from periods of 51 hours to 29 days in 10 per cent. solutions of sulphuric, hydrochloric, nitric, acetic and citric acids, and the losses determined. With a few irregularities the resistance to acid attack was a minimum at 1.2 to 3.3 per cent. silicon, and a maximum at 16 to 18 per cent. The latter alloys are very hard and brittle. Attempts are being made to find an addition element which will decrease these undesirable qualities without impairing the resistance to acids.

ESTIMATION OF LÆVULOSE IN PRESENCE OF DEXTROSE. By L. Lowe, in "Proc. Soc. Experim. Biol." One cubic centimetre of the liquid under test is treated with 6-8 drops of orcin solution and 1 c. c. of 85 per cent. phosphoric acid. The mixture is heated to boiling, and held for 10 minutes in a boiling water-bath. If lævulose is present, a more or less intense yellow color is produced, according to the amount present, and, on cooling, a yellow precipitate separates. On neutralizing with caustic alkali, the yellow color becomes orange, and the latter is used as the basis of a colorimetric method for estimating the amount of lævulose present, the color being compared with those produced in liquids of known lævulose-content. By this means the author detected lævulose in 1 c. c. of a 0.005 per cent. pure aqueous solution. A positive result was obtained with 0.5 c. c. of a 0.1 per cent. solution of lævulose in presence of 0.5 c. c. of a 20 per cent. dextrose solution. Maltose, lactose, galactose, and arabinose are without any influence on the reaction.

* "Revue de la Brasserie Suisse."

Notes and Queries.

This portion of our columns is designed for the use and benefit of practical brewers, who, being subscribers to the JOURNAL, are cordially invited to apply to us for advice on all practical and technical matters pertaining to brewing and malting.

By special arrangement these questions will be submitted to and answered by the Director of the *National Brewers' Academy and Consulting Bureau*.

Where personal interview, analysis or investigation are necessary, terms will be made reasonable; particulars of such expense being forwarded before the work is commenced.

Inquirers may indicate some word or initial under which they desire to be answered. No notice will be taken where correct names and addresses are not given; these are not for publication, but as an evidence of good faith.

As nearly all the questions we receive refer to matters generally interesting to the trade, our readers will find it to their advantage to carefully follow our replies.

H. T. We regret that your brewery should be so far away from the center of our activities, and that, consequently, we are unable to make the proposed inspection. There are, however, brewing technologists within easy reach of your city who could undertake the work and give a reliable opinion. From what you tell us, all your troubles seem to arise subsequent to the cooling and yeasting of the wort, but there is just a chance that they may be primarily due to defective brewing materials or defective mashing methods.

J. W. S. The malt you submit to us is an extremely poor brewing material, and we are at a loss to understand why it should have been accepted. Our advice to you, under the circumstances, is to set your mill rolls a little closer and grind the malt a trifle finer. Get an initial temperature of about 28 degrees R. and maintain it steadily for 2 hours before letting down your raw grain mash. Get the two mashes together as quickly as possible and saccharify at 52 degrees R., maintained for 45 minutes. Mash off at 56 degrees R., and rest for 1 hour. If you will follow these instructions exactly as we have given them, you will see a very material improvement, not only in your yields from the malt, but in the behavior of the beers during fermentation.

T. B. You can very readily make all the necessary connections at very little cost, provided you have an intelligent and competent engineer. The temperature of the steeping water should be maintained uniformly at 55 to 56 degrees F. All the other details of the steeping process should be carried out in accordance with our recent instructions.

H. Q. We are not at all surprised to hear that your yields fell off so very considerably during the last six months of the past year. We called your attention on two occasions to the inferior quality of your malts with special reference to their abnormal percentage of moisture. The average practical brewery yield of last year's malt did not exceed 63 per cent., and so far as we can ascertain from the brewing sheets you have sent to us, your own yields did not amount to 56 per cent. It is quite evident that your brewery is in serious need of scientific control.

J. M. The amount of foreign organisms that may be permitted in a yeast must naturally depend to a great extent upon the nature of the organisms. There are some bacteria which, if the slightest chance is given after the withdrawal of the deterrent influence of yeast, for example, will create havoc during the end of the primary fermentation in a very short space of time, and develop with a rapidity almost inconceivable. It is, therefore, wise always to take into consideration not only the amount of the contamination of the yeast, but its nature, and this is why the examination of yeast demands so much care and practical knowledge.

F. A. M. We cannot give you an intelligent answer to your question in the absence of the necessary analytical data. From what you tell us, however, we are inclined to think that the taste and odor you complain of both arise from the defective quality of your pitch, without reference

to the temperature used in your pitch kettle. If you are connected with a brewers' laboratory, you can very readily verify our opinion by submitting samples for analysis and noting the remarks of the analyst.

B. J. We cannot see anything to criticise in the advice given you by your Consulting Brewer, but on the contrary are disposed to entirely agree with his conclusions. You have hitherto been using too low a proportion of malt, and converting your mash at very unsatisfactory saccharification temperatures. The type of wort produced in any brewery must be regulated by the quantity and quality of the malt; the percentage and kind of mineral salts; the percentage and character of the protein; and the ratio of fermentable to non-fermentable bodies. We think that one hour's digestion of the malt at low temperatures will be quite sufficient. We also believe that saccharification at 53 degrees R. will be satisfactory. The finished beer, when you rack it from the chip cask, should be of about 3 degrees B. gravity.

J. V. C. The sample of malt you have submitted to us is of very inferior quality; probably made from a lower grade six-rowed barley. The germination has been very imperfect, and very nearly 50 per cent. of the malt is only about $\frac{1}{4}$ grown. The barley was insufficiently steeped; the meal-body has been very imperfectly modified. We should not care to suggest any basis for a commercial valuation of malts of this character.

M. M. C. You could probably equip a laboratory suitable for your purposes at a cost of from \$4,000 to \$5,000. You could doubtless secure the services of a competent young man to take charge of your laboratory and perform all your analytical work at a salary of, say, \$2,500 per year. Have you studied this question in all its bearings? Before you definitely enter on such an undertaking, you should well weigh the propriety and advisability of abandoning the services of your present consultants, who have had many years of active and varied experience, of which they give you all the benefit for a comparatively moderate fee.

H. W. Speaking from our general knowledge of such geologic strata as that which you describe, we are inclined to believe that, if the well is 170 feet deep, all the chances are in favor of your getting organically pure water. Despite this opinion, however, we can see no objection to surrounding the upper part of your well shaft by a solid wall of good masonry, being careful to see that the entire surface of the ground in the immediate vicinity of the well is properly covered with concrete or asphalt.

C. P. H. We have found in our own practical experience that well established contamination by *Sarcina* cannot be overcome by extra heavy hopping of the worts in the kettle. We, therefore, believe that the practice is a fallacy, even if such heavy hopping has proved efficacious in some specific cases. One of the first things for you to discover is the source of your *Sarcina* infection. Is it stables, pigeon roosts, neglected grain heaps, malt-mill dust, etc.? Unless you discover the origin of the evil by a systematic investigation, you will always be liable to a recurrence of your present trouble. In the meantime, we recommend an immediate change of yeast and a thorough housecleaning.

B. F. C. We can see no reason for condemning, or even for adversely criticising, the pitch of which you sent us a sample. It is normal in color and odor, in fracture, and in specific gravity. It is quite insoluble in, and communicates no odor or flavor to a 5 per cent. alcoholic solution, slightly acidified with acetic and lactic acids. It has excellent coating qualities, and does not crack when dry. We should pronounce this a first-class pitch for brewers' use.

— THE —

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Our Increasing Production of Beer.

The Commissioner of Internal Revenue at Washington reports that in 1916-1917 stamp taxes were paid in the United States on 60,729,509 barrels of domestic beer, an increase of 2,165,001 barrels as compared with the figures for the preceding fiscal year.

This does not look as if the American brewing industry were near its death rattle, an alleged "fact" which its enemies would like to make their dupes believe. Far from it. We are upon the up-hill road again. True enough, we have been going down since 1911, when the taxed output of the American breweries amounted to 63,283,123 barrels, until, in 1914, it reached the record figure of 66,189,473, far outdistancing all other beer-producing countries, some of which, years ago, were considerably ahead of us in this respect. That there was a decrease since 1911 has been explained several times, local economic and political conditions being responsible. There was the depressing effect of the financial panic of 1907, which retarded the growth of many other industries until they completely recovered and were once more enabled to progress at a rapid rate. Aside from this the brewing industry was hampered by the onslaught made upon it by the Prohibition parsons and their political helpmates and their ignorant fanaticized followers, whose trickery and foolhardiness closed entire States to the disposal of the brewers' product. But even that obstacle has been almost entirely overcome by the trade adapting itself to prevailing conditions and so we may now expect that henceforth there will be plain sailing for our invincible industry. It cannot be conquered nor can it be killed, because the masses of people in all civilized countries are accustomed to alcoholic stimulant, and governments know very well that in these excited times the mood of the laboring classes cannot be trifled with. England knows it; Germany knows it; France knows it; the Russians will have alcohol, and all other European and American nations are demanding and obtaining it. The demand is there, and where there is a demand for any commodity, nature, through the genius of the human mind, liberally offers the supply. This natural law has never been reversed, and it cannot be reversed by artificial "laws" voted for by politicians or misguided citizens.

Therefore, we may look for a constant improvement in the situation. The American workmen are prosperous; their wages are increasing and their purchasing power will greatly increase as soon as this war has been ended. The people of the United States will be busier than ever before, the laboring power of Europe having been almost exhausted, and America, still in the full vigor of its manhood, intellect and inexhaustible natural resources, will have to be the restorer and provider for the countries devastated by the battling millions of the rest of the world.

There is no reason why we should whine and whimper. We have the best reason for being optimistic, and the events of the coming years will demonstrate that we have not erroneously read the signs of the times.

Editorial Comment.

Opinions Expressed upon Current Events as they may Affect the Brewing Industry and its Affiliated Trades.—The Prohibition and Local Option Movement, as reflected by Legislation, Judicial and Executive Action.

Food Shortage Artificially Produced.

The enemies of this nation, prominent among them the Prohibitionists, are constantly talking about there being a food shortage in the United States, and they demand, therefore, grains should not be employed in the production of alcoholic beverages.

There is a shortage in meat. That is true. And it has partly been caused, as we have previously shown, by the Prohibition States no longer permitting the production of beer and spirits, farmers being unable to raise cattle by feeding them spent grains. But there is no shortage in cereal food. There is grain enough in the United States to overfeed its population and export hundreds of millions of bushels of corn, wheat, rye and barley to Europe.

But why are prices so high? people ask us.

That is more than simple. In the first place, enormous quantities of cereals and all other food products have been bought up by speculators, who keep these commodities stored up and away from the market, while, secondly, the agitation of the nation's enemies has resulted in a mental panic among those ignorant of real conditions. These ignorami repeat what they have heard the agitators and propagandists say and the consequence has been that the greed of the middlemen, taking their cue from the universal stupid and sinister talk, are falling over one another in a mad scramble for increasing profits. Wherever one goes he hears that "the war is raising prices for everything." Every grocer, every butcher, every butter and egg man, every milkman and every peddler tells you that "things are scarce and that's why we cannot sell any cheaper than we do." The consequence has been that many well-to-do persons have bought provisions in larger quantities than usual. Barrels of flour, sugar, potatoes, canned goods, etc., and hundreds of tons of coal have thus been hoarded by people who are afraid that when the winter comes they will not have anything to eat and that they will have to freeze.

So we see that unwarranted talking, stimulated by the lying statements of the nation's enemies are at the bottom of our present troubles, and if wages do not keep step with the general trend of artificial raising of prices those now suffering will have to blame the liars who told them that there is a shortage in everything.

But the day of reckoning will come. Next month we are going to the polls to vote against every candidate who is known to have assisted in talking "shortage!"

Some of the Prohibition parsons and politicians are now trying to bribe members of the trade into betraying their fellow workers and comrades by offering them "employment" in case they should lose their jobs, or their business being destroyed by Prohibition. So far we have not noticed that these offers have been accepted by any considerable number of any of our friends, probably not only because no sane person believes that the tempters are sincere, or that they could provide decent jobs that pay as well as the trade does, but because there are no traitors among the trade.

"Statistics" and Statistics.

Prohibition agitators are in the habit of quoting alleged "statistics" to show that in Prohibition States idiocy, insanity, poverty and crime are decreasing while increasing in States without Prohibition. This is not only untrue, but it now also appears that in Prohibition States statistical figures are systematically falsified. It is a notorious fact that arrests for larceny, assault, murder and other violent crimes are not reported in the official returns of the police, to produce the desired "statistics."

The Federal Government has recently published the result of an inquiry regarding psychiatric conditions among the people of the United States, showing that the number of the insane, idiotic and drunkards is increasing proportionately more rapidly than the population, a phenomenon which has been observed almost everywhere in the world, the reason being that the masses are partly overworked and partly underfed. That condition is simply one of the result of the present competitive system, and it cannot be changed unless the system be changed.

But what is most interesting and most significant is the fact that the increase of idiocy, insanity and drunkenness is far greater in Prohibition States than in those States where the people have not been foolish enough to have permitted Prohibition to be imposed upon them.

The Government's figures show Maine to be the State where the increase in idiocy has been greatest, as during the last seven years that increase was 506 per cent.! In New York and Pennsylvania the increase was 61 per cent.; in Ohio, Utah and Wisconsin about 44 per cent.; in Minnesota only 15 per cent.

Another unassailable witness, Dr. C. F. Bolduan, director of the Maine Bureau of Public Health Education, has stated that "no matter what the effect of Prohibition laws may be upon crime and civic evils, they have not succeeded in preventing a rapid increase in the death rate from diseases ordinarily attributed to alcoholism in Maine. In twelve years, according to Dr. Bolduan's statement, Bright's disease and apoplexy have increased from 279 to 339 per 100,000. This increase, he says, has been greater in Maine than in any other State in the Union.

So there!

We have not seen anything in the Prohibition papers in regard to these figures and we do not expect them to discuss them. It would knock the agitators into a cocked hat if they did.

The totals elicited by the National Committee for Mental Hygiene, whose members conducted the inquiry, are these: In all public institutions of the United States were found 37,220 idiots, 234,000 insane persons, 10,394 epileptics, and 4,891 drunkards and users of opium.

These figures are not exactly exhilarating, but they demonstrate at least that Prohibition is not a means toward making the American people sane of mind and sound of body.

Who Pays the Taxes?

The Commissioner of Internal Revenue reports that in 1916-1917 the aggregate collections of Federal taxes in the United States amounted to \$809,393,640.44, of which \$85,511,392.05 was collected in the Prohibition States, leaving the rest of \$723,882,248.39 to have been paid by the States whose inhabitants have not been foolish enough to have had Prohibition imposed upon them.

So the Prohibition States gloriously support the Federal Government, its army, navy and all the other machinery of Government by a contribution of one-ninth of the total taxes paid by the entire nation.

And that ninth of our people pretend to dictate to the other eight-ninths in regard to what they shall eat, drink and do all the other things done by men and women in our blessed Democracy. Isn't it wonderful!

These figures, published year in and year out by the Government in Washington, when contrasted with the pretensions of the parsons and politicians in those Prohibition States more than anything else demonstrate that their inhabitants and their industries are still sadly undeveloped and unprogressive. And yet they assume the rights of an overwhelming majority! They do not represent a majority; neither in numbers of population, nor in wealth, substance and intelligence, and it is high time that the other eight-ninths of the populous, progressive, wealthy and intelligent North American States should take steps to rebuke that pretentious, though insignificant minority by sternly making it take a back seat, behave with due modesty, and stop talking and acting as if it were the teacher and the boss.

They profess love for others, while their actions show that they hate everything and everybody to whom they cannot dictate. The Prohibitionists love nobody but themselves.

The American soldiers and sailors who are now in Europe and the hundreds of thousands who are to follow them, will return to the United States—every one of them not killed—agitators against Prohibition. They will resent being less free than their British and French comrades in arms who sympathize with them, and pity them for being treated like children that must not drink whatsoever narrow-minded parsons and peanut politicians have decreed shall not be sold to them. British and French soldiers and sailors in the United States can get all the beer and whiskey they want, while American men in uniform must stand by and envy them. That sort of "Democracy" will not make much headway in Europe!

Beer Makes Men Brutal.—Headline in Prohibition Organ.

Is that so? Well, let's see: Of all the nations engaged in the present war, the Turks are the only ones whose religion prohibits them from drinking alcohol. The others have all been drinkers of wine, beer and spirits all their lives, and their ancestors for thousands of years. Are the Turks less brutal than any of the other belligerents? Have they not murdered hundreds of thousands of Armenians and other Christians and Jews? Are British soldiers brutal? Are Hollanders and Belgians brutal? They drink more beer than most of us. Are the millions of German ancestry in this country typically brutal? Their harmlessness has been the butt of the stage for generations. It is simply false that men are made brutal by drinking beer. There are brutal men that drink beer, yes; but there are also those that do not drink at all, and still they are far more brutal than all drinkers. Prohibition—thy name is brutality!

Back to Bestiality and Gloom?

Have you ever observed a Prohibition parson or a Prohibition politician who was a man with humor or kindness? We haven't. These fellows are as dangerous to the human race as everyone of the monsters of whom history tells us.

When man was still a carnivorous beast, killing his neighbor to obtain food, furs, shelter or weapons, he had no humor and no smiles, no more than the tiger, the hyena and all the other ravenous beasts that have come down to us from the times of prehistoric man. The barbarous conquerors who devastated whole continents were men with no humor and without a smile. The dark ages produced such monsters as Torquemada, Alva, Nero, Tamerlane and all the others who have tortured, robbed and assassinated millions of their fellow beings. They were men who never laughed, smiled or enjoyed a good story. They only knew hatred and cruelty. Napoleon Bonaparte never smiled. Nor does his understudy of our present holocaust.

But the real great men of history, those who worked and fought for liberty and progress, were all kind and humorous. Washington and Lincoln were of that type, and so were all of the great men in literature, the arts and sciences.

You can always tell whether a man or a woman is really good and kind if they go through life with a smile on their face; if they enjoy a good story, or tell a good joke.

The Prohibitionist frowns, scolds, knocks and hates. He could not be kind and pleasant to save his neck. He is hidebound in his brutal doctrine; he is a spoilsport who sprinkles ashes on the slide when his neighbors are trying to enjoy themselves with coasting or sliding. He wants to deprive us not only of the cup that cheers, but he also wants to take from us our pipe of tobacco, or our cigar. He wants to close our theaters and movies. Ball playing he hates, as he does hate dancing and a pack of playing cards. He wants our women to wear dresses that would hide their womanly charms. And all this to be able to rule and domineer over nations of knownothings and darenothings.

Will you permit him to succeed? Is humanity to be thrust back to the usages of centuries of misery and reaction? We guess not!

Prohibition "organs" are clamoring for General Pershing to be disciplined because he permitted his soldiers to drink the champagne the French gave them on Bastille Day. As the United States Government will not dare to discipline its commander at the front, the Prohibs will probably rejoice if the Kaiser were to succeed in "strafing" Pershing. They sympathize with the Kaiser anyhow, as they are doing all they can in the way of embarrassing the government by trying to impair its financial and, therefore, fighting capacity.

That Maine defeated woman suffrage by a vote of more than two to one is not surprising, because Maine as a Prohibition State is reactionary, mediaeval. Sentiment there is like that in most other Prohibition States which have refused to give the franchise to their women. In New York and the other progressive States where woman suffrage is about to be voted upon, other reasons will probably defeat it, principal among them the foolish agitation of the White House pickets in Washington, and also the preoccupation of the women's minds with matters relating to the war. Nowadays women have more to do and to think of than attending suffragette meetings and reading pro-franchise literature. Woman suffrage, particularly on a national basis, will still have to wait a while.

Prohibition for Latin America?

"Porto Rico's 'dry' victory opens a door to Prohibition in all Latin Americas," says the "20th Century Quarterly," and then it proceeds to relate what it calls the "Wonderful story of Porto Rico's Prohibition victory," from which it appears that the overwhelming majority of the Porto Rican people had no vote at the election and that most of those who went to the polls were too ignorant to know what they were voting about. The result in Porto Rico was due to the ceaseless agitation of a small band of North American Prohibition fakers who had invaded the "conquered" Island. If Porto Rico were still Spanish there would be no Prohibition there to-day. And as to making Mexico, Brazil, Argentina, Peru, Chili, Uruguay, Paraguay, and all the other Latin-American republics Prohibition States—let the North American schemers try it. They will no more succeed than if they tried to melt the North Pole.

The White Bread Prohibition Party.

Now white bread is to be prohibited. One of the fanatics and fools who are not in lunatic asylums is agitating in this country against the baking and eating of bread made from white wheat flour, saying that "everybody who makes white bread should be in the penitentiary," asserting that it "causes indigestion and bad temper and breaks up families." This cheerful assertion is hardly more capable of being proved than the assertion of those other fanatics and fools that alcohol is the root of all evils to which mankind is a sufferer. However, we joyfully welcome the New White Bread Prohibition party. How many votes will be cast for its candidates next month?

The assertion that, if people could be prevented from consuming alcohol, all misery, disease and crime would disappear from our midst is no less intended to swindle the ignorant out of his liberty and property, than are the artful schemes of wildcat stock promoters, flim-flam operators, three-card montemen, food adulterators, forgers, counterfeiters and all other kinds of fancy as well as plain swindlers and crooks.

"Why cannot a Prohibitionist tell the truth?" asks a letter writer one of our daily contemporaries, without receiving an answer to his pertinent question. If he would only set his think tank in motion he would arrive at the logical conclusion that, if Prohibitionists were to tell the truth, their sly scheme of capturing the Government would be smashed to smithereens. Prohibition can thrive only by circumventing and suppressing truth.

One R. E. Haynes, of Reesville, Ohio, writing in the Columbus "Dispatch," says: "Let the President be equal to the occasion in patriotism, in moral and intellectual force, by issuing a mandate that the wheels of Germany's sin, the brewery, come to a sudden standstill. Then, and not till then, we will hail him, as we did Lincoln, a savior of our country." Although Woodrow Wilson may or may not be anxious to live in history as great and as honored as the Emancipator of the black race, we are ready at any time to bet all we possess against a nickel, to be put up by the benevolent Mr. Haynes, of Reesville, Ohio, that the President will not issue any such "mandate" as the one desired of him by Mr. Haynes, that mandate, if issued, being apt to precipitate its originator into more trouble than any "savior" can reasonably wish or expect.

Why American Grain for England?

The U. S. Food Administration's Public Information Division last month sent to the press the subjoined statement which speaks for itself:

"The 1918 harvest program for England and Wales contemplates 2 million acres less grass and 2,600,000 more grain, according to an official statement received here to-day by the Food Administration.

"The announcement shows a change from that previously given out by the British Board of Agriculture, wherein the government urged farmers to plow up an additional 3,000,000 acres of grass land, in the hope of making England as near self-sustaining for cereals as possible.

"The agricultural program proposed, taken in conjunction with the declining scale of prices fixed by the government for cattle, indicates that cattle are to be sacrificed for grain in the present emergency as a part of the governmental policy, and that the end of the war will find the meat and live stock problem left largely to the United States for solution, with increased demands upon us for live stock and dairy products, and lessened demand for grain.

"The British official statement says: In 1916 there were 5,730,000 acres under corn crops (wheat and barley, oats, rye, beans and peas) in England and Wales. The Board aims at an addition to this area of 2,600,000 acres in the harvest of 1918—an addition of 300,000 acres has been made. In 1918 the Board expect to secure 600,000 acres of potatoes as compared with 428,000 acres grown in 1916. Nearly one-half of this increase has already been obtained. Reductions in the areas of temporary grass and in certain of the less important crops of arable land are proposed, so that the extra 3,000,000 acres of essential crops may, it is estimated, be secured by the plowing up of about 2,000,000 acres of permanent grass. Over and above mountain and hill grazings, there were 16,000,000 acres under permanent grass in England and Wales in 1916; it is thus only necessary to plow one-eighth of our grass land when preparing for the harvest of 1918; and it may be estimated that quite one-fifth of this task has already been completed.

"Various circumstances have combined to bring about this revision of the official program for 1918. In the first place the new policy has proved so acceptable in Ireland and Scotland that those two countries have contributed an increased corn production this year over the year 1916 and have arranged to add largely to their tillage for 1918. This factor has enabled the Government considerably to reduce its call upon England and Wales. Other factors in the situation have been the difficulty, without unduly interfering with the supply of man power for the army, the navy and munition and other essential services of providing sufficient labor and machinery to carry out the whole of the Government's agricultural program in one season.

"The aim of the Government's revised plan (as it was the aim of the original) is to break up a sufficient amount of the poorer quality grass land that has fallen down since 1870 or thereabout to grow enough cereals to render the country self-supporting in case of extremity.

"Unless the position of affairs should become unexpectedly more serious during the late summer, the official opinion is that with the good will of agriculturists generally and a continuance of the energetic and public-spirited action of the executives, it should be possible to approximate very nearly to the ideal of an additional 2,600,000 acres of corn following upon the breaking up of about 2,000,000 acres of permanent grass."

Prohibition and Excise Matters.

Bills Presented and Acted Upon in National and State Legislatures.—Action of Courts, Municipalities, Civic Bodies, etc. (Reported by Special Correspondents.)

Washington, D. C. The report of Commissioner of Internal Revenue Osborn shows that all previous records for the consumption of "liquors" have apparently been broken during the past fiscal year, ended on June 30th. Following are the grand totals of production upon which taxes were paid: Distilled spirits from every source, 164,665,246 gallons—an increase of 26,000,000 gallons over the previous fiscal year—yielding a tax return of \$186,563,055. The production of beer, while exceeding that of the previous year, fell below the high record of 66,000,000 barrels in 1914. Taxes were paid last year on 60,729,509 barrels of beer at \$1.50 per barrel, and other taxes on brewers and retailers brought the total up to \$91,897,193, as against \$88,771,104 in the previous fiscal year. The cost of collecting the revenues was approximately \$9.53 per \$1,000, or 95 per cent., the lowest on record.

Daniel C. Roper, for some time past a member of the Tariff Board, is to become chief of the Bureau of Internal Revenue of the Treasury Department, succeeding W. H. Osborn, who has resigned to enter private business.

With a view to having the courts pass upon the question whether the District of Columbia comes within the scope of the "bone-dry" law, A. E. Shoemaker, Anti-Saloon League attorney, has planned to have a test case instituted on or about November 1st in case any intoxicants are brought into Washington. Prohibition for the District goes into effect at midnight of October 31st. After that date, the advertising of liquor in the District is prohibited. The Post Office appropriation act also prohibits the use of the mails for advertising or soliciting orders in states and territories where such advertisements are prohibited by legislative decree.

According to present indications, Washington is destined to be "dry," or practically so, long before November 1st. Liquor dealers claim that it is impossible to get stock to fill their empty shelves. Prices kept jumping until they were prohibitive, and now the big wholesale dealers are said to be holding their stocks. Many "liquors" have more than doubled in price recently, and the wholesalers know that they can get even double what they formerly could by storing their goods and holding them awhile. So the indications are that there will soon be no "liquor" in Washington with the exception of beer and wines, and even wines are scarcer and are going to be much higher.

The Post Office Department, by a decision rendered on September 19th, barred from the mails in "dry" territory any advertisement of a saloon, barroom or buffet, or any other place where intoxicating "liquors" may be procured. However, "liquor" propaganda, literature setting forth the advantages of liquor generally, or which argue, pro and con, on prohibition, but do not advertise intoxicating brands, may enter "dry" territory.

The United States government will be in the distilling business during the war, operating two or three plants to supply alcohol to make munitions. Other distilleries, as is well known, have been closed. It has not yet been decided which two or three out of the more than 600 will be selected

by the government for its proposed uses, but it is understood that one in the East, one in the Middle West and one on the Pacific coast will be chosen.

The taxes levied on "liquors" in the war revenue bill, under discussion by Senate and House conferees when this report is sent, are as follows: On distilled spirits, \$135,000,000; rectified spirits, \$5,000,000; fermented liquors, \$46,000,000; wines, \$21,000,000; soft drinks, syrups, etc., \$11,000,000.

In the war-tax bill, save for the elimination of the Gore amendment designed to levy a prohibition tax on grain to be used for making beverage liquors, the Senate beer and distilled liquor rates have been retained. This means a tax of \$2.75 per barrel on beer and \$3.20 per gallon on whiskey.

Senator Shafroth has introduced a bill to make Hawaii Prohibition territory.

The Presbyterian Foreign Mission, through Representative Cooper, of Ohio, has protested to Secretary of War Baker against "liquor" being dispensed to American soldiers in France at the canteens of the various American units.

By a unanimous vote of the seven members present the Senate Suffrage Committee has agreed to report favorably the Federal suffrage amendment. The report is held up in order to secure the votes of the remaining two members. According to the statement made to local suffragists by Senator Jones, of New Mexico, chairman of the committee, "the purpose of the action on the part of the committee is merely to get the amendment on the calendar, not to pass it. It will not be pressed at this session, as only war legislation to be taken up." September 24th, the House of Representatives, by a vote of 181 to 107, resolved to appoint a standing committee on Woman Suffrage.

Without debate or objection the Senate also passed Senator Shafroth's bill authorizing the Hawaiian Legislature to give women who have property and other qualifications of men the right to vote in territorial elections. It also authorizes the Legislature to submit to the territory the question of giving women unrestricted suffrage there.

Montgomery, Ala. The Liberals of Alabama are making a campaign to have John H. Wallace, Jr., Game and Fish Commissioner of this State, elected governor next year. Should they succeed in their purpose and also elect a liberal-minded Legislature, the repeal of the Alabama State-wide Prohibition law will be an assured fact.

Atlanta, Ga. The Georgia Legislature has suspended this reactionary State's "blue laws" by permitting freight trains to be run on Sundays—should this become necessary on account of the war. The Prohibition parsons tried to prevent the Legislature's action by vehement opposition, but their bulldozing tactics did not avail them this time.

The Legislature has also been asked by the parsons' outfit to prohibit the University of Georgia from accepting the 20,000 gallons of wine bequeathed to that institution by the late Judson L. Hand.

Frankford, Ky. Bills to make Kentucky "dry" and to prevent the inter-county shipment of liquor from "wet" to "dry" territory will be among the first proposals introduced at the next session of the Kentucky Legislature, in the opinion of Senator Hiram Brock, of Harlan. Mr. Brock said the Republicans will urge a legislative redistricting bill.

Salem, Ore. A "two per cent. 'wet' law" in Oregon within the next year is predicted by M. N. Weinbaum, statistician of the Portland Chamber of Commerce. He says that Oregon is at present turning out a "near beer" of about one-half of one per cent. alcohol content. This brew has proved so popular that public sentiment is now turning in favor of allowing a light beer to be served with meals as a beverage.

Austin, Tex. Governor James E. Ferguson has been deposed from office by the Texas Legislature for alleged gross dishonesty and numerous violations of State laws.

Madison, Wis. Governor Philipp, of Wisconsin, is about to call a special session of the Legislature to consider liquor legislation, and especially the subject of the closing of saloons on Sunday. The Governor made this statement following a conference with the Executive Committee of the Wisconsin Anti-Saloon League, which had called upon the Governor to enforce the closing of saloons on Sunday. After reciting the history of Sunday closing legislation in Wisconsin, the Governor said that a policy of local option on this question has prevailed in the State since its admission into the Union, and that he is unwilling to act on the mere demand of the Wisconsin Anti-Saloon League and the parsons who are running its political machinery

**Interpretation by the Judiciary—Municipal Action—Local Option, Elections, etc.,
Action by Civic Bodies and Others For or Against Prohibition.**

Alabama. The Court of Appeals of Alabama has held that druggists are not violating the Prohibition law through the sale of Jamaica ginger in medicines, even though persons use these prescriptions as beverages. Sickness for which Jamaica ginger is supposed to be a cure is rapidly increasing in Alabama, and the sale of Jamaica ginger is booming, while cases of intoxication due to its use are multiplying. Whiskey now sells in this State at from \$5 to \$10 per quart.

Arizona. Three bootleggers who had in their possession four trunks and three suit cases filled with bottles of whiskey, were recently arrested at Tempe.

Arkansas. Peter Condit, former policeman, has been sent to prison for two years for selling "liquor" at Fort Smith. His partner, James Bonner, is also in jail.

Sheriff A. G. Flippin recently held an autodafé at Yellville, feeding 14 quarts of confiscated "liquor" to the flames.

California. The city authorities of Sacramento are about to purchase ten saloons in that city for the purpose of closing them.

The San Joaquin Valley Farm Bureau, at a meeting held in Stockton, has indefinitely postponed consideration of a Prohibition resolution which the parsons and politicians of the Anti-Saloon League had asked the members of the Bureau to adopt.

Colorado. Since Prohibition went into effect in Colorado the greater part of those applying at the county recorder's office in Denver for permits to ship in liquor have been women. This is due to the fact that the person who obtains the permit must receipt for the liquor, and because

a man probably would lose a day's work by having to care for his liquor shipments he lets his wife do it for him.

For importing five cases of "liquor" into Denver, one Frank Melsheimer has been fined \$250 and costs at the Brighton District Court.

Mrs. Chloe Edge, mother of three children, recently died in Denver a victim of the "violet cocktail," a concoction that had its advent with the enforcement of the Reed bone-dry law. The new drink is composed of Jamaica ginger, mixed with lemon extract, hot water and sugar, and gives a violet hue when "fixed."

Connecticut. The Prohibition question is to be voted upon at this year's election in Connecticut, the parsons and agitators of the Anti-Saloon League having succeeded to put it on the ballot.

District of Columbia. The National Democratic Fair Play Association is testing the law by which the District of Columbia is to be Prohibition territory next month, in about 50 saloonmen's cases injunction proceedings having been entered upon. Drinking is not prohibited in the District as the law permits intoxicants "for personal use."

Florida. Judge J. T. Willis, of the Eighth Circuit Court, Jacksonville, has decided that the clause in the Florida law which undertakes to charge a common carrier with knowledge of whether a shipment being carried by it contains intoxicating liquors, is unconstitutional and void.

Georgia. At Columbus and Gainesville large quantities of whiskey and beer have recently been confiscated by Federal Revenue officers, who also discovered several "moonshine" distilleries.

Ernest Henkel, business manager of the Metropolitan Opera Company, New York, has been arrested for having some whiskey and wine in his trunk when he was on a business trip in Atlanta. It is ridiculous to suppose that Mr. Henkel was to sell these beverages; he took them to Atlanta for his personal use and the court refrained from punishing the gentleman.

The Savannah grand jury has recommended that all road houses located on the county roads be closed and that steps be taken to stop the sale of "beverages in brown bottles" which have no labels.

September 11th a new ship called the "Chaska" was launched, and christened with a bottle of rye against the howling objections raised by a number of Prohibition parsons.

In the office of Mayor Wilcox, of Ocilla, 137 pints of whiskey were recently "found" by deputy sheriffs, whom the Mayor charges with being his political enemies, the whiskey having been "planted" by them before they raided the office.

Hawaii. Governor Pinkham has banished liquor from his official banquets—but only during the war, the Governor desiring to be in keeping with Mr. Hoover's food conservation campaign.

Illinois. Springfield, the capital of Illinois, now commences to realize what it means to live in a "dry" place. But it's their own fault. They are being punished for their silliness. Their corporate tax rate would have to be increased from \$1.20 to \$2 if their police, fire, health and other departments are to be maintained; but even then the force of most of them would have to be cut down. Surely there will be neither gas nor electric light during the night hours, a fact which the "Illinois State Register," one of the most vicious Prohibition organs in the country, is trying to make fun by advising the citizens of Springfield to use their pocket flashlights when venturing out

after dark. However, the citizens have taken the matter seriously by refusing to vote for the proposed increase of their tax burdens, and the city authorities are now facing the difficult problem of protecting the people from crime, fire and all other sorts of disaster. The fire insurance companies immediately raised their rates when a number of fire engine houses had been closed in the residence district.

An ordinance of the City of Marion prohibits the delivery of intoxicating liquors therein to any person, without entering in a book for that purpose the date the liquors are received by the persons delivering, the true name and address of the consignor, etc. The Illinois Supreme Court has ruled that the ordinance is not authorized either by the authority of or the necessity to carry out the powers expressly granted by the Cities and Villages Act, empowering cities and villages to license, regulate and prohibit the selling or giving away of any intoxicants.

Indiana. The County Superior Court at Indianapolis, Judge Marion presiding, has declared the Indiana Woman Suffrage law to have been passed in violation of the Constitution of the United States.

Iowa. Senator Kenyon and many other prominent men, as well as most of the newspapers published in Iowa, are of the opinion that the majority of the citizens will vote against constitutional Prohibition next month.

The farmers of Iowa, in order to keep their help during the harvest, had laid in plenty of "liquor" before the Reed law became operative. And these very fellows are the most fanatical Prohibitionists!

At Council Bluffs nineteen cases of whiskey have been stolen from a train in transit from Milwaukee, and in Grinnell negroes have been detected carrying "liquor" in cocoanuts, while at Sioux City a private residence was raided whose owner had a piano in which he kept twenty pints of whiskey.

Barbarous treatment is meted out by the police of Sioux City to intoxicated persons, whom they place in a chair, the seat of which is charged with electricity.

Kansas. The great demand for cider in several parts of Kansas, coupled with considerable drunkenness, revealed a new method of beating the bone-dry law. It appears that cider was placed in the sun, allowed to ferment and run through a cream separator. This draws out all of the heavy apple juice in the cider and leaves behind a residue which is largely alcohol and is as bad as "forty-rod" whiskey in its effect. The police have found no way of stopping this method of getting drunk.

Hickory Jones, a bootlegger, has been fined \$500 and sentenced to six months in jail at Rosedale for selling whiskey from a motor car.

Kentucky. Both the Democratic and Republican parties of Kentucky are favoring a referendum on Prohibition; not sincerely, but only as a political trick by which they hope to elect their candidates next month. Interest in State-wide Prohibition in Kentucky is at a very low ebb, especially since Congressional legislation has put an end to distilling for the duration of the war.

Maine. Woman suffrage was defeated in Maine, September 10th, by a vote of nearly two to one. In Portland the vote for suffrage was 1,792 and 4,591 against it.

Mrs. Clarence Hale, President of the Maine Society opposed to suffrage for women, has said: "The present election on Woman's Suffrage, we believe, is but another illustration of the proverb, 'As goes Maine, so goes the Union.' Maine has given a good majority against woman's suffrage. Massachusetts went two to one against it in 1915. It

would seem that nothing further is needed to prove that the East is not in favor of woman's entrance into political life. The result of the election should satisfy the public, and if suffragists really practise the principles of democracy, which they never fail to preach, they will accept this decision as final for many years to come."

At Bangor they have prohibited selling "liquor" on Sundays; on week days they cannot possibly enforce the Prohibition law.

In Lewiston Deputy Sheriffs have discovered that whiskey is smuggled into that city in barrels labeled "lubricating oil."

Michigan. The trade is making a determined effort to have the Michigan Prohibition law repealed next year, and the Antis are scared because they see that the masses of the people are now convinced that they were hasty and foolish when they voted for the barbarous incubus.

Minnesota. St. Louis county has gone "dry" by a majority of more than 3,000 votes. As a result the county will become "dry" March 25, 1918. Duluth gave the "drys" 701 majority, as against 1,378, at the last municipal election when the option question was voted upon locally. Surprises in the election were the results at Buhl and in several other "wet" towns of the county, which gave the "drys" comfortable majorities. At Hibbing the "wets" led by a small margin, although Hibbing is "dry" under an Indian treaty.

Mississippi. "Moonshine" distilleries are increasing throughout Mississippi and large quantities of their poisonous product are being consumed in this State.

Missouri. The Missouri law imposing a tax on "soft drinks" is a dismal failure, as so far only about \$14,000 has been collected from that source. The State has not appropriated enough money to inspect the 400 soft drink factories, the "near" beer breweries, the 25,000 saloons and soda fountains.

St. Louis has now 2,028 saloons, 214 less than last year and thus the city's revenues have been decreased by about \$100,000.

"Is bottled beer one of the necessary attachments of a steamer like the Belle of the Bends?" The Griesedieck Bros. Brewing Co., St. Louis, says beer is, and so has caused the steamer to be seized by the Government pending settlement of a suit for \$700, which the brewery declares the management of the boat owes for this beverage. A maritime law stipulates that only the necessary attachments of a steamboat are subject to a lien, so in order to obtain a preferred claim in the settlement of the steamer's accounts, the brewery concern asserts beer is a necessary adjunct to the business of an excursion boat.

The Missouri State Alliance of the German-American National Alliance, at its convention recently held in St. Louis, adopted a resolution recommending laws by which the number of saloons in this state may be decreased to a minimum.

Nebraska. Taxes must be increased in Omaha and other Nebraska cities because this State cannot get along with its present income owing to Prohibition.

That no police officer may enter a man's home to gather evidence of liquor law violation without first obtaining a search warrant, has been ruled by Police Judge Fitzgerald at Omaha in the case of Otto Borchert. The judge dismissed the defendant and ordered returned to his home nineteen cases of beer and five gallons of whiskey which had been seized there. The sacred inviolability of a man's home, safeguarded by the National Constitution, took precedence over all other phases of the state prohibition law, said the judge.

A new hiding place for "liquor" illegally brought into Nebraska has been discovered by the bootlegging experts of the Governor, who reported that they had discovered 1,400 quarts of beer in the bottom of Crystal Lake.

New Jersey. All cider factories were closed last month by a new law in New Jersey.

Three of the five city commissioners of Asbury Park have decided in favor of holding a referendum upon the saloon licenses question next month and it is now almost certain that Asbury Park will go "wet."

New York. To-day the amendment to the New York Excise law, limiting the number of saloons in cities and towns with 55,000 inhabitants and less to one for each 500 of population, becomes operative and the result will be that over 3,200 saloons will have to go out of business throughout this State, aside from the several thousand that will have to close on account of the high prices for "liquor," war taxes, etc.

The government order against selling liquor to soldiers and sailors in uniform is raising quite a rumpus wherever large numbers of the defenders of Democracy are assembled. Arrests of saloon men and restaurant keepers are frequent and in one case the question has been raised whether "near" beer comes under the military ban, the proprietor of a New York "rathskeller," whose waiters were arrested, claiming that they cannot be punished because the beverage they served to a number of soldiers was not "beer." Chemists are to report whether it was, or was not.

To the South Brooklyn saloonmen whose places were closed because they are near an ammunition factory, a renewal of their licenses has been declined by the State Commissioner of Excise.

Detectives disguised as soldiers and sailors are in evidence almost everywhere trying to trick saloonmen into violation of the law and in numerous cases they have been successful.

Rochester restaurants are to close at 10 P. M. because waitresses must not work more than nine hours per day.

An investigation recently made in this State evidence has been found of the general decline of alcohol as a cause of insanity. The alcoholic cases annually admitted since 1909 have decreased both relatively and absolutely, and intemperance as a contributing factor in causing mental disease has gradually diminished.

North Dakota. Under a ruling of Attorney-General Langer, of North Dakota, all malt drinks containing more than two-tenths of 1 per cent. of alcohol will be refused entry into this State hereafter. Dealers in the State, and shippers outside, have been notified of this decision, which bars out all "near-beers," as Bevo, Pablo, Barma, etc.

Ohio. The Prohibitionists of Ohio have succeeded in placing their "issue" upon the ballot to be voted for next month. The campaign has so far aroused little interest, most people considering it to be an outrage to discuss Prohibition while the country is at war. Even the Anti-Saloon League is opposed to the amendment advocated by the Prohibition party and one of the League's mouthpieces, Rudolph A. Mack, has denounced it as a "bootlegger's amendment," saying, among other things: "Let's forget the dry amendment this fall and each and every one of us tell the high-salaried leaders who framed the dry amendment we are going to confine our energy and money to help the United States win the war. If the amendment was carried it would still allow the manufacture of intoxicating liquor and its sale in this State for medicinal, industrial, sacramental, scientific or other non-beverage purposes. With the exception of the medicinal purpose, any person could

buy intoxicating liquor without a prescription or writing of any kind. The amendment opens the door for bootlegging on a wholesale scale."

Colonel Roosevelt is among the campaigners for the Prohibitionists.

It is of vital importance that the amendment should be defeated and to this end the most determined and strenuous efforts of the trade must be directed. We need the vote of every liberal-minded man in Ohio to win.

Oklahoma. Whiskey men whose automobiles were confiscated when smuggling whiskey into Oklahoma, are now considering a plan to carry their "goods" into this State by means of aeroplanes. But what if the State should equip itself with aeroplanes also, to chase and hunt down the bootleggers of the air?

Oregon. The crew of the steamer "Great Northern" recently went on strike when an attempt was made by State officials at Flavel to search the boat for "liquor." The captain wisely started before the raiders could board the vessel.

Pennsylvania. Saloonmen in some of the "dry" counties of Pennsylvania have started what is called "one man's clubs," trying to thereby beat the law. Many arrests are being made.

Judge Criswell, of Franklin, has decided that members of a club whose liquor had been seized in a raid and against which proceedings had been instituted to prohibit the selling of liquor, were entitled to recover the liquors thus taken, as there was "mere apprehension" that an offense was to be committed and no evidence introduced to show that the club was guilty of violating the liquor laws.

As the Odd Fellows of Venango County have been very active in favor of Prohibition, the proprietors of halls at Oil City, where the Order was to hold a convention, have refused to let them have any hall in that city.

Watermelons, hollowed out and containing bottles of whiskey, have been found in the possession of bootleggers at Coatsville.

Rhode Island. There has been submitted to the Police Board of Providence by L. Elmer Wood, special counsel to the commissioners, an opinion relative to the transportation of liquors through the streets of this city by employees of the Old Colony Breweries Company, whose property is under lease to Bliss & Co. of Warren in which counsel points out that in his opinion there is no ground upon which to base a complaint, either against the company or its agents for violation of the liquor law. Mr. Wood first takes up the matter of illegal sale by the company of any intoxicating liquors in Fall River or elsewhere. The remaining question is then taken up, and on that, too, counsel for the board finds no evidence of illegal acts in transporting liquor from the brewery to the company's place of business in Warren or to the establishment in New Bedford, in both of which places licenses to sell intoxicating liquors are issued under the law.

South Carolina. Sheriff Thomas and his Deputies have seized a "moonshine" distillery near Gaffney. Two arrests were made.

At Lexington, Sheriff S. J. Miller has destroyed a large quantity of "liquor" captured in a raid recently made by him.

Tennessee. The whiskey boat "Gypsy" was recently seized by Federal Officers at Sugar Grove Landing, about twelve miles south of Memphis and six automobiles to carry 200 cases of whiskey were confiscated, and nine men made prisoners.

Large quantities of "liquor" are smuggled into the mili-

tary training camp near Chattanooga, but the authorities say that most of the stuff consists of "medicines" and, therefore, they cannot interfere.

Near Knoxville a "moonshine" distillery has been seized.

Texas. Dallas County has been voted "dry" by a majority of 1,952. The saloons in the county are to be closed October 20th.

Houston voted in favor of license, the "wet" majority being about 3,000.

During the campaign, F. Charles Hume, Jr., former State Senator, declared that open saloons, under strict regulations, such as exist in Texas to-day, and where beers and wines, as well as whiskey, are sold, are better for the morals of the community than bootlegging, where boys and all other classes of people can get hold of the cheap grades of liquor handled. To simply vote the saloons out of existence would not stop drinking, but that instead of having drinking conducted under regulatory laws as at present, the State would be deluged with bootleggers of every description, who would ply their trade in back alleys and all sorts of places. The worst feature of such a state of affairs would be the fact that boys of any age would be the victims of the illegal sellers of booze, whereas they are not now permitted on the inside of a saloon. The fact was also brought out by the speaker that the bootlegger never peddles anything but whiskey, and a very low grade at that. Beer and wines are never handled by them.

Cold storages for beer in the vicinity of army camps, where no sales are made, do not come under the President's order forbidding the sale of beer and liquors in the vicinity of army camps. Beer may be stored under refrigeration and delivered from such cold storages, according to a ruling by United States Attorney-General Gregory given in answer to a request by the Houston Ice & Brewing Association, Houston, whose storage had been ordered closed after the President's proclamation.

Utah. The first conviction at Ogden under the new "bone-dry" liquor law has brought fines of \$50 and \$100 for David Andrews, of Logan, when he pleaded guilty before Judge George S. Barker. The first fine of \$50 was assessed on a charge of drunkenness and the heavier fine on the count charging that Andrews had dispensed intoxicating liquor to two of his friends.

Virginia. The Alexandria Grand Jury having indicted twelve bootleggers, eleven of them pleaded guilty and they were sentenced to thirty days in jail and pay a fine of \$50 each.

At Martinsville an illegal distillery was discovered by Federal Officers who wounded two of the distillers by shooting them, and 3,000 gallons of "moonshine" whiskey were destroyed by the raiders.

On board the barge "Sea King," when she stopped at Norfolk, a quantity of whiskey was found and the captain, A. E. Snow, of Riverside, was sent to jail for six months. He also was fined \$500.

Washington. By official canvass of referendum petitions of Washington State, the bone-dry law is suspended until the 1918 election. As soon as the result was flashed from the Statehouse, druggists began to apply for liquor permits and express companies were informed of the legality of accepting such shipments by waiting representatives. Druggists and express companies have generally suspended liquor shipments since July 1, the date the Federal Reed amendment became effective, for fear of being caught with illegal liquor on hand through failure of the bone-dry petitions. Although the referendum revives the initiative prohibition law, Attorney-General Tanner has held that the Reed law nullifies the personal permit system by forbidding

shipment of intoxicating liquor into any state where its manufacture and sale is prohibited, except for scientific, sacramental, medical or mechanical purposes. Mr. Tanner's ruling against personal permits will be promptly tested. In the meantime, druggists and clergymen will procure liquor under the permit system, without statutory restriction as to quantity.

Fermentation of grape or berry juice strictly for home use is held by the Supreme Court of this State to be a violation of the prohibition amendment. The point was decided on appeal by Michael Fabri of Tacoma, convicted in the Superior Court for fermenting fourteen quarts of grape juice for his own use. This decision closes what by many has been regarded as a loophole in the "dry" law amendment by which it was thought wines could be fermented privately for family use so long as there was no intent to sell, although it is noted that the penalty will not be invoked where fruit canned by the housewife has soured on the shelf.

The mayor of Cape Horn, George Breslin, who is also a butcher and general merchandise merchant, has been arrested for having had two dozen bottles of "lemon extract"—in other words whiskey—in his store.

West Virginia. Pumping liquor into automobile tires is the latest scheme to smuggle liquor into West Virginia. The liquor is purchased outside the State and taken to a point near the West Virginia line and there pumped into the tires.

Federal Justice Keller has ruled the one-quart-liquor-per-month-for-personal-use law to be constitutional.

Professional women bootleggers who wear flowing gowns with especially prepared pockets for carrying liquor are also operating in this State. Two of them, negro women, were arrested at Davy, with eight and 16 pints, respectively, stored in their pockets. Each was fined \$100.

Deputy Prohibition Officer Sam Fields, of Charleston, aided by four constables, has arrested Dan Montague, another prohibition officer, and John Ford of Point Pleasant, at the Kanawha & Michigan station with two suitcases laden with "liquor." Montague was a former chief of police in Charleston.

Two men are dead and a woman is in a critical condition as the result, it is believed, of drinking "bootleg" liquor at a party in Rosemont, a mining town near Clarksburg. The dead are: Andrew Sena, aged 32, coal miner, and Peter Kudanisk, aged 34, coal miner.

Wisconsin. Colonel Sanborn of Fort Sheridan, near La Crosse, having asserted that La Crosse saloonmen were smuggling "liquor" to the Colonel's soldiers, Mayor A. A. Bentley, of La Crosse, has replied: "As a body the Retail Liquor Dealers of La Crosse are anxious to stamp out all violation of the law, and are on record to welcome any evidence which may assist in that result, and they are interested in exposing and punishing anyone who may be guilty."

Panama. A group of Panaman young men have started an antialcoholic campaign in the city of Panama. The authorities are in sympathy with the movement.

Venezuela. The total imports of alcoholic liquors into Venezuela from the United States during the first six months of 1916 amounted to \$95,022. The imports of beer from the United States during the same period were valued at \$9,400 and those of wines, \$127,961.

New Zealand. The National Efficiency Board of New Zealand favors total prohibition for that commonwealth, subject to compensation, and recommends an immediate poll on the question.

News from the Brewing World.

Letters from Correspondents at Home and Abroad.—Technical and Structural Improvements.—
New and Closed Breweries, and Firm Changes.—Doings of Brewers and Brewmasters.

Chicago News.

Office of THE BREWERS' JOURNAL, People's Life Building
Randolph and 5th Avenue.

CHICAGO, September 27th, 1917.

The output of beer in Chicago during the month of August aggregated 521,288 barrels, for which the brewers paid \$781,932.50 to the Internal Revenue collector of the Chicago District. The barrelage was 146,287 less than that of August, 1916. As of the 7,000 Chicago saloons about 2,500 are to close because whiskey is going sky-high, the keg beer output will continue decreasing, while the bottle beer trade is rapidly gaining.

The wholesalers say there is plenty of whiskey stored in Chicago. It is pointed out that 230,000,000 gallons were made within the last two months and this may be taken out of the warehouses after the spirits have matured, which will be within three years.

The Chicago Brewers' Protective Association having made a searching investigation of the evil influences exerted by a certain class of places with so-called cabaret shows, the Association's members have decided to rid the trade of these undesirable element. And this means, as William G. Legner, president of the Association, has stated, that the saloons which survive will be much larger and conducted, for the most part in the congested districts, in connection with restaurants. And it is their purpose, Mr. Legner said, to place the surviving beer saloons on such a basis of respectable conduct that the community will have little cause to complain of vicious places. Several of the brewers' investigators reported that some of the cabarets were places where women openly solicited. The damage to society, the investigators reported, was done after the cabarets closed, and the recommendation made to the executive committee of the brewers is that the cabaret feature be eliminated from the beer and wine saloons that will survive the closing of the distilleries. In the meantime there is considerable perturbation in hotel and café circles over the statement issued by the Brewers' Association that it would advocate an ordinance keeping dancing and cabaret shows apart from the sale of liquor.

The city council is to pass an ordinance by which it is proposed to eliminate the vicious cabaret as advised by the Chicago Brewers' Protective Association. Dancing will be segregated in liquorless dance halls and theatricals sent back to the stage. The saloon will be cleared of its bad features; it will take on the nature of the best type of foreign drinking establishment. Back-rooms of questionable character will have to go. There will be music allowed only in those places which have a permanent seating capacity of 500 or more, and then only by an orchestra of more than five people. Permits for music in such places, which will include the summer gardens, will be issued only by the general superintendent of police, and must be countersigned by him. This step, if accomplished, will tend to keep such places out of politics.

By his most recent antics and defiance to the orders of the Governor of Illinois, the still Mayor and unspeakable

Thompson has sealed his political doom so tightly that even his Prohibitionist and pro-German friends have abandoned all further attempts to boost this inveterate enemy of the trade into the United States Senate. And yet he goes on challenging public opinion by suing one of the Chicago dailies and its editor for libel, expecting a jury to award him \$250,000 damages to be paid by men who told the truth about him!

The fellow Yarrow, heretofore General Superintendent of the Dry Chicago Federation, who had been disgusting the public with his boast that next year several hundred thousand voters would "make Chicago dry," has now arrived at the end of his rope, having discovered that the people of Chicago will not have anything to do with him. He therefore threw up his job as general mischief maker and agitator, his expiring yelp being the charge that "the ministers and the leading members of the church are not sufficiently interested at this time to warrant our putting the question of a wet and dry Chicago up to the voters at the next spring election." The fact is that Yarrow could no longer extract any funds from the Chicago churches. They are sick and tired of the grafters of the Anti-Saloon League.

Two men trying to cash checks stolen by robbers who blew open a safe in the Mullen Brewing Company's office, and an amateur sleuth who tried to sell information concerning the identity of the robbers have been arrested. Edward Moran, 2225 Pierce Avenue, and John O'Donnell, 5551 Justine Street, were taken when P. A. Carrier, 4258 Ashland Avenue, telephoned the police they were trying to cash some of the stolen checks. Joseph Moran is sought as the head of the safe blowers' gang, and the police at first believed they had the right man. Later Moran and O'Donnell said they found the checks. The robbers are believed to have thrown them away. The amateur sleuth went to the brewery and offered his information for sale. Then detectives were sent for. He gave his name as Page.

Delegates of the Prohibition, Progressive and Socialist parties are to meet here next Wednesday to consider a plan for pooling their so-called "issues."

FIRES. The Anheuser-Busch Brewing Association's giant warehouse, Pestalozzi Street and Broadway, St. Louis, was destroyed by fire early August 26th, entailing a loss of many thousands of dollars.

THE AUSTRALIAN ARMY CANTEN. From the Australian camp on Salisbury Plain writes a correspondent to the "Australian Sun": "The crime sheet is practically a negligible document at Salisbury. There are less orderly-room cases than there were in Australia. I asked a responsible officer the reason for this, and he replied shortly: 'We have a wet canteen. The dry canteen in Australia is so much nonsense. Men will have drink, and when they go outside for it they are often given bad stuff, and too much of it. The drink in our canteens is as wholesome as possible. Army inspectors are careful that it is, and no man can obtain too much from us.'"

Doings on the Pacific Coast.

(Special Correspondence of THE BREWERS' JOURNAL.)

SAN FRANCISCO, September 21, 1917.

Saloons in San Francisco and the Bay cities will close in compliance with Governor W. D. Stephen's request during the entrainment of the second contingent of the new national army to-morrow and next day. This is in accord with the fixed policy of the liquor industry which is to comply with all Government requests and "do their bit" to prevent disorder.

At San Diego they have a new cantonment, Camp Kearney, and an election is brewing. A few misguided citizens think that the city should be made "dry" because of the soldierboys. The city of San Diego has already pledged its income from the liquor industry, amounting to \$120,000 yearly, to building roads and making other improvements for the benefit of the military camp, and if the ordinance carries, the city will be enabled to carry out its pledges.

No city in California has attempted to foist as drastic an ordinance on its people as San Diego is attempting to. The ordinance not only forbids the sale of liquor under any condition, but also forbids the use of it in the home and provides that the home of any one suspected of having wine or beer in their own home can be searched at any hour of day or night. If a bottle of wine or beer is found it would subject its owner to a fine of \$300 and imprisonment!

And the San Diego ordinance gives but 30 days after adoption to close out the entire liquor industry and remove all liquor from the city limits including all liquors then on hand in private homes.

The date of the election has not yet been set as the ordinance is in the hands of the city attorney for an opinion of its legality.

Los Angeles has "Billy" Sunday in its midst, and an election near. However, the ordinance there is much less drastic, although framed by the same people who drew up the San Diego ordinance. The heads of the Drys Federation live in Los Angeles, and much will be understood when it is remembered that Los Angeles and San Diego are rival tourist cities.

The Los Angeles ordinance allows the sale of wine and beers in the hotels and cafés with meals and for family liquor stores. It restricts the sale of liquor and does away with the saloon, but the comfort and pleasure of the tourist is carefully safeguarded. It also allows five months after the enactment of the ordinance for the disposal of stock on hand.

The election day has not been set in Los Angeles, but it will be late in November, or early in December.

The machinery from the Mission Brewery of San Diego, which has been closed for some time, was sold this month by J. Henry Zitt to capitalists in Mexico City, who will start a brewery there. The building will be sold to a manufacturing concern, as the site has excellent shipping facilities.

San José also has an election threatening; a petition to call an election there has been presented and will be acted upon at the council meeting next Monday night.

The hop market continues to be strong with thirty cents asked for Russian River hops. The Oregon crop was short on account of lack of rain and decreased acreage.

—The twenty-ninth annual convention of the American Bottlers' Protective Association will be held at the Hotel Statler, Detroit, Michigan, October 9th, 10th, 11th, 1917.

Third Annual Midsummer Reunion of the Alumni Association of the National Brewers' Academy, at Rochester, N. Y., Sept. 14th-16th, 1917.

The graduates and members of the Alumni Association of the National Brewers' Academy, New York, assembled in Rochester at Power's Hotel on Friday evening, Sept. 14th, and many visitors had traveled far from East, North and South in order to be present at this gathering, which was thoroughly enjoyed by those who were fortunate enough to reach the convention city in time. While the early visitors were discussing the serious problems of the day and others renewing friendships and living in remembrance of their former associations, the bulk of the participants of this convention were traveling fast in order to reach Rochester early Saturday morning, when they were met at the railroad station by the Reception Committee and escorted to Power's Hotel. After a very cordial exchange of greetings, the President, Mr. Wehle, at once called everybody to the colors so that nothing would be missed in the execution of the selected program. Everybody was on hand promptly at ten o'clock, and after a beautiful drive through the Flower City the visitors reached the wonderful plant of the Pfaudler Company, where they were received by Mr. Williams and Mr. Miner and shown all over the plant. No efforts were spared by the officers of the Pfaudler Co. to thoroughly explain their processes and operations, and the inspection of this plant was a revelation to everybody, proving as it did the immense progress of our American Industrial plants. After the inspection of this plant, a photograph was taken on the lawn in front of the buildings, a copy of which we understand will be presented to every visitor present.

At 12 o'clock the party was driven to the plant of the Genesee Brewing Co., where they were cordially welcomed by Mr. John Bradley, after which a fine luncheon was served. Speeches were made by Mr. Bain, Mr. Schlichting, and Mr. Williams, and after the luncheon there was an artful exhibition of the fine prize-winning nine-horse hitch of the James Hanley Brewing Co., Providence, R. I., who were kind enough to have their horses remain over in Rochester specially for this occasion, through the good efforts of our esteemed Honorary President, Mr. James K. Carroll.

The visitors were then conveyed by autos to Corbet's Glen. The program had been carried out so correctly that the party arrived at the Glen in time for the clambake, which was thoroughly enjoyed. A pleasant surprise at the clambake was the fact that the beer served bore specially printed labels commemorating the occasion. The surprise was augmented by the presentation to everybody of a beautiful badge bearing the seal of the city of Rochester. It was of special significance that quite a number of guests took part, representing the brewing industry of the city of Rochester. After many had taken part in a baseball game and a photograph had been taken, the call was given to return to Rochester, where the officers of the American Brewing Co. had arranged a reception and kommers in their home-like and hospitable Rathskeller. The evening, spent in genuine conviviality and the reception, was made most entertaining and pleasant by the efforts of Messrs. E. W. Loeb, Jr., Robert Nevin, and Mr. Otto. The evening wound up with the final reception at the Bartholomay Brewing Co., where no efforts were spared to finish this memorable day as happily as possible. An excursion by automobile to Manitou Beach, at Lake Ontario, had been planned by the Reception Committee for Sunday and, while some of our members were obliged to return home,

a large majority stayed in order to enjoy the fine day and weather at this Beach, where an excellent dinner was served and thoroughly enjoyed.

Great credit is due to the Reception Committee, consisting of Messrs. Moeller, Wehle, Loebe, Fromm, and Neschke, who have earned the everlasting thanks of everyone who was fortunate enough to be present on this occasion. Many thanks are also extended to the officers of the Bartholomay, Genesee, and American Brewing Companies, who were kind enough to assist in such a large and generous measure to make this third reunion of the National Brewers' Academy Alumni Association such a grand and unqualified success.

Our London Letter.

OFFICE OF THE BREWERS' JOURNAL,
46 Cannon St., E. C., September 14th, 1917.

Demands for more beer to be brewed in the United Kingdom are accumulating. Almost every day statements are being published that, to win the war, the masses of the British people require more of their national beverage than is now being provided for them. Says the "The Brewers' Gazette": "It is quite obvious that the provision of more beer for consumption is a matter that brooks no further delay, and must be undertaken by the Government forthwith. When the latter were stampeded, by the fanatics of teetotalism, into reducing the already reduced 18,000,000 barrels, into 10,000,000, it was clear to all the responsible heads of the trade that such a delimitation would defeat itself. The squeezing process was carried too far; but to curb the irrational demands of the irreconcilables, the Government conceded a reduction which now only brings an ocean of trouble in its train. It is a curious fact, that all the embarrassments—and their number is legion—affecting ministerial pronouncements, have invariably arisen from that insensate desire 'to run with the fox, while hunting with the hounds.' To listen to this or that demagogue with a negligible following, and to unwisely endeavor to placate him by concessions, is simply purchasing endless trouble; yet this method seems to commend itself to our administrators and is followed religiously whenever possible. It can be taken for granted that the Government are not only 'considering' proposals to extend for another three months the recently-granted increase for the hot months, but are prepared to concede the extension, and to renew it after that, if necessary. Why, then, not return to the original 18,000,000 barrels, and dispense with all this 'rubber-backed' policy? This war has much to answer for, not the least being the opportunities it has presented to a lot of incompetent bureaucrats to restrict the working of centuries-old industries, in the guise of communal benevolence."

And the London "Times" reports: "Ben Tillett, secretary of the Dock, Wharf, Riverside and General Workers' Union, has written to Premier Lloyd George and Sir Joseph Maclay, pointing out what he considers to be the dangers attending the curtailment of the working man's beer and the 'robbery' of selling 'swipes' instead of beer. In his letter to the Prime Minister Mr. Tillett says: 'I want to warn the Government that they are rushing soldiers to disaster; even the teetotal fanatics and pacifists are utilizing the dragooning of the Government, with very evil results. * * * If ever we are beaten, we shall not be beaten by the German Huns, but by the stupidity of the German folks at home, who do not honor liberty as liberty should be honored. There is plenty of foreign malt and barley in the country that could be utilized for the brewing of light beers. I would advise that 26,000,000 barrels should be brewed at a gravity of 1.047 degrees, as against the Government ale

gravity of .036. I do sincerely trust that you will give this your serious consideration, because I am most apprehensive of results. These results are already manifest in the refusal of our men to work, first of all, overtime, and, in some cases they refuse to work more than certain days in the week.'"

Furthermore, Sir George Cave, the Home Secretary, has said: "It is a fact—there is no doubt about it—that there is a serious shortage of beer in many parts of the country. * * * That shortage is causing serious unrest and is interfering with the output of munitions and with the position of the country in this war."

While the Parliamentary Secretary to the Minister of Munitions, Mr. Kellaway, has made this statement: "A large batch of letters has reached the Ministry, not from brewers, not, I believe, prompted by brewers or men interested in the liquor industry, but from trade unionists, officers of the Ministry, officers of the Board of Trade Employment Exchanges, and representatives of precisely those classes of men who are in a position to know what the munition workers and the hard manual workers of the country feel upon this question. * * * They are all to the same effect * * * that the shortage of beer is one of the causes of industrial unrest and of the restriction of output."

The North Western Commissioners have reported: "Liquor restrictions contribute to unrest rather than cause it. Far more important than hours of restriction is the more serious cause of unrest about the price of beer and the quality supplied. It should be insisted that the quality of the beer is good, and that reasonable quantities should be supplied." While the West Midland Commissioners say: "We were frankly amazed at the strength of the objections to the liquor restrictions. These came not only from men in the habit of drinking beer, but from those who were life-long teetotalers and yet recognized the need of beer to those working in certain occupations. The question is threefold—one of hours, price and scarcity. Of these the last is by far the most galling. * * * We hold no brief either for or against beer-drinking, but we are convinced that this is a question that men must settle for themselves, and that it must be recognized that beer is more than a drink. * * * We recommend to the Government that the supply should be largely increased."

A large meeting representative of all Ireland was held in Phoenix Park, Dublin, for the purpose of protesting against the restrictions on the Irish brewing, distilling and allied industries, and a resolution was adopted demanding their immediate withdrawal and condemning the recent Order of the Food Controller granting an increased allowance of beer, as aimed at the destruction of the Irish brewing industry, the increase being only granted in such a way that Irish brewers could not avail themselves of it without destruction of the industry.

The beer authorized to be brewed during the quarter ending December is 2,800,000 standard barrels. The existing stock of malt is 890,000 quarters, and it will therefore be necessary to provide about 110,000 quarters of malt, as the present supply of malt will be exhausted before November 1st.

The Ministry of Food has notified brewers and maltsters that, when they have obtained a government license, they may manufacture a limited amount of malt not to exceed one-third of the total quantity named in the license, new licenses for additional quantities to be issued for a further malting period after December 1st, 1917.

The Government's Wheat Commission is now offering Barley at 90s. per quarter, leaving the government a profit

of about 6s. per quarter, everyone asking why the government should make any profit at all?

The hops grown in 1917 will be taken over by a government committee of managers, whose chairman is George F. Clarke, Mayor of Maidstone, and head of Foster Clarke, Ltd. Growers have been prohibited from picking more than 50 per cent. of their 1914 acreage.

The report of Bass, Ratcliff & Gretton, Ltd., shows a profit of £425,387 for 1916-1917, and a dividend of 14 per cent. on the ordinary shares.

One of the results of the general demand for more beer has been an announcement by the Food Ministry that arrangements have been made for an increased supply of beer in agricultural and munition areas. Farmers are to be allowed to brew beer for agricultural laborers under license, and laborers themselves are to be allowed to brew on obtaining permits from the local War Agricultural Executive Committees.

Representations made by the Protection Committee of the Institute of Brewing to the Home Office Committee for England and Wales have resulted in compensations being granted to the trade where its interests have been jeopardized by Government restriction and the Government has intimated that the claims of the brewery technical and consulting staffs will receive thoughtful and sympathetic consideration.

An important decision has also been rendered by Mr. Justice Younger in the case of the Cannon Brewery against the Liquor Control Board, the Justice ruling that compensation for licensed premises taken over by the Board must be granted as a matter of right.

Eggs being very scarce in France, members of the trade, under the initiative of one of the brewers' monthlies, are now collecting a fund wherewith to purchase eggs for the British soldiers at the front.

Financial reports of brewing companies show that despite war-time restrictions satisfactory profits have been made. Watney, Combe & Reid, who had paid no dividend for 10 years, this year paid an 8 per cent. dividend on its deferred ordinary stock. Net profits for 1916-17 were £516,000 compared with £386,000 last year. Improved methods of manufacture, the sale of dried grain and other by-products, and a large stock of barley bought at low prices have brought about the increase in profits. A. Guinness & Co., reached a record figure. The profits for 1916-17 were £1,900,000. This firm paid an excess profit tax of £473,000 and was still able to pay a 16 per cent. dividend on its stock. Whitbread & Co., Ltd., report for the year ended July 6th that the accounts, including £79,379 brought forward, show a balance, after paying preference, preferred ordinary dividends and the dividend on the "Crawshay" shares, of £160,122. A dividend of 7 per cent. was paid on the ordinary shares, leaving £92,404 to carry forward.

A NATURAL APPETITE CANNOT BE A CRIME. "The evidence is no more certain that a pauper or criminal will be made when a man buys a glass of beer or whiskey, than it is certain when a person buys a rope that he will hang himself. Neither a majority vote nor a moral sentiment will change this essential principle, and make the gratification of a natural appetite into a crime against the State. There are two courses open to the moralists. Either remove the desire from individuals, or take control of the traffic and gratify the desire in its minimum. Imperial Rome could not make a third course possible. If the legal traffic is absolutely suppressed while the appetite remains, it merely runs into illicit channels."—("National Herald.")

Brewing News from the European Continent.

From the annual report of the German Brauer Bund it appears that 490 brewery corporations in Germany, still existing in May, 1916, representing a total capitalization of 610,596,600 marks, paid an average dividend of 6.6 marks, as compared with 6.15 marks paid in 1915, the Bavarian breweries paying the highest rate.

The number of breweries compelled to close on account of malt not being obtainable is constantly increasing in Germany and Austria, the governments of both countries having commandeered almost all of the barley in sight. One of the results of this action has been that in Austria brewers are now using beans, particularly those known in botany as "vicia faba," as well as horse chestnuts, as substitutes for malt, together with any sugars, honey or saccharin. The German and Austrian soldiers at the front are complaining that the beer supplied to them is "too thin."

Last year Munich's breweries produced 81,752,000 gallons of beer, of which 42,500,000 gallons was drunk in that city, while the rest was exported to other parts of Germany and abroad. This home consumption represented an increase of 2,310,000 gallons as compared with the previous year. There was a lugubrious funeral function at the Hofbrauhaus when the last keg of real beer was tapped and the "stammgaeste" are now compelled to consume a brew which is still "thinner" than the soldiers' "beer."

While the consumption of beer has been increasing of late in France there are parts of that country where it is again decreasing quite rapidly; in some localities the decrease is nearly 50 per cent. This is due to the fact that the price of beer, owing to the scarcity of brewing materials, labor, fuel, and means of transportation had to be raised to such figures that consumers have become abstainers, cider, lemonades and other non-alcoholic drinks taking the place of beer. In some places the wholesale price of beer is now 80 francs per hectoliter, and retailers are charging from 25 to 30 centimes per glass. Some retailers are giving glasses so small that to the consumer one hectoliter may nearly cost 200 francs! But this is exactly the way to kill the retail trade altogether. The greedy retailer is the worst enemy of the trade, aside from his foolish action being suicidal.

Like in Germany and Austria, the French government has taken over all the barley produced in France and imported from abroad, doling it out in small portions to brewers and maltsters who have to pay the government price fixed by the Food Ministry at 43.50 francs, f. o. b., per hectoliter, while malt bought from the government costs 85 francs at a maximum. Brewers and maltsters are required to make affidavit as to their stocks on hand to enable the government to limit the amount to the respective purchaser, according to the capacity of his plant and the extent of his trade. The government also prescribes to brewers the wholesale prices of beer, according to its various degrees of gravity.

The new cereal taxes which the French government has imposed upon farmers and which must be paid before they may be permitted to market their crops are 42 francs per hectoliter of barley weighing at least 60 kilos; the same tax for corn and oats, and 50 francs per hectoliter of wheat weighing at least 77 kilos.

The exportation of all grains, hops and beers from France to Switzerland has been prohibited, because it has been shown that most of these imports were again exported from Switzerland into Germany and Austria. The embargo is now considered to be literally airtight.

The French brewing industry is greatly in need of brew-

masters, chemists, engineers, maltsters and brewery workmen and there will be plenty of good chances for young men—after the war—to obtain positions in breweries. The brewing academies will have plenty to do in preparing apprentices and graduates. Brewmasters and brewery chemists who lost their positions through Prohibition in America might take notice and study the French language. They will be very welcome in France and Belgium.

A fine chance is also offering at Casablanca, Morocco, where money put into a large brewery would be a splendid investment. There is good brewing water there and good Moroccan barley only costs 12.15 francs per quintal, while the tax per hectoliter of beer is not more than 5 francs and a large consumption of beer is an assured fact.

Members of the trade who recently received from the French Ministry of Commerce and Industry the silver medal for industrial merit are: Anatole Mervaud, maltster for Webel & Co., Tours; Louis Régent, manager for Lamotte Frères Brewery at Vannes; and Auguste A. Tissot, of the St.-Eloi Brewery at Tours.

The barley crop of Tunis, almost entirely exported to France, last year amounted to 9,186,000 bushels.

The International Agricultural Institute at Rome, Italy, reports that the condition of this year's barley crop is good in Spain, average in Italy and Switzerland.

The American Consul at Basel, Philip Holland, reports: "The production of the breweries in the Basel District fell from 15,897,573 gallons in 1915 to 11,851,221 gallons in 1916. The chief difficulties were experienced in maintaining the supply of malt. England and France furnished Switzerland with malt and rice in 1915, but afterward placed an embargo on them. In 1916 the Swiss Brewery Association bought in the American market to cover its requirements. Owing to the high freight rates and the difficulties of transportation prices rose to three times normal. At the close of the year the stock of raw products was believed to be sufficient to meet the demands of the brewers for six months. The Federal Railway Co. on October 1 increased its freight rates, affecting particularly the breweries of Basel and Rheinfelden. The Government decided not to impose a special beer tax, which would have greatly restricted the consumption."

Consul Frank W. Mahin reports from Amsterdam: "The retail price of beer is again advanced 25 per cent. in Amsterdam, being now 20 to 25 Dutch cents (8 to 10 American) per glass for first-class beer, though inferior grades are sold in cheap drinking places for half that price. Retail prices of all kinds of beer have now doubled since 1913. Local breweries announce that they shall discontinue the practice of taking back beer which is not entirely satisfactory. Raw materials are very dear and so scarce that the brewers declare that they must cease operations unless conditions improve, and the scarcity of fuel threatens to close the breweries even if they had abundance of materials."

Sweden has a beer crisis. The grain shortage has led to a substantial reduction in brewing and the cork shortage in corks. There is not much beer. For a month bottles were corked with composition made of compressed cork powder. This was not a success, because the cork broke into bits when pulled. Now bottles are corked with plugs of wood, which are unsatisfactory. As there is not enough beer to go round in Sweden its distribution is a favor. No new customers are supplied by the breweries. Restaurants and hotels have as much as they want. A consumer who cannot obtain a single bottle for his house can consume ten in a restaurant.

The Norwegian breweries have ceased the production

and sale of beer. Cafés depending on the sale of beer have joined them. The Union of Hotel Keepers contemplate closing their establishments altogether. The attitude of the Government is dictated by the extreme temperance party, who are doing all they can to prevent the consumption of any intoxicating drinks, except wines containing not more than twelve per cent. of alcohol.

The Danish government proposes doubling the taxes on beer and if Parliament agrees Denmark will have the highest beer taxes in the world.

By Cable. Paris, September 22nd. The Chamber of Deputies last night passed a bill against drunkenness in public places, which, having already passed the Senate, now becomes a law. The bill has been back and forth between the two houses for more than two years. The measure provides that any one found intoxicated in the streets, in saloons or public places shall be fined from one to five francs for the first offense and imprisonment for three days as the maximum penalty for the second offence within a year after the first. The penalty for the third offence within a year from the second is a fine of from sixteen to three hundred francs, in addition to imprisonment for six days to a month. Those incurring four convictions within three years may be deprived of civil rights and of parental rights over children.

The Second Liberty Loan.

To win the war, our Government needs more money and, therefore, a second Liberty Loan to be subscribed for has been called. We are convinced that the brewers and maltsters and all others engaged in and supplying to the American brewing industry, will liberally subscribe.

Plans are being perfected for a uniform system of handling the bonds which are to be sold in the second Liberty Loan campaign on the partial payment plan. Under it all banks and employers who so desire will be supplied with punch cards.

This question of uniformity was agitated immediately after the close of the first campaign, when many different methods of keeping track of the investors' installment payments were found to be in practice among the banks and corporations of the Second Federal Reserve District. The plan now under way is to distribute among the banks a supply of cards which will be punched every time an investor makes a payment. The purchaser of the bond will have one of the cards and the bank which handled his subscription another card, identical in size. Both cards will be punched at the same time, and the first card will be returned to the subscriber. The second will be filed away until the next payment comes due. This system will be applicable to \$50, \$100 and \$500 bonds purchased by installments.

The Pfaudler Company, Rochester, N. Y., writes us: "We are proud of the fact that in addition to the \$45,000 worth of Liberty Bonds which this company purchases, \$10,000 was subscribed to the issue by our employes, ninety-six of our people having subscribed. It is also a very pleasant recollection to us that 100 per cent. of the employes of our General Office and 90 per cent. of the factory employes subscribed to the Red Cross Fund in addition to which our directors contributed \$10,000. We tell you this, not with a view to capitalizing our patriotism, but rather in a spirit of thankfulness for what we have been able to do for our country at this critical period, and in pride for the practical patriotism of our employes and associates."

New Buildings, Improvements, Installation of Machinery.

Reports from Technical Managers, Superintendents, Brewmasters, Contractors, Machine Manufacturers and Many Others

—Anchor Brewing Co., Tarentum, Pa., recently installed three flask type exhaust steam condensers, furnished by the York Manufacturing Co., York, Pa.

—Casper Brewing Co., Casper, Wyoming, have leased their plant to Henry A. Johnson, wealthy ranchman, who is converting it into a packing house.

—Cerveceria de Maracaibo, Maracaibo, Venezuela, are installing additional Glass Enameled Steel Tanks made by the Pfaudler Company, Rochester, N. Y.

—Connecticut Breweries Co., Bridgeport, Conn., have installed an Arrow Type "C" Automatic Bottle Washer in connection with their 150-bbl. Soaker.

—Constancia Brewery, Santa Ana, Salvador, S. A., have added twenty-four Pfaudler Glass Enameled Steel Tanks to their already large complement of Pfaudler equipment.

—Deppen Brewing Co., Reading, Pa., are making changes and erecting additions in their plant for the manufacture of non-alcoholic beverages.

—Derby-Ansonia Brewery, Derby, Conn., are sinking a new well, 180 feet, through solid rock, to reach spring water for their refrigerating and ice making plant.

—Christian Feigenspan, Inc., Newark, N. J., has used two new Arrow Type "C" Automatic Bottle Washers during the past summer season and is now installing a third one. They are automatically fed from Goldman Soaker Brush Conveyor and each Washer (capacity 125 bottles per minute) delivers its output to two B. & B. Fillers.

—Fenway Breweries Co., Boston, Mass., have just installed an Arrow Type "C" Automatic Bottle Washer. As a sample of Arrow Service, the machine was installed and running two weeks after being ordered.

—Wm. Hartig Malting Co., Watertown, Wis., are making alterations and repairs in their plant which has been closed for that purpose.

—Harvard Brewing Co., Lowell, Mass., have placed a contract with the Arrow Bottlers Machinery Co., Chicago, to attach their Arrow Automatic Brush Conveyors, with Automatic Transfers to Arrow Type "C" Bottle Washers, to two of their present Soakers. This will make the two units automatic from soaker load end to pasteurizer and give a maximum capacity of 110 bottles per minute.

—John Labatt, Ltd., London, Ontario, have contracted with the Arrow Bottlers Machinery Co., Chicago, for a complete automatic unit between soaker and pasteurizer. It is the first of its kind and consists of Arrow Brush Conveyor, Arrow Type "C" Automatic Bottle Washer, Arrow Rotary 40-spout Counter-pressure Bottle Filler and Arrow Automatic Gravity Crowner. It has a sustained capacity of 120 bottles per minute.

—Gerhard Lang Brewery, Buffalo, N. Y., have just ordered an Arrow 40-spout Counter-pressure Bottle Filler. This apparatus fills the bottles in an inclined position without any filler tubes entering the bottles.

—Leisen & Henes Brewing Co., Menominee, Mich., are making rapid progress in building their bottling works and refrigerating plant at Marinette, Wis. The estimates call for an expenditure of about \$10,000, the structure to be 50x155 feet, of concrete and brick.

—S. Liebmann's Sons' Brewing Co., Brooklyn, N. Y., have used two Arrow Outside Brush Conveyors and Arrow Type "C" Automatic Bottle Washers all during the summer months and are now installing a third set.

—Menominee River Brewing Co., Menominee, Mich., erect a large bottling house and refrigeration depot at Marinette, Wis., to cost about \$10,000, and, should Michigan really become a recationary Prohibition State, the company may be building a complete new brewery at Marinette, combining for that purpose with the Leisen & Henes Brewing Co., also of Menominee.

—Oconto Brewing Co., Inc., Oconto, Wis., are erecting a distributing depot at Niagara, Wis.

—Pacific Brewing & Malting Co., Oakland, Cal., are installing an Arrow Type "C" Automatic Bottle Washer in connection with a 20th Century Soaker.

—Rockford Brewing Co., Rockford, Ill., are installing an Arrow Type "C" Automatic Bottle Washer.

—Adam Scheidt Brewing Co., Norristown, Pa., are enlarging and equipping their bottling department with new machinery for the production of "near" beer.

—Springfield Breweries Co., Springfield, Mass., have just placed their order for a second Arrow Type "C" Automatic Bottle Washer in connection with Goldman Soaker and Brush Conveyor.

—United States Brewery, Petaluma, Cal., are remodeling part of their plant for the production of non-alcoholic beverages.

MADISON AND JEFFERSON ON OPPRESSION AND TYRANNY. James Madison has said: "It is of great importance in a republic not only to guard the society against the oppression of its rulers, but to guard one part of society against the injustice of the other part. Justice is the end of government; it is the end of civil society." And Thomas Jefferson said: "The executive power in our government is not the only, perhaps not even the principal, object of our solicitude. The tyranny of the legislature is really the danger most to be feared, and will continue to be so for many years to come."

"WHAT'S THE DIFFERENCE? Professor Ashworth says: 'The taking of private property for a public purpose, without remunerating the owner, is confiscation, and is not sanctioned by precedent in this country.' But, despite his own definition of the term, he asserts that abolition of the liquor business, a lawful enterprise, without compensation for property depreciated in value or destroyed, would not be confiscation. If this Government prohibits the manufacture and sale of liquor, and in so doing does not take from every property so used a value at least equal to the owner's loss in adapting it to some other purpose, then we fail utterly to know what 'taking private property' means; and if the proposed prohibition or abolition is not 'for a public purpose,' then every man who ever has advocated it has been guilty of hypocrisy, fraud and willful misrepresentation. A property equally is taken for a public purpose whether the public continues to use it for the purposes in which it previously was employed or proceeds to destroy it or decrease its value for what the public believes will be the public's own advantage."—"The Other Side.")

Brewery Companies and Their Officers.

New Corporations and How Capitalized. Results of Annual Elections.

Officers have been elected by brewery companies as follows:

American Malting Co., New York: Vice-president, R. H. Lansdale, succeeding Stephen L. Leonard, who has resigned.

Berghoff Brewing Association, Fort Wayne, Ind.: Brewmaster and assistant superintendent, Rudolph Bender, succeeding Rudolph Lichtwitz.

Columbia Malting Co., Chicago: President, E. A. Graff; secretary and treasurer, Henderson D. Graff; manager and superintendent, Carl Plewa.

Commercial Brewing Co., Boston, Mass.: President, John D. Sullivan; treasurer, John Lyons; secretary, Frank T. Ford; brewmaster, William Heine.

Commonwealth Brewing Co., Philadelphia: President, George W. Heuer; secretary and treasurer, Ralph T. Moyer; general manager, Walter Krug. The brewmaster is Ludwig Ritschel.

Crescent Brewing Co., Washington, Pa.: President, John B. Murphy; vice-president, A. A. Cummins; secretary-treasurer and general manager, R. J. Sullivan; brewmaster, John Muth.

Eagle Brewing Co., Chicago: Brewmaster, F. L. Kalacynski.

Enterprise Brewery, Inc., Brooklyn, N. Y.: President, W. A. A. Brown; vice-president, Hugo C. Gollmar; treasurer, Henry G. Friedmann; secretary, Ernest W. S. Buckland.

Fairmount Brewing Co., Cincinnati, Ohio: President, Charles Hasterlik; vice-president, Samuel Hasterlik; secretary-treasurer, A. Despres; brewmaster, John Koenig.

Fell Brewing Co., Simpson, Pa.: Assistant brewmaster, John B. Dirnberger.

Flock Brewing Co., Williamsport, Pa.: President and general manager, H. F. Wm. Flock; vice-president and treasurer, J. Henry Flock; secretary, J. George Flock; additional directors, Katie E. Flock and Mrs. Mary O. Flock. The brewmaster is Charles P. Anton, Sr.

Froedert Malting Co., Milwaukee: President and treasurer, Kurtis R. Froedert; vice-president and secretary, W. A. Teipel; superintendent, John Fluck.

Greensburg Brewing Co., Greensburg, Pa.: President, Theodore Fisher; treasurer, R. D. Laird; secretary, C. L. Phillips; general manager, F. A. Maddas; brewmaster, Daniel Sutter.

John Hauck Brewing Co., Cincinnati, Ohio: President, Louis J. Hauck; vice-president, P. W. J. Hauck; secretary and treasurer, Edward Schulz. The brewmaster is Charles M. Butz.

Home Brewing & Ice Co. of Joplin, Mo.: President and general manager, Wilhelm Griesser; vice-president and treasurer, Charles W. Griesser; secretary, J. Herman Eckart; additional directors, August Tenner and G. A. Habermehl; brewmaster, Stephan Wagner.

Otto Huber Brewery, Brooklyn, N. Y.: President, treasurer and general manager, Joseph Huber; vice-president, Frank Obernier; secretary, Otto Seidenberg; brewmaster, John Huber.

Hudepohl Brewing Co., Cincinnati, Ohio: President, M. E. Hudepohl; vice-president, C. Hesselbrock; treasurer,

Frank J. Willenbrink; secretary and general manager, William A. Pohl; brewmaster, John Merkt.

Indian Brewing Co., Indiana, Pa.: President, R. E. Young; treasurer, Elmer Ellis; secretary and general manager, Howard B. Kline; brewmaster, Henry Sutter.

Kurth Company, Columbus, Wis.: President, John H. Kurth; vice-president, superintendent and brewmaster, John W. Kurth; treasurer and general manager, Henry J. Kurth; secretary, A. Kurth; additional director, C. Kurth, Jr.

Herman Lackman Brewing Co., Cincinnati, Ohio: President and treasurer, Albert Lackman; vice-president, Henry F. Lackman; secretary, Herman W. Lackman; additional directors, Margaret L. Kiechler and J. G. F. Grote. The brewmaster is Edouard Bronner.

Joseph Laurer Brewing Co., Binghamton, N. Y.: President and general manager, Jacob Schwab; vice-president, John F. McDonald; secretary and treasurer, Anthony Garvey; additional directors, John J. Ehresman and Michael Moran. The brewmaster is Albert Hergenrother.

Lion Brewing Co., Wilkes-Barre, Pa.: President and general manager, William Stoppel; secretary and treasurer, Nathan Karnofsky; superintendent and brewmaster, Oscar Gebler.

Molson's Brewery, Ltd., Montreal, Can.: President, Herbert Molson; vice-president, F. W. Molson; secretary and treasurer, H. W. Molson. The brewmaster is John W. Hyde.

Montana Brewing Co., Great Falls, Mont.: President, F. G. Johnson; vice-president, Mrs. Emma Johnson; secretary-treasurer, S. R. Jensen; superintendent and treasurer, G. J. Siebel; additional directors, F. L. Johnson, S. A. Prentice, and W. H. Jensen.

Francis Perot's Sons Malting Co., Philadelphia: President, T. Morris Perot, Jr.; vice-president and treasurer, Elliston Perot; secretary, Theodore F. Miller; assistant secretary, John H. Gorke; Buffalo manager, Frank J. Stull.

Prairie du Chien Brewing Co., Prairie du Chien, Wis.: President and secretary, Louis W. Silberschmidt; vice-president, Frederick G. Silberschmidt; treasurer, A. G. Silberschmidt.

Ruehl Brewing Co., Chicago: Brewmaster, Hans Weiss. Adam Scheidt Brewing Co., Norristown, Pa.: Assistant brewmaster, Philip Berkes.

Stark-Tuscarawas Breweries Co., Canton, O., New Philadelphia Branch: Brewmaster, John F. Kniessner.

Suffolk Brewing Co., Boston, Mass.: President, Theodore C. Haffenreffer; treasurer, Albert Hayman; brewmaster, Frederick J. Slawson.

Union Brewing Co., New Orleans: President, Jos. Di Carlo; vice-president, George Mulé; secretary-treasurer, Philip Toto; brewmaster, Henry G. Dihlmann; additional directors, F. S. Einstein, P. Almerico, J. Calamia, J. K. Loyacano, S. Graffagnini and A. Dell'Orto.

Daniel D. Weschler & Sons, Incorporated, Milwaukee: President and general manager, George D. Weschler; vice-president, E. A. Weschler; secretary and treasurer, Walter K. Weschler; superintendent, C. W. Kalthoff; additional director, Mrs. Daniel D. Weschler.

Personal Mention.

Edward Bauersfeld, brewmaster of the Fink Brewing Co., Inc., Harrisburg, Pa., and his pretty wife celebrated their silver wedding last month, and on their second honeymoon they visited friends in Washington, D. C., Baltimore, New York and other cities.

Charles W. Bergner, a junior at Yale, son of Gustavus W. Bergner, president of the Bergner & Engel Brewing Co., Philadelphia, has been commissioned a second lieutenant of artillery in the United States Army and he is now at the front in France.

Adolphus Busch III., second vice-president of the Anheuser-Busch Brewing Association, St. Louis, and his wife, on Wednesday, September 6th, gave a supper and dance at Shore Acres, near Narragansett Pier, R. I., where they spent the summer months, for more than 150 guests, among them Mrs. Albert Bond Lambert, Miss Lisa Norris, Conte and Contessa Rodolphe Festetics De Tolan, Miss Dorothy Norris, Miss Ruth Magnus, Mrs. J. W. Loeb, Mrs. Sidney Berg, the Princess of Thurn and Taxis; Mr. and Mrs. John H. Hanan, Mr. and Mrs. August A. Busch, Mr. and Mrs. C. Drummond Jones, Mr. Adolphus Busch Magnus and Mrs. George McGrew, Miss Anne Festetics, Duca Durazzo, Mrs. Leo Samuels, Miss Clair Samuels, Mrs. Louis M. Hemmaway and Miss Violet Dean.

Louis J. Ehret, son of George Ehret, New York, has composed a march dedicated to the officers and soldiers of the Twelfth Regiment; under command of Col. Reginald Foster. The march was played by the Regiment's band when it left for Spartanburg, S. C., September 14th.

Arthur C. Hensler, secretary-treasurer and general manager of the Joseph Hensler Brewing Co., Newark, N. J., is a firm believer in the great strides Newark is making in the development and industrial progress of that busy city. He recently purchased a large tract of land on Austin street and Tichenor lane, as a fine investment of capital.

Henry Menzenwerth, Jr., son of Henry Menzenwerth, superintendent of the Anheuser-Busch Brewing Association, St. Louis, has been certified to the St. Louis District Appeal Board from the Fourteenth Ward of St. Louis as ready to serve in the National Army and he is now in training camp with good prospects of rapid promotion.

L. Randal Plunkett, partner in the firm of Plunkett Brothers, malt roasters, Dublin, has enlisted for active service, and went to training in the Inns of Court O.T.C.

Jacob P. Rettenmayer, president of the Acme Brewing Co., and also president and general manager of the California Brewing Association, both of San Francisco, has announced his engagement to Miss Philippina Schmidt, daughter of Mr. Leopold F. Schmidt, of Olympia, Wash.

Frank J. Ruhstaller, president of the Buffalo Brewing Co., Sacramento, Cal., has assumed control and management of the Capital Hotel in Sacramento, which he purchased from the former owner, C. J. Titus.

Col. Jacob Ruppert, New York, received an ovation, on Saturday, September 15th, from thousands of soldiers who were his guests at the Polo Grounds, when his Yankees played the Boston Red Sox, the Colonel having invited the various regiments then in New York. Col. Ruppert is also actively engaged in collecting a fund wherewith to provide soldiers and rookies with baseball material.

Louis Silberschmidt, for many years brewmaster of the John Gund Brewing Co., La Crosse, Wis., has purchased the property of the Schumann & Menges Brewery, Prairie du Chien, Wis., from George L. Schwarz and

William Garrity, who were the owners for a number of years.

Joseph Uihlein, vice-president and general manager of the Jos. Schlitz Brewing Co., Milwaukee, has returned from a successful hunting trip he made with several friends in the territory of Alaska.

Among the Brewmasters.

Master Brewers' Association of the United States. President Robert Weigel has made the following appointments:

Technical Committee—Otto Mittenzwey, Fitzgerald Bros. Brewing Co., Troy, N. Y., Chairman; Ernst Uhlman, Hinckel Breweries Co., Albany, N. Y.; Paul Glaesel, Stanton Brewing Co., Troy, N. Y.; Garret Noyes, Bolton Brewing Co., Troy, N. Y.; Henry O. Sturm, Beverwyck Brewing Co., Albany, N. Y., Secretary.

Advisory Committee—Leonhard Michel, Michel Brewing Co., Brooklyn, N. Y., Chairman; Oscar C. Aichel, Portsmouth Brewing Co., Portsmouth, N. H.; Henry Hoerl, Val. Blatz Brewing Co., Milwaukee; Adam Kayan, Fidelio Brewing Co., New York City; Louis Kress, Ebling Brewing Co., New York City; Fritz Sieber, Buffalo, N. Y.

Finance Committee—Carl Fuchs, Berkshire Brewing Ass'n, Pittsfield, Mass., Chairman; William F. Otto, Flower City Brewing Co., Rochester, N. Y.; George Neher, Stoll Brewing Co., Troy, N. Y.

Editorial Staff—Robert Weigel, President of the Master Brewers' Association, Editor-in-Chief; Henry O. Sturm, Corresponding and Recording Secretary of the Association, Assistant Editor; C. A. Nowak, St. Louis, Mo., Scientific Editor, and Dr. Leo Stein of New York City, Collaborator. Otto Mittenzwey, Ernst Uhlman, Paul Glaesel, Garret Noyes, members of the Technical Committee.

Secretary, Henry O. Sturm, of the Beverwyck Brewing Co., Albany, N. Y., with office at 410 Central Avenue, Albany, N. Y.

District Meetings.

Albany. After having received and approved the report of Colleague Uhlmann, delegate to the special meeting of the National Executive Board held in Detroit, Mich., the members of the Albany District, upon invitation by their Utica colleagues and friends, enjoyed an automobile ride through part of the beautiful Adirondack mountains.

Buffalo. At the August meeting of the Buffalo District colleague R. Schwartz "gave the details of the special meeting of the National Board of Trustees, and those present were surprised to hear that such circumstances existed at such critical times where only unity should prevail." The District's picnic at Erie, Pa., August 19th, was a thoroughly pleasing success.

Cincinnati. At the August meeting of the Cincinnati District, colleague Joseph Ruh, who was delegate to the special meeting of the National Board of Trustees submitted a very satisfactory report of the meeting which was accepted and dwelt in particular upon the generous hospitality shown the delegates by the members of the District Detroit. A very interesting discussion dealing with the present conditions in the brewing industry followed.

Pittsburgh. The Pittsburgh District has approved the action of the National Board of Trustees and the delegates to its meeting have been given a vote of thanks for their report and the hope was expressed that it would not be long before the German part of the "Communications" would be restored. After a discussion of the pending prohibition amendment to the Constitution and the closely related question of the low alcoholic beers, the meeting adjourned.

Sales of Beer in the United States.

According to the official report of the Internal Revenue Bureau, Washington, the number of barrels of beer sold in the United States in the several months of the present fiscal year, compared with the previous one, was as follows:

	1915.	1916.	Increase.	Decrease.
July	6,126,166	6,889,293	763,127	.....
August	5,727,851	7,137,132	1,409,281	.....
September ...	5,603,298	5,453,469	.....	149,829
October	4,567,582	4,849,077	281,495	.....
November	4,386,268	4,474,950	88,682	.....
December	4,299,591	4,487,910	188,319	.....
January	3,591,781	4,009,066	417,285	.....
February	3,730,615	3,675,243	.....	55,372
March	4,368,682	4,581,782	213,100	.....
April	4,513,512	4,627,221	113,709	.....
May	5,594,277	4,861,199	.....	733,078
June	6,054,885	5,683,168	.....	371,717
Total	58,564,508	60,729,510	3,474,998	1,309,996
Net increase for the fiscal year 1916-1917			2,165,002	
July	6,889,293	6,013,926	.....	875,367

FATHER OF THE BLIND PIG. "The licensed saloon sells by the drink; the mail order house sells by the gallon; the bootlegger sells a concoction of drugs that would make a bear climb a tree, which system do you prefer? Any man who advocates prohibition, either county, State or National, is the father of the blind pig."—(Frank E. Aid.)

THE VALUE OF BEER. In the course of a lecture on "The Problems of Food and Drink," before the Institute of Hygiene, J. Grant Ramsay, principal of the Institute, said beer was the national drink and had some food value as well as a tonic and stimulating value, but it was often unsuitable for sedentary workers. Many attempts had been made to shut down stimulants from the dietary altogether, but it was doubtful whether this was possible or even advisable. They had been recognized since the times of Biblical history, and were tonics just as laughter or enjoyment. No "total exemption" from alcohol was really known to science, as it was made if not imbibed by everyone. It was abuse that was dangerous, yet it was a fact that more illness, disease, and degeneracy was due to the abuse of foods than to the abuse of alcohol. Even the abuse of tea was believed to be a greater cause of degeneracy, but while all abuse was bad, it was no use being misled by the more prominent evidence of the abuse of drink.—("London 'Brewers' Journal.")

THE AVERAGE CITIZEN SHOULD WAKE UP! "Petitions, frequently secured through misrepresentations to the effect that prohibition will promote temperance, are sent to Washington by ten thousand. Hordes of Anti-Saloon League agitators infest the lobbies of the Senate and House. Accelerated movements, the strings of which are pulled by scheming politicians, profess to represent the views of the communities in which they are organized. All this has the effect of leading Congress to believe that 'the people' want prohibition. The average citizen, who drinks beer, wine or highballs, and attends to his own business, doesn't go to Washington. He doesn't bother to write to his United States Senators or Congressman. He doesn't even write to his local newspaper, protesting against the attempted invasion of his personal liberty in a matter of private conduct. He and his fellows outnumber the prohibition fanatics five to one, but they count for nothing as against the well-financed campaign of the persistent minority."—(Brooklyn, N. Y., "Citizen.")

Federal Taxes Paid by Brewers in 1916-1917.

Commissioner of Internal Revenue, W. H. Osborn, in his report for the fiscal year 1916-1917, gives the following figures as his receipts from taxes upon beer (less additional tax of 50 cents per barrel): \$61,532,025.08, and \$30,365,168.70 as the additional 50 cents tax, a total of \$91,897,193.78, an increase of \$3,126,089.82, as compared with the federal taxes paid by brewers in 1915-1916.

The taxes collected from distillers in 1916-1917 amounted to \$192,111,318.81, an increase of \$33,428,879.28 over the taxes of 1915-1916.

In regard to taxes paid upon fermented liquors by manufacturers in Prohibition States, Deputy Commissioner David A. Gates has this to say: "Such collections may have arisen from different causes. Under the existing rulings, tax is collected under the Internal Revenue laws on fermented liquors containing one-half of one per cent. or more of alcohol by volume, while in some of the States where prohibitory legislation is in force the limit is higher, or was higher during some portion of the year. Further, in some States, having prohibitory laws, the rule as to the limit of alcoholic content being construed the same as under the Internal Revenue laws, samples may have been found on the market showing an excess of alcoholic content above the one-half per cent. limit, making necessary the collection of tax on the product or a portion thereof under the Internal Revenue laws. The collections in these cases are small, and it is believed that they are due to one or the other of the explanations above set forth."

THE 1917 YEAR BOOK OF THE MERCHANTS' ASSOCIATION is out. It contains portraits of the officers of the Association, views of its headquarters in the Woolworth Building, New York, the annual reports of the Association's officers and of the managers of the Bureau of Research, the Foreign Trade Bureau, the Industrial Bureau, the Traffic Bureau, the Legislative Service Bureau and the Librarian, etc. The Secretary's report shows that on April 30, 1917, the membership of The Association was 5,197, an appreciable increase over the membership on the same date of the previous year. During the year 385 members were added to the Association's list. The Association now has a membership more representative in number and diversity of different business houses and individuals than that of any other commercial organization in the United States.

SAFEGUARDING AGAINST FIRE. The National Board of Fire Underwriters, 76 William street, New York, has prepared for the Council of National Defense a booklet of directions for the prevention of fires, under the title: "Safeguarding Industry"; also a show card, suitable for hanging upon the factory walls, giving fire prevention rules for employes. Copies of the booklet and show card are obtainable, without cost, by addressing the board of underwriters. The cover of the booklet bears a facsimile of a letter from President Wilson which is as follows: "Preventable fire is more than a private misfortune. It is a public dereliction. At a time like this of emergency and manifest necessity for the conservation of national resources, it is more than ever a matter of deep and pressing consequence that every means should be taken to prevent this evil." This is a period of emergency when it is most opportune to cultivate a habit of caution as to possible fire risks; for example, in the handling of gasoline and other explosive liquids or gases and in the dropping of matches, lighted cigars or cigarettes, the emptying of pipe bowls, and many other little acts and omissions that increase the fire risk.

Robbing the Poor Man of His Beer?

By ALEISTER CROWLEY

Whatever may be the powers exercised by any government, there is one thing which cannot be done without a revolution. That is to interfere with the customs of the people. A custom may be the silliest superstition, or the most deleterious habit, but it is inviolable. History is full of examples of tyrants who fell because of attempts to interfere in such methods. I almost wish I had not forgotten my history, because I should like to quote a whole lot of examples. However, history is all lies; it will be just the same if I invent a few cases. Timur Bukh was assassinated by a child of twelve years old in the midst of his victorious army, only a month after he promulgated his infamous decree forbidding his use of toothpicks. Mamius tried to alter the date of the festival of the God Runtum, and his dynasty crumbled in an hour. The emperor, Chwang Myang, lost his throne through forbidding people to feed goldfish on oatmeal as formerly.

As a matter of fact there is a recent and rather terrible case the Sipahi Mutiny in India. The entire country had submitted uncomplainingly to all sorts of tyrannies and exactions. But as soon as the Mohammedan thought that he was to be compelled to defile himself with pig, and the Hindu with cow, there was an immediate outbreak. It is impossible to alter by an act of legislation those deep-seated customs which refer to the satisfaction of the primary needs of men, the need to support life and the need to reproduce it. It is notorious that a food riot is the most terrible of all the danger signals.

But the interference with those customs which contain reference to pleasure is even more dangerous. The man of the common people has so little pleasure in his life. It is as crazy as it is criminal to attempt to remove the little he has got. Robbing the poor man of his beer is a desperate adventure.

If prohibition were enforced in any State, revolution would instantly follow. Trouble does not arise in dry States under the present system, because in addition to the pleasure of drinking you have the pleasure of thinking that you are putting one over on the law. It is humiliating to reduce men to the level of school boys. I shouldn't care to do it myself; but I dare say it is good fun for those who like it.

To attempt any such change in war time is entirely suicidal. I am perfectly convinced that the prohibition of Vodka was the determining cause of the Russian revolution. If any Russians hate Germans, it is not for any economic reasons. The Russian peasant does not understand political economy; he knows scarcely more than the average professor of that subject in a university. But the story was put about that the Germans had mutilated his ikons; and that put him into a baresark rage, although it did him no manner of harm.

The whole history of popular warfare is that of the attack and defense of sacred symbols, or superstitions, or customs, that could not be rationally defended for a moment. I do not know whether I like beer or not; for as it happens I have never tasted it. But I value my option. If any one comes into my office, and forbids me to drink beer, one of us has got to die. Any person not similarly irrational and violent has no just title to the name of man.

China. Additional taxes in China on liquors and new taxes on tobacco are reflected in the decrease in the number of distilleries from 148 to 138 and of tobacco factories from 34 to 29.

Obituary.

Joseph Beltz, vice-president of the Cleveland Home Brewing Co., Cleveland, Ohio, died at his residence in Cleveland, August 18th, at the age of seventy-seven years. He founded the Beltz Brewing Co., which subsequently was merged in the Cleveland Home Brewing Co. Two daughters and five sons survive him.

Herman Erb, brewmaster of the Joseph Stoeckle Brewing Co., Wilmington, Del., died there September 11th. Mr. Erb was born in Weidersheim, Hessen, Germany, June 27th, 1857. He was apprenticed in his father's brewery, and came to America, first securing employment in the Trefz Brewery, Newark, N. J., about 1875. Shortly afterward he came to Philadelphia and secured employment at Mueller's Brewery and then with George Guendele. In 1876 he returned to Germany for a short time and then embarked again for America, securing employment in the ale brewery of Frank Jones, Portsmouth, N. H., and after the death of his brother, John Erb, who was brewmaster at the Frank Jones Brewery, he went to Philadelphia, and became first fermenting cellar man at the Prospect Brewing Co., where his elder brother Louis was brewmaster. In 1884 he accepted the position of brewmaster of the Diamond State Brewery, Wilmington, Del., owned and conducted by the late Joseph Stoeckle, which position he held under Johanna S. Stoeckle, the widow of Joseph Stoeckle, and the Joseph Stoeckle Brewing Co., of which Harry J. Stoeckle, the son of Joseph Stoeckle, is the president and manager, and which position he occupied until the time of his death. He is survived by his brothers, of whom Wilhelm was formerly brewmaster of the Prospect Brewing Co., Philadelphia. His period of employment with the Stoeckle Brewery saw it grow from an output of 6,000 barrels to over 75,000 barrels annually. His other survivors are his widow, and one daughter, Mrs. Dudley Wood. Hermann A. Wolters, son of the late Arthur Wolters, brewmaster of the Krueger Brewery in Newark, N. J., who has been assistant to Mr. Erb for the past two years, has succeeded him as brewmaster.

C. B. Henschel, president of the Gutsch Brewing Co., Sheboygan, Wis., died at his residence in that city September 12th, at the venerable age of eighty years. He was a pioneer manufacturer of Sheboygan and Milwaukee, having large industrial and financial interests in both these cities. His widow and six children survive him.

Felix Kohn, assistant secretary-treasurer of the Springfield Breweries Co., Springfield, Mass., died at his home in that city, August 27th, at the age of sixty-eight years. He had been connected with the company since 1889. His birthplace was Markt Erlbach, Germany. Mrs. Kohn, two daughters, Minna and Emily, and two sons, Leopold S. and Sidney H. Kohn, survive him.

August Myer, for many years identified with the Akron Brewing Co., Akron, Ohio, died on Friday, August 24th, in a St. Louis, Mo., sanitarium, where he had been treated for a complication of diseases. He was born in Germany sixty-two years ago and was one of the best known brewers in Akron and vicinity. Besides his widow, he leaves three children, Charles and Augusta of Akron and Mrs. Bertha Hoffman of Cleveland, Ohio.

Joseph Schwartz, Sr., president of the Joseph Schwartz Brewing Co., Hartford, Wis., died at his residence in that city, August 30th, having been in poor health for several months. He was born at Ettersdorf, Prussia, November 9th, 1838, and came to America with his parents at the age of seventeen. In 1902 he purchased the Hartford brewery

from George Portz, incorporating it under its present name and he operated it with such skill and capability that its trade grew by leaps and bounds, and gradually large additions had to be erected to the brewery in order to handle the ever increasing business. A few years ago he placed his son, Andrew, in the brewery as manager, who took hold of the business with the same vim and success as his father. In April, 1861, the deceased enlisted in the 1st Wisconsin Volunteers and served until the end of the Civil War. Four children survive him, namely, Joseph, Andrew, and Miss Barbara of Hartford, and Mrs. Remmel of Milwaukee. Mrs. Schwartz preceded her husband in death years ago.

Alfred von Rosenegk, founder of the Rosenegk Brewing Co., Richmond, Va., died at his summer home at Virginia Beach, August 11th. He was born in Germany sixty-six years ago and came to the United States in 1876, settling in Richmond. He conducted his brewery until 1916 when Virginia's Prohibition law destroyed the flourishing brewing industry of that State. Mr. Rosenegk was prominent in the financial, industrial and political field of Virginia and at one time he was elected to the State Legislature where he rendered distinguished service to the commonwealth. His survivors are his widow, four daughters and one brother.

Deaths in Foreign Countries.

Capt. Frederick D. Andrews, M. C., son of Alderman T. Andrews, of the City Brewery, Lichfield, England, and Chairman of the Birmingham and Midland Counties Brewers' Association; killed in action.

J. A. P. Harding, for 25 years manager of the New Street Brewery, Burton-on-Trent.

Lionel H. King, private in the Dragoon Guards, British Army, and former manager of the Anchor Brewery, Newport, England; killed in action.

Alfred Rémy, proprietor of brewery at Fleury-sur-Orne (Calvados), France; aged 60.

Alderman Alfred Nuttall, mayor of Blackburn, England, and director of Nuttall & Co., Ltd., Blackburn; aged 54.

Michael Ridler, maltster, Porlock, Somerset, England, aged 78 years.

Corporal Francis E. Shipstone, son of James Shipstone, chairman and manager of the Star Brewery, New Basford, Nottingham, England; killed in action; aged 42.

Lieut. Reginald C. W. Smithers, son of the late H. W. Smithers, director of Smithers & Sons, Ltd., North Street Brewery, Brighton, England; killed in action.

William Stevenson, Glasgow manager for Geo. Younger & Son, Ltd., Allva, and previously representative of Messrs. Allsopp.

"HEAVEN MEND US ALL! Heaven keep us sober this day—and each and every day—because drink is the root of all evil—because drunkenness is beastly and most abominable—because sobriety, like cleanliness, is next to godliness—not that, unable to get drink, the wickedness that is in us may seek other channels of gratification and expression. Then rather let our prayer to the Great Governor of nature be, Lord, restrain us in excesses of every sort. Make us to discriminate alike in food and drink, in conduct and apparel. Make us to see through the inner lights of the soul, not be ever browbeaten by the brutish arm of the law. Make us honest and chaste—in nothing pharisaic—taking all that is good in life—happiest in moderation—eschewing cant hypocrisy and greed, for Thine is the Kingdom, the Power and the Glory, world without end, Amen!"—(Col. Henry Watterson.)

Firm Changes and New Breweries.

(Reported by the Internal Revenue Bureau, Washington, D. C.)

FIRM CHANGES.

MARYLAND—Baltimore	Standard Brewery, Inc., succeeds Albert J. Fleischman, Edward Duffy, Joseph Ulman, Receivers of the Standard Brewery Co. of Baltimore City.
NEBRASKA—Omaha	Storz Beverage & Ice Co., succeeds Storz Brewing Co.
" "	Willow Springs Beverage Co., succeeds Willow Springs Brewing Co.
NEW YORK—Auburn	Independent-Koenig Brewing Co., succeeds Independent Brewing Co. and Koenig Brewing Co.
PENNSYLVANIA—Conemaugh	Conemaugh Brewing Co., succeeds D. L. Parsons and Alvin Sherbine, Receivers of Conemaugh Brewing Co.
WISCONSIN—Madison	Hausmann Brewing Co., Inc., succeeds Hausmann Brewing Co.

BREWERIES CLOSED

DISTRICT OF COLUMBIA—Washington	National Capital Brewing Co.
MARYLAND—Frostburg	Frostburg Brewing Co.
MISSOURI—St. Louis	Schroeder's Berliner Weiss Beer Co.
NEBRASKA—Columbus	Columbus Brewing Co.
" —Fremont	Fremont Brewing Co.
" —Hastings	Hastings Brewing Association.
" —Nebraska City	Otoe Brewing Co.
" —Omaha	Metz Bros. Brewing Co.
" —West Point	West Point Brewing Co.
" —Wilbur	Wilbur Brewery Co.
NEW JERSEY—Newark	Geo. C. Wiedenmayer.
NEW YORK—Brooklyn	Franklin Brewing Co.
" —Buffalo	Alois Muehlbauer, Jr.
" —Rochester	Chas. G. Weinmann.
PENNSYLVANIA—Lykens	Lykens Brewing Co.
SOUTH DAKOTA—Central City	Black Hills Brewing Co.
" —Huron	Blume Brewing Co.
" —Sioux Falls	Sioux Falls Brewing Co.
" —Yankton	Schwenk-Barth Brewing Co., Inc.
WISCONSIN—New Lisbon	Estate of Henry Bierbauer.

—It is reported that the Hennepin Brewing Co., Minneapolis, has been placed into the hands of a receiver.

"IF YOUR PROHIBITION FRIENDS TELL YOU," says the Manufacturers' and Merchants' Association of New Jersey, "that the American people are scrambling for seats on the 'Water Wagon,' and that the country is drying up, just ask them to explain why it is that with State after State going 'dry,' the United States Internal Revenue department receipts from beer and whiskey show enormous increases annually. The figures presented are astonishing and would appear to show that the more prohibitory laws there are enacted the greater is the consumption of alcoholic beverages. These figures are taken from the report of the Commissioner of Internal Revenue, showing receipts for January, 1916, as compared with January, 1917, together with the receipts for beer and whiskey for the fiscal year of 1915 and 1916. In 1915-1916 the gain in beer taxes was \$624,356.88; in whiskey taxes, \$3,195,481.21; in 1916-1917, gain from beer, \$9,442,157; from whiskey, \$14,062,740. Your prohibition friends cannot explain this paradoxical condition; it is a mystery even to Prohibition leaders. There is but one explanation—only one—to this question: The American people drink (yet very rarely to excess), not necessarily to please and support the manufacturers and sellers of alcoholic beverages, but simply because they want to drink, like to drink and mean to drink them, despite all the prohibitory laws enactable."

Foreign Trade Opportunities.

Additional details relating to Foreign Trade Opportunities may be obtained upon application to the Bureau of Foreign and Domestic Commerce, Washington, D. C., or at the branch offices of the Bureau, 315 Customhouse, New York, N. Y., 629 Federal Building, Chicago, Ill., Association of Commerce Building, New Orleans, La., and 310 Customhouse, San Francisco, Cal. Apply for address in letter form, giving file numbers.

25273.—A firm in Spain desires to secure an agency for the sale of barley in shipments of 200 or 300 tons. Quotations should include agent's commission. Payment will be made by bank credit in New York, or sight draft against delivery of documents. The barley may be put up in 100 kilo sacks or sent by shiploads in bulk. Correspondence may be in English. References.

25312.—The general manager of a firm in British East Africa wishes to be placed in communication with American manufacturers and exporters of wines, spirits, ales, etc. The firm will make outright purchases and also consider agency propositions, depending on nature of the goods desired. References.

25313.—An agency is desired by a company in Brazil for the sale of malt, hops, and brewery supplies. It also wishes to make outright purchases. Correspondence should be in Portuguese. References.

25365.—A man in Cuba wishes to secure an agency for the sale of grain, corn products and rice. Payment will be made by sight draft with documents attached at presentation on arrival of goods. Correspondence may be in English. References.

25395.—An agency is desired by a man in Argentina for the sale of rice. Correspondence may be in English. References.

"CORN is no longer being distilled for beverage purposes, but the brewer may continue to use his usual quota, and the distiller who engages in the manufacture of alcohol for ammunition purposes will continue as heretofore. No doubt some of the distillers who have been manufacturing spirits for beverage purposes will turn their product over to the ammunition makers. Even though all the distilleries were closed, with a three billion bushel crop assured their needs would not be likely to have much effect on the market price of corn during the year. The crops of barley, rye, buckwheat and potatoes are so large that the restrictions upon the manufacture of malt and vinous beverages, which are optional with the President, would not seem likely to be enforced, at least during the present crop year, and with the close of the war, the Food Control Law is automatically revoked."—(*Grain Dealers' Journal*.)

DISRESPECT FOR LAW BECOMING UNIVERSAL. "In America no man knows whether he is a criminal or no, unless he is sure that he is one. And this conviction is very widespread. Laws being passed in Albany alone at the rate of 600 per annum, even the judges make no attempt to 'keep up with the Joneses,' as Judge Welles complains in his recent book. The general disrespect for law has become universal. It is impossible to go into a bar in New York without seeing men in uniform being surreptitiously supplied with alcohol. The decent man objects to being made into a criminal by a few faddists who slyly pass laws directed against his normal actions. He consequently ignores the law completely, and relies solely on his conscience. This is all very well for the good man, but it encourages the bad man. 'One may as well be hanged for a sheep as for a lamb,' says he, and finds murder more profitable than spitting on the sidewalk."—(A. C. in "The International.")

Correspondence.

*** Our readers will clearly understand that we do not hold ourselves responsible for the opinions of our correspondents, nor for the language in which they are expressed.

CORRESPONDENTS are respectfully requested to send their communications so as to arrive at our office one week in advance of the date of publication. This is the only means by which insertion can be insured in the next number of the JOURNAL.

CINCINNATI, September 20th, 1917.

Editor, THE BREWERS' JOURNAL.

Dear Sir:—The legislative situation at Washington as it refers to breweries having become relatively quiet, the consensus of opinion among the trade seems to be that the brewer is "in the clear" for some years to come, since the food conservation bill has passed with the most obnoxious features eliminated, and the amendment to the federal constitution, the adoption of which is still by no means a certainty, would, if passed by both houses, not become a national issue for six years at least.

With such worries off his mind, the brewer should begin to devote his attention to ways and means for reducing his manufacturing costs. The unprecedentedly high price of malt is reacting upon the size of the beer glass, and naturally the brewer who gives the most and best for the money will secure the greatest volume of business.

The American public has been made once more to think. And it has sensed a discrimination between whiskey and beer. Formerly it was the custom of the prohibitionists to call every thing "booze," classifying the harmless beer beverages with the more or less deleterious whiskey. The agitation set up has created a well-defined distinction, and this distinction has been given wide publicity by the newspapers of the entire country. Having once learned the lesson, the public will not so easily forget it. The prohibitionists are finding that they have over-played their game, which is the reason for the introduction of the eleventh hour proposals in Congress that the federal constitution be amended.

There were five vital considerations which impelled Congress to exclude beer from the national prohibition amendment to the food conservation bill. The first is the immense curtailment of excise and revenue taxes at a time when the Government is in dire need of funds; second, lawless confiscation of colossal capital investments; third, the social unrest and discontent which would be engendered by depriving hundreds of thousands of persons of employment, and a greater number of sober and honest men of their legitimate daily beverage; fourth, increased cost of milk and its products due to lack of food for live-stock, a large percentage of which is obtained from breweries in the form of spent grains; fifth, increased cost of bread due to scarcity of yeast, made almost entirely from malt sprouts.

Another feature which brightens the outlook as it concerns local option and State elections this fall is that it is no longer possible to vote dry without voting "bone-dry." In other words, any territory voted dry this fall, whether it be State or county, will automatically become bone-dry, by the operation of the provisions of the postal appropriation act. With the prohibition of whiskey already taken care of by federal statute, it is a matter highly doubtful, to say the least, that the workingman will want to go still farther, and vote himself out of his glass of beer. The bone-dry feature does another very good thing; it brings the situation home to the vile hypocrite who has heretofore been voting "dry" to "save the other fellow from hell"—at the same time having a full and assorted supply in his own cellar.

Taking all these facts into consideration, we believe that the situation just now looks brighter for the brewer than it has for quite a long while. Of course, having been the victim of persecution and a target for odious legislation all these years, the brewer will naturally be somewhat slow to respond to the stimulus for more favorable conditions; but we feel that gradually he will begin to realize the possibilities of the situation and see matters in their true perspective.

Our earnest conviction is that a new era is dawning, and that within certain reasonable limits the brewer will enjoy unexampled opportunities for doing a prosperous business. If these optimistic views are sufficiently disseminated, we believe this fact will also tend to re-create a normal situation.

Very truly yours,

JOS. E. SIEGEL,

Secretary-treasurer, The B. Hehle Malt Milling System Company.

—The plant of the Uneeda Brewing Co., Wheeling, W. Va., has been sold to the Wheeling Chemical Products Co., for the manufacture of matches, glue and similar products.

Our Patent Bureau.

Selected List of Patents relating to Brewing, Malting, etc., issued by the United States Patent Office, Washington, D. C.

- 1,237,724. Unfermented malt beverage and process of preparing the same. William A. Steinemann, Los Angeles, Cal.
 1,237,942. Water-purifying device for boilers. John H. Mutchler, Gibsonburg, Ohio.
 1,238,051. Refrigerating apparatus. John M. Peterson, Chicago, assignor to George J. Sayer, Chicago.
 1,238,156. Cover for bottle-cap corks. Reinhold Gustav Koch, New York, assignor to Silver Crown Disk Co., Inc., New York.
 1,238,577. Process of treating fermented beverages. Joseph Schneible, Chicago.
 1,239,572. Precision temperature apparatus. Achilles de Khotinski, Chicago, assignor to Central Scientific Co., Chicago.
 1,239,836. Bottle-closure. Harry W. Spangler, Allentown, Pa.
 1,239,858. Wiper mechanism for labeling-machines. Assigned to Economic Machinery Co., Worcester, Mass.
 1,240,016. Process of preparing a non-alcoholic chill-proof beverage. John Beerhalter, Duluth, Minn.
 1,240,383. Bottle-stopper. Henry F. Stock and Joseph Nader, Waukesha, Wis.
 1,240,606. Arrangement for flaming. Karl Rücker and Daniel Pickée, Marienfelde, near Berlin, Germany.

On receipt of twenty-five cents, together with number and date, we will mail printed specifications of any desired patent, with full payment of the fee required by law.

Prepared specially for the BREWERS' JOURNAL by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C., London, England, and 10 Gray's Inn Place, W. C., London, England.

Specifications Published
1916.

Prepared specially for the BREWERS' JOURNAL, by Messrs. G. F. Redfern & Co., Chartered Patent Agents, 15 South Street, Finsbury, E. C., London, England, and 10 Gray's Inn Place, W. C., London, England.

- 107,391. E. Kenward. Brewing.
 107,480. Bratby & Hinchliffe, S. A. Jackson, and W. Richmond. Rotary bottling-machines.
 107,840. T. W. Cameron. Stopper for bottles and the like to prevent tampering with the contents.

1917.

- 104,000. E. Nordstrom. Apparatus for making and packaging bottle-caps.

For copies of published specifications of Foreign Patents (25 cents each), address Messrs. Redfern & Co., 15 South Street, Finsbury, London, England.

Newly Registered Trade Marks.

The subjoined list of trade-marks, used in the brewing trade, is taken from the Official Gazette of the United States Patent Office. The owners of these marks are entitled to have them registered under the Act of February 20th, 1905, and persons believing that they would be damaged by such registration may oppose it upon payment of the fee required by law.



Ser. No. 100,358. National Brewing Company, New Orleans, La. Filed January 4, 1917.

Particular description of goods.—Cereal Beverages, Fermented and Flavored with Hops, Containing a Maximum of Two Per Cent. of Alcohol.

Claims use since February 15, 1916.

LACTONADE

Ser. No. 101,945. Class 48. United Breweries Co., Chicago, Ill. Filed March 6, 1917.

Particular description of goods.—Beer.

Claims use since on or about the 24th day of February, 1917.

SERVO

Ser. No. 101,936. Class 45. North Western Company, Chicago, Ill. Filed March 6, 1917.

Particular description of goods.—A Soft Drink or Beverage.

Claims use since on or about the 24th day of February, 1917.



Ser. No. 103,972. Henry Weinhard Estate, Portland, Oregon. Filed May 19, 1917.

Particular description of goods.—Apple-Juice.

Claims use since April 1, 1917.



Ser. No. 104,680. Jung Brewing Company, Milwaukee, Wis. Filed June 25, 1917.

Particular description of goods.—A Carbonated Beverage of a Malt and Corn Nature Containing Less Than One-Half of One Per Cent. Alcohol and Sold as a Soft Drink.

Claims use since June 14, 1917.

FREMO

Ser. No. 104,298. M. K. Goetz Brewing Co., St. Joseph, Mo. Filed June 6, 1917.

Particular description of goods.—A Tonic Cereal Beverage to be Sold as a Soft Drink.

Claims use since May 18, 1917.



Ser. No. 104,958. Houston Ice & Brewing Association, Houston, Texas. Filed July 10, 1917.

Particular description of goods.—Non-Alcoholic Cereal Beverages Sold as Soft Drinks.

Claims use since April 2, 1917.



Ser. No. 105,464. P. Ballantine & Sons, Newark, N. J. Filed August 4, 1917.

Particular description of goods.—Lager-Beer.

Claims use since January 18, 1907.



Ser. No. 105,660. Massachusetts Breweries Company, Alexandria, Va., and Boston, Mass. Filed August 15, 1917.

Particular description of goods.—A Beverage of a Malt Nature.

Claims use since June 1, 1917.

AGRICOLA

Ser. No. 105,700. S. Liebmann's Sons Brewing Company, Brooklyn, N. Y. Filed August 17, 1917.

Particular description of goods.—Beverage Brewed of Malt and other Cereals and is Non-Alcoholic.

Claims use since July 25, 1917.

Presto

Ser. No. 104,945. St. Joseph Brewing Co., St. Joseph, Mo. Filed July 9, 1917.

Particular description of goods.—A Non-Intoxicating Malt Beverage to be Sold as a Soft Drink.

Claims use since July 2, 1917.

B&W

Ser. No. 105,371. Beadleston & Woerz, New York, N. Y. Filed July 31, 1917.

Particular description of goods.—A Non-Intoxicating Carbonated Beverage Sold as a Soft Drink.

Claims use since July 28, 1917.



Ser. No. 105,837. Galveston Brewing Association, Galveston, Texas. Filed August 23, 1917.

Particular description of goods.—Non-Intoxicating Cereal Beverages.

Claims use since August 13, 1917.

The following Trade Marks have been definitely Registered:

118,469. Non-Intoxicating Malt Beverage Sold as a Soft Drink. Milo Beverage Co., Milwaukee, Wis. Filed April 23, 1917. Serial No. 103,226. Published July 10, 1917. Registration granted September 11th, 1917.

118,470. Certain Named Non-Alcoholic Beverages. Pabst Brewing Company, Milwaukee, Wis. Filed June 13, 1917. Serial No. 104,429. Published July 10, 1917. Registration granted September 11th, 1917.

118,536 Maltless Beverage to be Sold as a Soft Drink. Frank Jones Brewing Co., Ltd., London, England, and Portsmouth, N. H. Filed June 12, 1917. Serial No. 104,407. Published July 17, 1917. Registration granted September 18th, 1917.

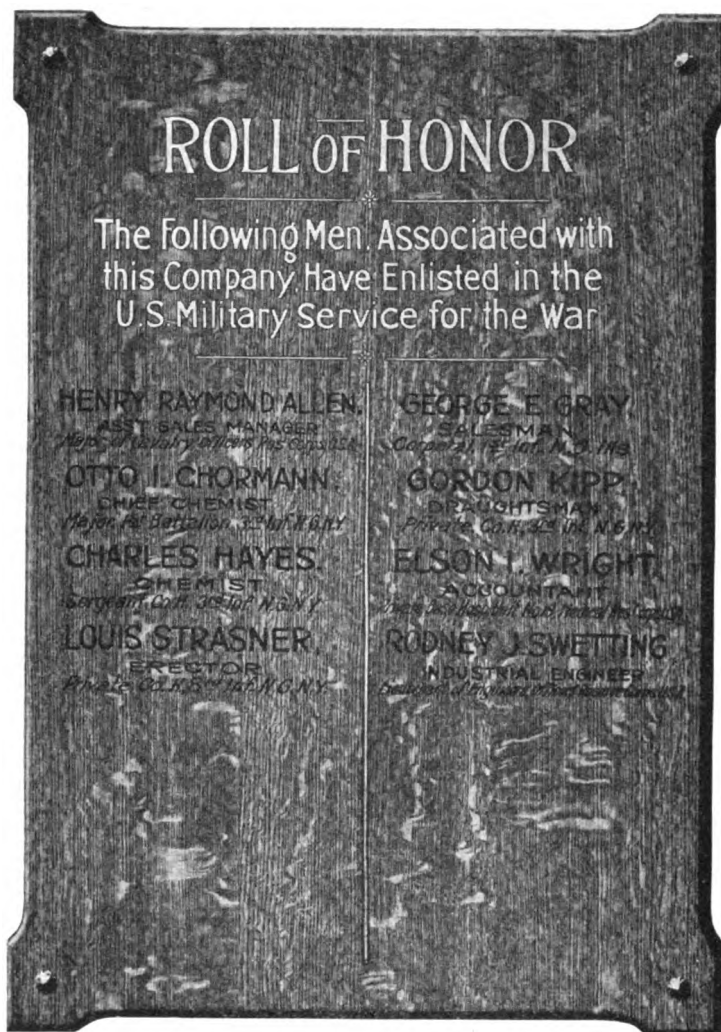
—At the great horse show held last month in Rochester, N. Y., the draft horses shown by the James Hanley Brewing Co., Providence, R. I., won second prize in their class.

—Four armed bandits broke into the office of the Mullen Brewing Co., Chicago, early September 10th, bound and gagged the watchman, blew open the safe and decamped with \$950 and checks amounting to about \$1,000.

—The Eagle Brewing Co., Inc., Waterbury, Conn., opened its large new bottling department to the public September 5th, visitors coming from all over the city and its vicinity, and the company liberally entertaining them.

Pfaunder Men in the Army.

The Pfaunder Company, manufacturers of steel enameled steel tanks, Rochester, New York, have placed conspicuously in the entry of their executive offices at Rochester a photograph, of which we herewith publish a reduced facsimile, bearing the names and ranks of the members of their organization who have enlisted in the service of our country during the war and to the list the names of the men who are drafted will also be added.



The company say: "We do not claim credit for originating this idea. It is one which our Vice-President and General Sales Manager, Mr. N. G. Williams, brought over from England last summer. However, we do not know of this particular thing being done by other firms in this country and are suggesting its publication with a view to its more general adoption."

"WHEN WE WERE YOUNG and went to Sunday school, there were several things we were taught about lies. One was as to the form of a lie, and among the forms was stating something as a truth that you do not know to be true, and another, repeating as a truth something that you know to be untrue. We were further taught that a lie is a lie, no matter who utters it. We think that this well applies to the reverend gentlemen who are using their pulpits as political rostrums for Prohibition propaganda and spreading the falsehoods originated by the professional Prohibition liars. A lie is none the less a lie when coming from the mouth of a man bearing the title of "Reverend" and who proclaims himself "a servant of the Lord."—"Wine and Spirit Buelletin.")

Market Review.

OFFICE OF THE BREWERS' JOURNAL,
NEW YORK, September 28th, 1917.

Barley. The Government's crop estimate, published September 7th, gave the following figures for Barley: September, 1917, forecast, 204,000,000 bushels, as compared with 203,000,000 bushels last August, and 181,000,000 bushels in December, 1916, the average since 1911 having been 197,000,000 bushels; price per bushel, \$1.10 in September, 1916, \$0.72; condition, 76.3; September 1st, 1916, 74.6.

To-day the local Barley market is quite firm, although there is no particular demand and spot stocks are light. Prices are of all sorts, \$1.45@ \$1.51.

CHICAGO, September 26th: "Barley receipts at the present time, while of fair volume, are not as large as thirty days ago, and this is due in part to the fact that the government has now established a basic price for wheat and that country elevators have had governmental instructions to give preference to wheat shipments. The quality continues to be excellent. The run is not as fancy as the early Iowa and Illinois shipments, but offerings are largely barley of good berry, sound, although a considerable amount is stained. Prices are a matter of ten or twelve cents higher than a month ago. We quote low grade \$1.30@ \$1.34, fair to good, \$1.35@ \$1.38, good to choice, \$1.38@ \$1.40 with fancy two or three cents higher. These prices show a decline from a week ago of three to four cents a bushel."

Malt. There has not been a great deal of buying going on lately. Things are very quiet now that the first rush is over. Brewers are confidently expecting lower prices, but whether they will materialize is not known. Convention-time is now coming on and there is very little buying to speak of, consequently the market may go off a little. Prices of Malt are relatively firm, about \$1.58 @ \$1.60, New York; Bottle Beer Malt, \$1.63@ \$1.65.

CHICAGO, September 26th: "New Standard Malt is quoted here at \$1.50@ \$1.52; New Bottle Beer Malt, \$1.55@ \$1.57; New Fancy Bottle Beer Malt, \$1.60@ \$1.62. Some Malt houses are making concessions of 1 to 2 cents. Samples of fancy Malt have not yet been shown."

Corn Goods. Quotations: Grits, \$5.40; Meal, \$5.39; 100 lb. sacks; Corn Sugar, \$5.70, in barrels; \$5.77 in bags; Corn Syrup, \$5.64.

CHICAGO, September 26th: Grits is quoted here at \$5.15@ \$5.18; Meal, \$5.13@ \$5.16. Some millers are also cutting prices 5 to 8 cents. The market is very uncertain."

Hops. The hop crop coming down even lighter than expected, and being not much more than half of what it was in 1916, the market has advanced considerably for the 1917 crop as well as the older growths. While many brewers have made contracts at low prices, some of the dealers have been disappointed in getting less hops from growers than what they contracted, and were compelled to buy them in at much higher prices than they were sold for. It is estimated that over three-quarters of the crop on the Pacific coast has been sold, and in New York State—which crop is very small—about two-thirds of the hops have left growers' hands. Growers as a general rule are reluctant to sell, and expected still higher prices, because the statistical position seems to warrant it. We quote: 1917 N. Y. State hops, 90@ 95c. per lb.; 1917 Pacific coast hops, 39@ 43c.; 1916 Pacific coast hops, 24@ 28c.; 1915 Pacific coast hops, 20@ 23c.; 1916 and older growths of N. Y. States, nominal.

UTICA, N. Y., Sept. 24. Fred Zweifeld & Son of Waterville have made the first sale of hops at \$1 per pound. This is the first price of \$1 since 1882. The purchaser also paid for sacking, a considerable item of expense.

NOT TIMELY. It is certain that to try and force Prohibition at one jump would cause two marked disturbances. One would be with the people who for years have used spirituous drinks. The other would be with the revenue. To deprive men, now utterly indifferent to Prohibition, and in many instances keenly resenting it, of all chance to secure what they want, except by stealth, is to invite a condition of affairs bad enough in times of peace. Practical experience in nearly every State in the Union called dry in these times has demonstrated this.—(Bridgeport [Conn.] "Post.")

THE NATIONAL ASSOCIATION OF COMMERCE AND LABOR will hold its annual convention at the Hotel Traymore, Atlantic City, N. J., Wednesday, October 3rd, 1917, to transact business of great importance to the American brewing industry. Also new officers will be elected.

DR. BISSELL'S TESTIMONY. "The food value of beer to a patient recovering from anthrax served its purpose as well as the stimulant effects sought. I have observed marked beneficial results following the administration of beer in so many instances that I feel we are warranted in placing a higher value on it as a nutrient therapeutic agent."—(Dr. Joseph V. Bissell, Bellevue Hospital, New York.)

HARVEY KNOWS THEM TO BE FAKERS. "How far is this sentiment of prohibition real sentiment, and how far as it politics? For my part I have no sympathy with and but little use for the political prohibitionist. My kind of prohibition is not the one which seeks to win votes; it is the kind which seeks to save humanity."—(Dr. Harvey W. Wiley, former Chief Chemist, U. S. Department of Agriculture.)

WEEVIL IN SHIPMENTS OF NEW GRAIN seem to prove some country elevator operators are open to the charge of slovenly housekeeping. Elevator boots, heads, spouting and especially the bins of studded elevators require thorough cleaning frequently. Dust, dirt and screenings should not be permitted to accumulate about the elevator as the pests hide in such rubbish and multiply rapidly. When weevil reach the bins they soon damage much grain and reduce the grade of all shipments.

If the principle of suddenly out-lawing a legal business, like the brewing industry, without compensation, is right there is no reason why all other industries might not thus be destroyed. In other words: the entire commercial and industrial structure of the United States would be at the mercy of a few unscrupulous schemers who temporarily happen to be in the possession of the law-making machinery of the country.

THE SANE MAJORITY WILL PREVENT IT. "The professional prohibitionists and their paid lobby do not care what happens, so long prohibition is put over on the people. Let the war be lost, let property be destroyed, let thousands be impoverished, let liberty perish, if only prohibition triumphs. But the great, sane majority of Americans ought to think and act differently. It is incredible that the people of the United States will finally approve the wholesale and ruinous confiscation of property."—(St. Louis "Post-Dispatch.")

New Advertisers in THE BREWERS' JOURNAL.

The names of wide-awake firms and manufacturers, who know a thing or two about the effects of advertising in a widely-circulating trade paper, are spread over the pages set aside for that purpose in THE BREWERS' JOURNAL. To-day we add to those with whom our subscribers have already become familiar, the following:

BALTIMORE PEARL HOMINY CO., Howard St. Pier, Baltimore, Md.
Corn Flakes, Grits and Meal.

M. LIBERMAN, 11 Lewis St., New York, N. Y.
Purchaser of Hop Sacks, Rice and all other kinds of bags.

NEVER-SKID MANUFACTURING CO., 110 West 14th St., New York, N. Y.
"Never-Skids" for Motor Trucks.

STERLING REFINING CO., Evansville, Ind.
Manufacturers of Body Sugar, Light or Amber.

JOHN WILFERT CO., 259 Broadway, New York, N. Y.
Valves, Fittings, etc. Complete Equipment for Engineering, Refrigeration, Hydraulic, Steam and Power Plants.

Trade Correspondence and Literature.

Descriptive of New Contrivances, Methods of Operation, etc., by the respective Manufacturers and Dealers, who alone are responsible for what they have to say.

Sell Your Hop and Rice Bags!

M. Liberman, 11 Lewis Street, New York City, purchases hop sacks and rice bags, and all other kinds of bags in any quantities, and they pay liberal prices too.

Guide to Investments.

Philip Lynch, whose offices are at No. 2 Wall Street, in the First National Bank Building, New York City, will show you how to profitably invest your surplus funds in gold-edged railroad bonds, industrial and public utility securities.

Pfautler Representatives in Detroit and Pittsburgh.

The Pfautler Company, manufacturers of Glass Enameled Steel Tanks, Rochester, N. Y., have established the following new Branch Sales Offices: In Pittsburgh, Pa., 1502 Oliver Building, Mr. James H. Charity, Representative; in Detroit, Mich., 1946 Penobscot Building, Mr. Geo. M. Scott, Representative.

The company believe that by the establishment of these offices they can give their patrons and prospective patrons within the vicinities affected the maximum of prompt and efficient service.

"Better Corn Products."

The Baltimore Pearl Hominy Co., Howard Street Pier, Baltimore, Md., announce that they furnish brewers with "Better Corn Products," guaranteeing one-half per cent. or less oil in their Flakes; three-quarter per cent. or less oil in their Grits and one per cent. or less in their Meal. The daily capacity of their plant is 10,000 bushels of White Corn.

Write for Market Letter and Samples.

Equipment for All Kinds of Plants.

The John Wilfert Company, W. Gerald Hawes, president and general manager, with offices in New York, Brooklyn, Goshen, Dayton and St. Louis, and factories at the Bushwick Terminal, Brooklyn, N. Y., manufacture valves, fittings and pipings for all kinds of engineering, refrigerating, hydraulic, steam and electrical power plants.

The Company's executive offices are located at 259 Broadway, New York City, while their salesrooms and warehouses are at 486-492 Bushwick Avenue, and 12-18 Garden Street, Brooklyn, N. Y.

Prepare Now for Winter!

To avoid trouble in your transportation department, the wheels of your motor trucks should be so equipped that skidding becomes impossible, even when the ground is covered with slush, snow or ice.

The Never-Skid Mfg. Co., 110 West 14th Street, New York, offer to users of trucks the new type of Never-Skid, which is said to practically eliminate vibration, does away with skidding and thus affords positive traction.

Folder and prices will be promptly mailed to all asking for them.

Edison Storage Batteries.

The Edison Storage Battery Company's Bulletin No. 610, just off the press, describes Edison Storage Batteries for use in lumber tractors, industrial locomotives and surface carriers, saying, among other things, that by the use of these batteries not only big savings are effected, but they also "speed up work throughout the plant. Waiting for the slow-moving horse or mule is eliminated. The fast-moving tractor, surface carrier or industrial locomotive sets the pace—output is increased all down the line. Fire risk around yards and in mills is reduced by the use of storage battery tractors, carriers and industrial locomotives. This method of haulage is approved by the Fire Underwriters.

"Edison Batteries are made of steel—the only ones so made—and withstand the bumps, jars, vibration and rough handling that is bound to occur. Further, they are easy to care for, need no

expert attention and have a remarkably long life. Such is their superiority for this work that to-day practically all storage battery lumber tractors, surface carriers and industrial locomotives are Edison-equipped.

"A study of the installations illustrated and described in this book will serve to emphasize another important point, namely, that there are different types of tractors, carriers and industrial locomotives, with different sizes of battery equipment depending on the kind of work to be done and the nature of the working conditions. It is therefore recommended that the complete problem be laid before our Engineering Department. Having ascertained data covering the weight of load, kind of dollies, wagons or cars used, average length of haul, number of round trips a day, percentage and length of grade, kind of surface of tramway or roadway to be operated upon, speed desired, etc., our Engineering Department will bring wide and varied experience to bear on your problem with the certainty that the Edison Storage Batteries specified will, as in thousands of other cases, do the work required and do it in a manner completely satisfactory.

"Study the illustrations in this book. They tell better than many words of the speed gained and the economy, efficiency and saving effected by applying Edison Batteries to lumber haulage problems."

York Manufacturing Company.

Since their last report the York Manufacturing Co., York, Pa., have equipped sixty-eight plants of public and private corporations and firms in the United States with York refrigerating machinery and the other installations made by this ever-growing and enterprising industrial organization of manufacturers. Among the plants where these installations were made we mention the following breweries the reader to find elsewhere in these columns: Cyclops Iron Works, San Francisco, Cal., one 2-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine and high pressure side complete; R. H. Parson, Medford, Wash., one 8-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Frank R. Mulkey, Deming, N. M., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; El Paso Ice & Refrigerator Co., El Paso, Texas, one 250-ton vertical single-acting refrigerating machine, direct connected to a cross compound poppet-Corliss valve engine; Gaukler & Stewart (Ice), Pontiac, Mich., one 35-ton vertical single-acting belt driven high speed enclosed type refrigerating machine, together with motor for driving same, and condensing side, also a 20-ton raw water flooded freezing system and 1,250 feet of 2-inch direct expansion piping for ice storage rooms; Royal Oak Ice & Produce Co., Royal Oak, Mich., one 35-ton vertical single-acting belt driven high speed enclosed type refrigerating machine, together with motor for driving same, and condensing side, also a 15-ton raw water flooded freezing system and 2,300 feet of 2-in. direct expansion piping for ice storage; Beatrice Creamery Co., Detroit, Mich., one 185-ton and one 125-ton duplex horizontal double-acting belt driven machines and condensing side, also a refrigerating system, including 10 double pipe brine coolers, each 18 ft. 2 in. long, 12 pipes high, made of 2-in. and 3-in. pipe, and 100,000 ft. of 2-in. direct expansion piping; Consumers Ice Co., Greenville, Miss., one 35-ton vertical single-acting belt driven refrigerating machine and condensing side, including 3 "Shipley" Flooded atmospheric ammonia condensers, also a 20-ton York improved raw water flooded freezing system and 1,000 feet of 1¼-in. brine piping for ice storage; Carrier Engineering Corporation, New York, N. Y., one 35-ton vertical single-acting belt driven refrigerating machine and condensing side complete. This installation was made for the Common Sense Gum Co., of Newport, R. I., and will be used for air conditioning; Jesse H. Kirk (Ice Manufacturer), Coatesville, Pa., one 50-ton vertical single-acting belt driven high speed enclosed type refrigerating machine and condensing side, also a 25-ton raw water flooded freezing system complete; Geo. E. Browne & Sons, Eldorado, Kan., one 8-ton vertical single-acting belt driven enclosed type refrigerating

machine and high pressure side complete; Riggs-Distler & Stringer, Inc., Baltimore, Md., one 22-ton vertical single-acting enclosed type refrigerating machine, direct connected to a vertical enclosed type slide valve engine, and condensing side, including two "Shipley" Flooded atmospheric ammonia condensers, also a 10-ton flooded freezing system, 10-ton distilling system, 100-H. P. boiler system, and 600 ft. of 2-in. direct expansion piping for meat and ice storage rooms. This installation was made in the United States Marine Corps Barracks, Port Royal, S. C.; E. I. Du Pont de Nemours & Co., Wilmington, Del., one 75-ton vertical single-acting refrigerating machine, direct connected to Corliss valve engine, and condensing side, including 6 "Shipley" Flooded atmospheric ammonia condensers. This installation was made in their Haskell, N. J., plant; S. Faith & Company, Philadelphia, Pa., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete. This installation was made in the United States Post Office, in New Haven, Conn.; Central Service Co. (Ice Manufacturers), El Campo, Texas, one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Crystal Ice Co., Ltd., Beaumont, Texas, one 20-ton and two 12-ton vertical single-acting belt driven enclosed type refrigerating machines and condensing side complete, also a 20-ton raw water flooded freezing system; Kiskiminetas Supply Co., Hillside, Pa., one 4-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete; Coca Cola Bottling Co., St. Louis, Mo., one 6-ton vertical single-acting belt driven enclosed type refrigerating machine and high pressure side complete.

IN OUR STATE, TOO. "Many persons consider that a prohibition that prohibits is a failure. We have lots of them here in Kentucky. They are commonly called prohibitionists."—(Louisville [Ky.] "Times.")

PARASITES AND SELF-SEEKERS. "The Prohibition movement has been carried on and swelled to its present proportions by the clever deceptions and preachings of a few who have striven hard to strengthen themselves with the support of the parasites, and these small people now, in their turn, rise and clamor, and cry aloud, so anxious are they to ally themselves with the popular movement, so anxious through it to make themselves heard and gain a little notice, perhaps even a little fame. They fight, for the most part, under an assumed cloak of sincerity, for their own gain. What a boon this Prohibition movement is to the small and unsuccessful, the shiftless and unscrupulous men and women who have never been able to command attention before. Now is their opportunity, for they can make themselves heard at last and in a "popular" movement, so they go with "sounding brass and tinkling cymbals," caring not whom they ruin or what they wreck, so that they may rise. "Men may rise on stepping stones of their dead selves to higher things," said the poet. Not so the parasites. Men, and women oftentimes, whose children are weak and vicious because they have not known how to raise them, or have not cared to give their time to this duty, go out now to reform, to teach and care for the children of others. Are these people animated by the desire to really help others, to rise spiritually themselves? No, they seek to rise in a worldly sense to a little prominence, to gain for a time anyway the unstable fame a little publicity gives them, and they care not a jot on whom they trample or whom they use as stepping stones so that they may elevate themselves, even as little as they do."—(C. A. Holsclaw, in the Louisville "Courier Journal.")

CLASSIFIED ADVERTISEMENTS.

Wanted.

To buy a number of good used oak casks for wine, from 5,000 to 10,000 gallons capacity. Address:

Colonial Wine Co.,
Fredonia, N. Y.

Wanted.

Two to four glass-lined steel tanks, with or without heads, large size. Must be in perfect condition. Mail or wire full particulars, with price. Address: Waterloo Creamery Co., Omaha, Neb.

Wanted.

Second-hand glass enameled steel tanks, state condition, capacity dimensions and price. Address:

S. P., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Five hundred, more or less, galvanized, union made, new, beer quarters—\$2.00 each shipping point. Address:

J. C. B., care of THE BREWERS' JOURNAL,
[Oct. 17] 1 Hudson Street, New York.

For Sale.

Brewery of 25,000 bbls. capacity, in eastern Pennsylvania, with 50-ton ice machine, fully equipped, and a number of hotel properties all in good condition. For further information write:

H. S., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Wanted to Buy.

Second-hand enclosed copper-lined Beer Cooler, with capacity of 85 or 90 barrels per hour, to be used for ammonia direct expansion. Cooler must cool liquid from 50 degrees Fahrenheit to freezing, and must be in first-class condition. Address, stating lowest price:

P. O. Box 692,
Galveston, Texas.

Position Wanted.

Hop Salesman, with extensive acquaintance among eastern brewers and at present employed, desires to make a change. Can furnish best of references and proof of success in past sales undertakings. Correspondence solicited, leading to an interview. Address:

H. W. C., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewmaster Wishes to Change Position.

Brewmaster, graduate of European and American Brewers' Schools, with wide theoretical and practical experience, desires to change his position. Guarantees to make finest quality beer and ale. Success means more than salary. Address:

L. R. 13, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Brewery plant, bottling house, valuable properties in good condition, in Northern Wisconsin town with population of 10,000 surrounding territory 75,000, large percentage Bohemian and Polish; has large, growing bottling business. Controlling interest can be secured at a reasonable price. If interested, write:

M. & T., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Position Wanted.

Brewmaster, practically and theoretically trained, with 30 years' experience in Germany and America, seeks position. Excellent references, graduated with high standing from U. S. Brewers' Academy, New York, and also of Lehmann's Brewers' School in Worms. Competent to produce economically all kinds of pure and palatable lager beers, ales, and porter, as well as the finest bottle, export, and temperance beers. Address:

Gambrinus 42, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Brewmaster Desires to Change Position.

Brewmaster of 25 years' successful experience, graduate of the Brewers' School at Munich, Bavaria, and also of an American Brewers' Academy, wishes to change. I make A1 keg and bottle beers, ale, porter and temperance beers, real German, Pilsener and Budweiser lager beers. At present holding permanent position with excellent success. Would purchase some stock in profitably working brewery, or invest part of salary. Address:

N. B. P. 18, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Salesmen Wanted.

To present to brewers a proposition paying handsomely upon the investment. Should have a good working knowledge of brewing technique. This position, while very lucrative, means the hardest kind of work and the exercise of the highest grade of selling ability. Therefore, unless you have wide experience in salesmanship and are absolutely confident of your qualifications for business-getting, it will be a waste of time to answer. Make written application in own penmanship, using not over 150 words. Give outline of experience and results accomplished, also names of past connections. Address:

Charles Joseph Boni,
Box 4, Cincinnati, Ohio.

For Sale.

One Frick machine, 120-ton; one Featherstone Consolidated 40-ton machine; three high-pressure H. T. Tubular Boiler, in A1 condition, with Jones Underfeed stokers, also having Hartford Insurance and Ohio State inspection; one Otis closed feed water heater, 700 H. P.; three ice-making tanks, 25 tons to 35 tons apiece complete, and two combination ice-making and refrigerating tanks; thirty sections of 2-inch extra wrought iron galvanized ammonia condensers; all kinds of steam pumps. Can be seen in operation and if sold can be removed immediately. If you are looking for junk do not apply. Address:

The Adam Brewing Co.,
Camp Washington, Cincinnati, Ohio.

THE Brewers' Journal

The Representative Paper of the Brewing, Malt and Hop Trades.

Established in 1876 by A. E. J. TOVEY Honorary Member United States Brewers' Association.

Chicago Office:
People's Life Building

Main Offices: 1 Hudson Street, New York

London Office:
46 Cannon St., E. C.

Vol. XLI., No. 12.

NEW YORK—CHICAGO, OCTOBER 1st, 1917.

\$5.00 a Year
Postage Prepaid

W. M. SCHWENKER, Inc.

Brewers' and Ice Manufacturers' Supplies

340-344 EAST 92nd STREET

NEW YORK CITY

Superior Brewers' Hose
Stamp Paste
Filtermass
Isinglass
Sidewalk Keg Mats
Bi-Sulphite of Lime
High Temperature Pitch
Finola (for dissolving finnings)

Anhydrous and Aqua Ammonia
Calcium Chloride
Brine Salt
Cotton Waste
Oils (Ice-machine, Cylinder, etc.)
Ammonia Helmets
Condenser Paints
Ice Tools



Scientifically made, of the
best material under ex-
pert supervision.

Carefully inspected and
tested.

Guaranteed in quality and quantity. Serves users reliably and economically.

THE NATIONAL AMMONIA COMPANY

PHILADELPHIA

ST. LOUIS

NEW YORK

(WRITE FOR NEAREST STOCK LOCATION)

ALBERT SCHWILL & CO.

The Largest Manufacturers of Malt in the World

CHICAGO

OUR
SPECIALTIES

Chill-Proof Bottle Beer Malt
High-Power Diastatic Malt
Extra High Dried Aromatic Malt

(See Adv. page 87.)

WHITE TRUCKS



Part of a fleet of nine White Trucks owned by the Huebner Toledo Breweries Company

Eight Repeat Orders *In Two Years*

IS the record of the Huebner Breweries Company and its use of White Trucks. But back of this steady growth of the company's White Fleet is the "Reason Why" as told by facts and figures compiled from carefully-kept operating cost records.

According to Mr. John J. Huebner the cost records show that in comparison with other makes of trucks employed by the company the Whites cost less to operate, have required less attention and fewer repairs, have been capable of greater work capacity and have given the most dependable service.

"The showing made by our first White Truck, purchased in 1915, convinced us that it could be depended upon to give satisfactory service under the most constant and strenuous work," said Mr. Huebner. "Later cost records proved conclusively that Whites were the best investment. Since that time we have been gradually replacing our other hauling equipment with White Trucks."

Write today for copy of White Truck Book
containing 225 pages and 1400 illustrations.

THE WHITE COMPANY
CLEVELAND




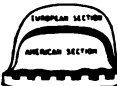





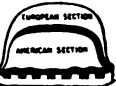
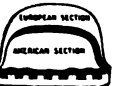
Largest Manufacturers of Commercial Motor Vehicles in America

SOLVAY

73% TO 75%
CALCIUM
CHLORIDE

SEMET-SOLVAY CO.
SYRACUSE NEW YORK

10,000 MILES
GUARANTEE
INvariably
EXCEEDED

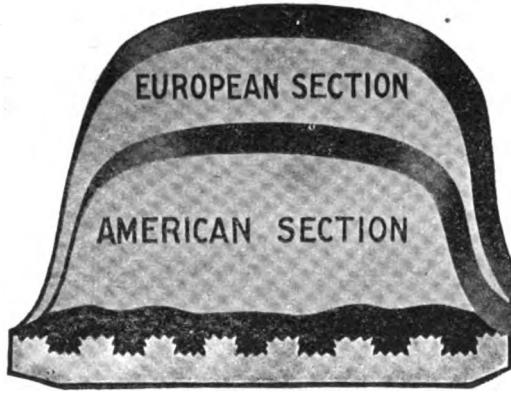










10,000 MILES
GUARANTEE
INvariably
EXCEEDED

POLACK

TRUCK TIRES

**"Highest in price?"---Certainly
but---"Lowest in cost per mile"**










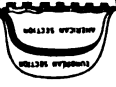

Real tire costs are based on mileage.

If you buy a 36x5 S.A.E. tire, guaranteed 7000 miles, for \$59.40, your cost is .00849 cents per mile (or \$8.49 per 1000 miles.)

But if you pay \$77.55 for a 36x5 **POLACK EUROPEAN PROFILE** tire, guaranteed 10,000 miles, your cost is .00775 cents per mile (or \$7.75 per 1000 miles.)

Of course, 74c per thousand miles isn't a large sum to save on each tire, but if you multiply it by **each tire you buy**—and then consider the saving in time and repairs the **higher cushion** of European Profile tires assure you, the extra investment will prove itself quite worth while.

10,000 MILES
GUARANTEE
INvariably
EXCEEDED

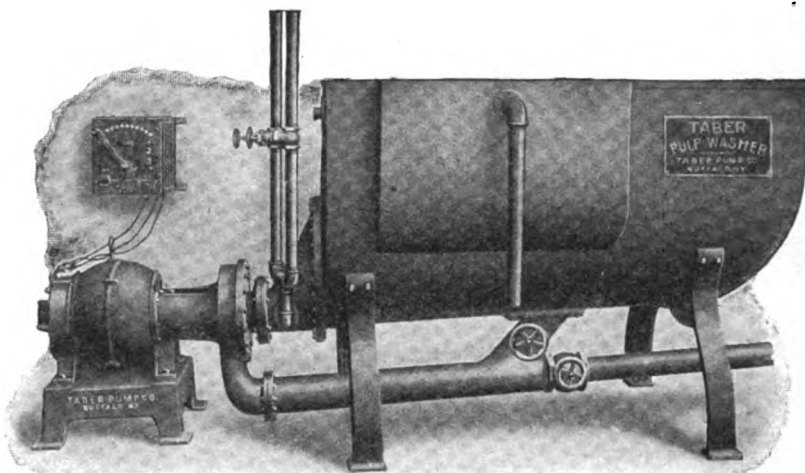
10,000 MILES
GUARANTEE
INvariably
EXCEEDED

TABER FILTER-MASS WASHER

*Does Not
Ball*



*Keeps Mass
Fluffy*



Send about two pounds of your abandoned filter-mass and we will treat it in our washer and return it UN-BALLED.

TABER PUMP CO., Buffalo, N. Y.

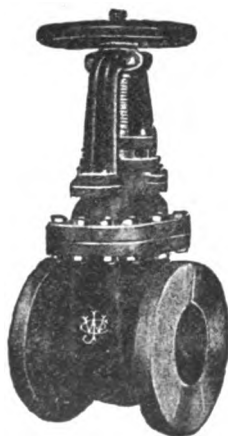
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JOHN WILFERT CO.

W. GERALD HAWES, Pres. and Gen'l Mgr.

— MANUFACTURER OF —

**VALVES
FITTINGS
and
PIPING**



— COMPLETE EQUIPMENT FOR —

**ENGINEERING
REFRIGERATION
HYDRAULIC
STEAM and
POWER PLANTS**

Executive Offices: 259 BROADWAY, NEW YORK

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	{ 12-18 Garden Street }
Foundries and Machine Shops	{ Connecting all }
Bushwick Terminal, Brooklyn, N. Y.	{ departments } 6643 Barclay
	1300 Stagg

Chillproof and Stable Bottle Beers

More Than Five
Hundred Brewers
Have Adopted
Our Process—

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171 Madison Avenue

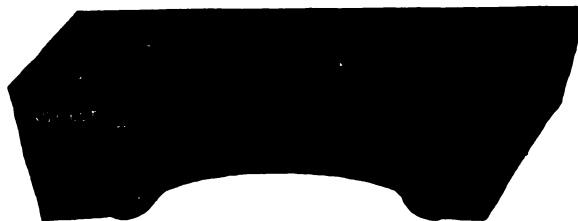
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You can cut down your costs and make more money without spending a cent to do it.

Simply tell your cooper to put NATIONAL BUSHES in your new packages, or in your repairs—he is equipped to do it.

If you repair your own cooperage, our small, inexpensive hand bush insert machine will do the work for you, quicker and cheaper than anything else.



“The Right Way to Bush a Bung Hole”

The NATIONAL is the perfect bung bushing that will do away with all your bushing troubles.

Once rolled in a stave, the NATIONAL BUSH will not leak nor split the stave. It will prevent contamination of contents.

The NATIONAL BUSH is now used by most of the large breweries in this country.

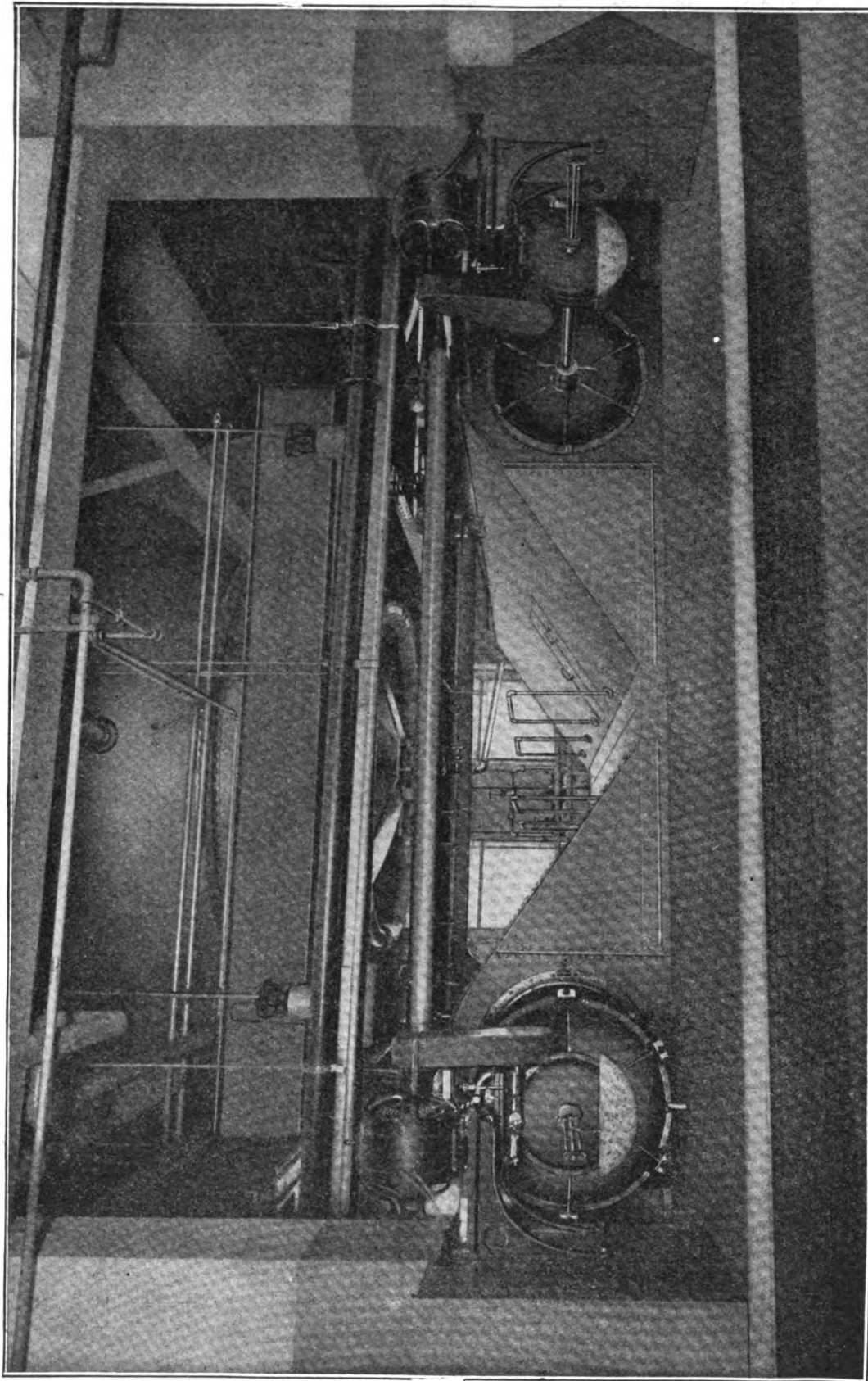
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National Bush Company

2 Rector Street

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THE HUPFEL AUTOMATIC HOP STRAINER



Duplex Installation - Jacob Ruppert's Brewery, New York. Yearly Capacity 2,000,000 Barrels

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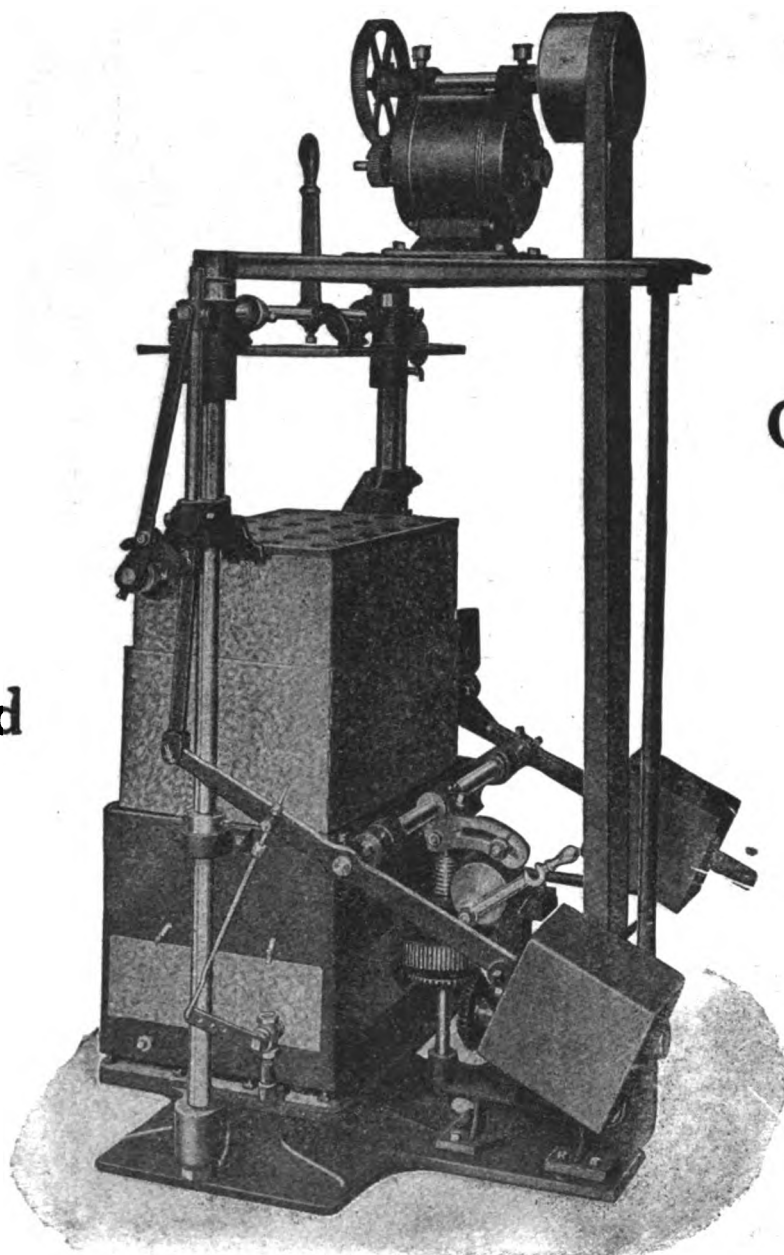
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NEW YORK, N. Y.

The Improved EICK Bottle Washing and Rinsing Machine

**5/8
Horse
Power
Required**



**Only 9 lbs.
Water
Pressure
Needed**

24-spindle machine with countershaft and automatic attachment.

**is the only bottle washing machine that can be operated
either by hand lever or automatically.**

MADE IN 3 SIZES.

CAPACITIES: 24 spindle machine washes 45,000 bottles per day.
16 spindle machine washes 30,000 bottles per day.
8 spindle machine washes 15,000 bottles per day.

WRITE FOR CATALOGUE AND LIST OF USERS TO

The S. S. Wenzell Machine Co.

50th and Parkside Avenue, Philadelphia.

Hold Down The Alcohol

M-D

EIGHT methods of making **TEMPERANCE BEER** have come to our attention.

M-D

THREE were methods wherein a *too high* percentage of alcohol had later to be *reduced*.

The reducing processes are *costly* at best, and the more *reducing* is necessary the *greater* the cost. **AND OFTEN** it has to be *repeated* because of *further fermentation* in storage.

M-D

FIVE methods employed—**MALTO-DEXTRINE**—**BECAUSE** the very high percentage of **UNFERMENTABLE** matters composing our product make it a great *time and money saver*.

It holds down the alcohol and *keeps it down*.

It is absolutely pure—gives splendid body, rich, creamy foam and a delightful flavor.

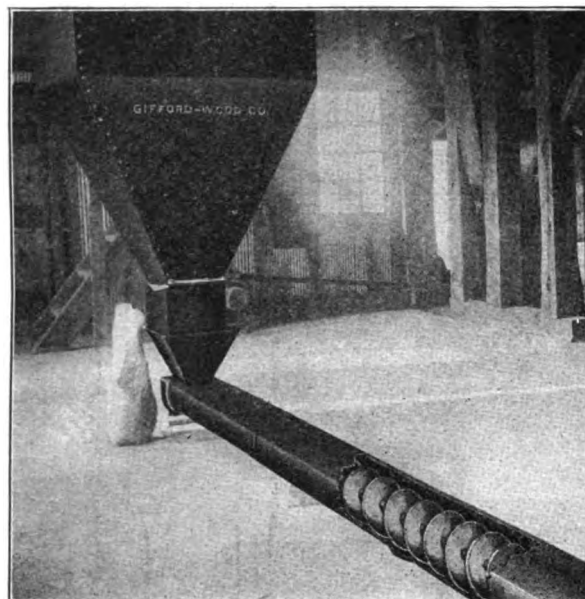
M-D

THERE are imitations of Malto-Dextrine, but no substitutes.

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Reliable Dealers Everywhere Sell Malto-Dextrine

Sheet Steel and Iron Works For BREWERIES



WE DESIGN AND MANUFACTURE
STEEL TANKS : TROUGHS : CASINGS, ETC.
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If We Can Be Of Service, Send Us Your Specifications

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Packed in All Size Containers

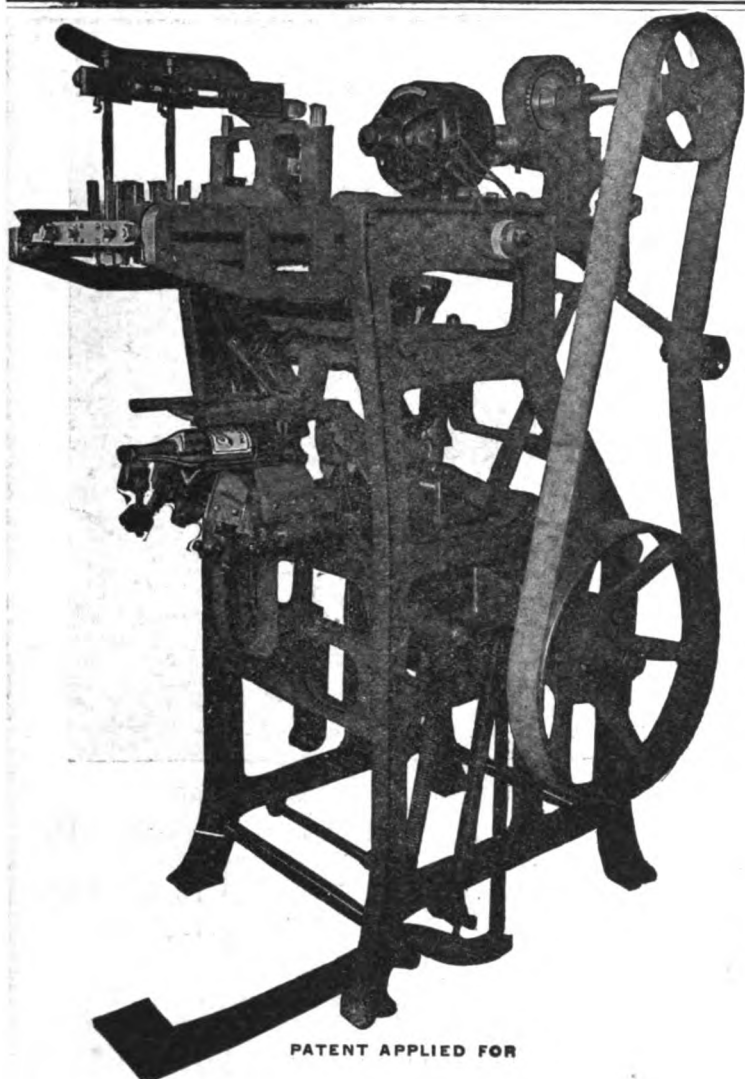
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THE "NATIONAL" LABELER

FOR "BODY AND NECK LABELS"
OR "BODY LABELS" ONLY

Arranged for either belt or motor power

SIMPLE-STRONG-DURABLE
Built for Speed :: Fewest Parts

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FOSTER PUMPS

are built of the **BEST** material obtainable
and assembled by first-class workmen.

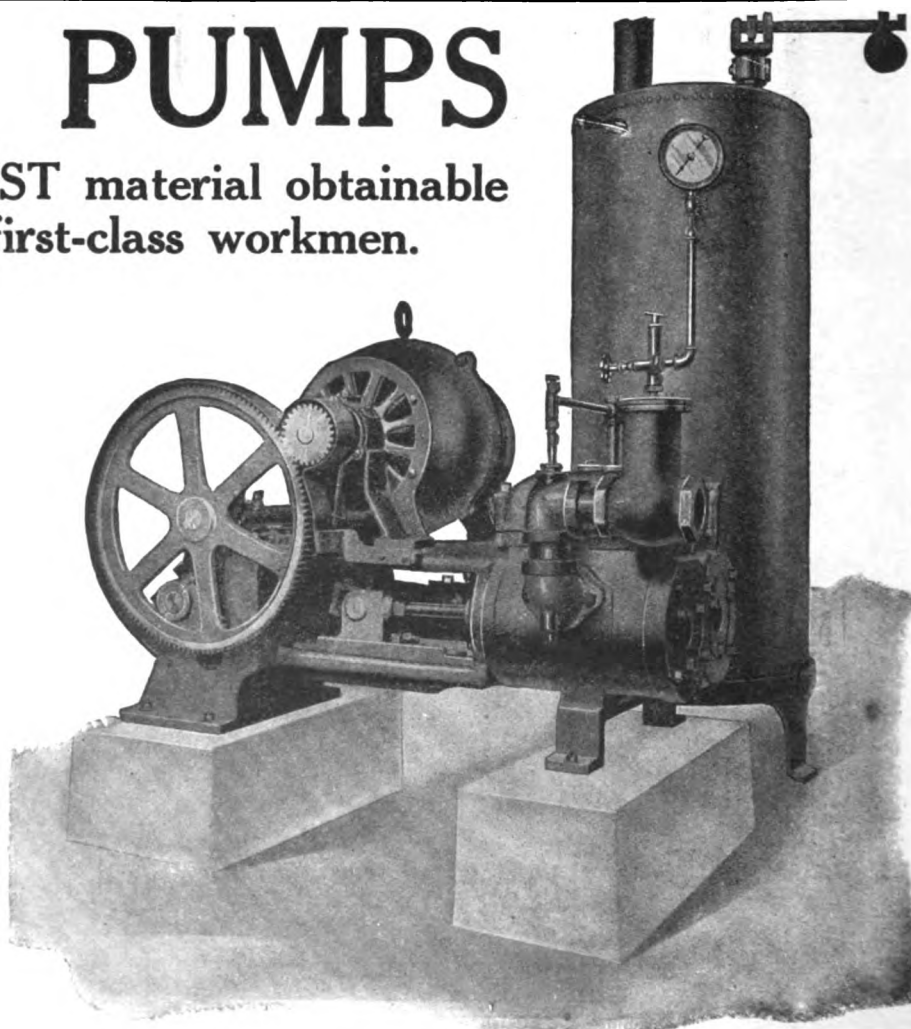
Being of heavy design makes it possible for them to be repaired several times, thereby saving the trouble of purchasing a new pump. They are extensively used by Brewers throughout the United States and Canada.

State your pump troubles to us and we, with our fifty years of experience in this line, are quite sure that we can remedy same.

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ESTABLISHED 1860

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MOTOR-DRIVEN DUPLEX AIR PUMP

World Labeler, Improved

Places—

Body and Neck Labels at one operation
or Body Labels only as fast as any opera-
tor can feed to the machine.



Bronze bushed throughout.

All standard parts made in the jig system
making perfect duplication possible.

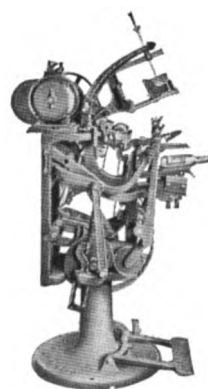
In those plants where for one reason or
another World Automatic Rotary Labeler
cannot be consistently used, World Labeler,
Improved, should by all means be the choice.

World Labeler, Junior

A sturdy single labeler.

Easy to operate and care for.

Designed and built with the idea of giving the
smaller bottler everything (except double label-
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Labeler, Improved.



Economic Machinery Company

Worcester, Massachusetts

World Automatic Rotary Labeler

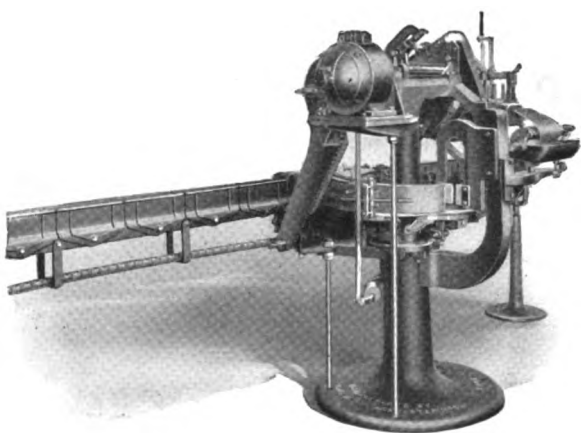
Body and Neck Labels at one
operation—Body Labels only

Automatically fed and discharged.

Needs only one operator to feed and another to take away.

Absolutely uniform labeling because one wiper mechanism
does all the work.

And remember this about speed, proper design, proper balance
and proper bushing make it possible for a machine to stand
up under a high rate of speed in better shape than a machine
not so designed and balanced and bushed running at a much
lower speed.



Economic Machinery Company

Worcester, Massachusetts

World Automatic Rotary Labeler
World Labeler, Improved
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PLAIN ————— LACQUERED ————— EMBOSSED

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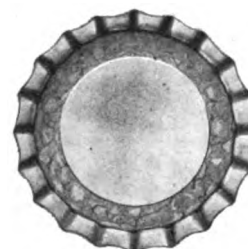
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Manufactured only
from the best grade
of NATURAL CORK

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and far superior to lower
grade of NATURAL CORK,
with the cork taste eliminated

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THE NEW PROCESS CORK CO.

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real cold weather sets
in and the streets are
covered with ice and
snow, before getting
"NEVER - SKIDS" for
your motor trucks.

THE NEW TYPE NEVER-SKID

practically eliminates vibration
Does away with skid-
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tive traction on slippery
streets. The cross-
pieces are made of the

finest quality woven steel wire — strong
enough for the heaviest machines made.

The device can be applied in a few minutes with-
out jacking up the truck, and there is no danger of
its catching in driving chains or damaging tires.

YOU WILL SURELY NEED "NEVER-SKIDS" this winter.

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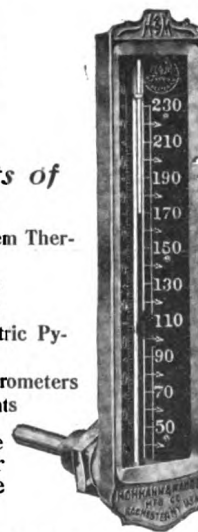
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The use of B. B. Anhydrous Ammonia will increase the earning power of any Refrigerating or Ice-Making Plant. For its definite purity will not permit a contribution to any accumulation of foreign gases in the system. That is why

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OUR OUTSTANDING STOCKS ARE TEMPORARILY DISCONTINUED.

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ANALYZE YOUR TRUCKING COSTS

HAVE you carefully analyzed your delivery costs?
Are you getting the greatest value from your expenditure?

Cost records prove the Electric Commercial Vehicle to be the most economical unit for the delivery of heavy loads, especially when interrupted by numerous stops.

The dependable every-day power furnished by the "Ironclad-Exide" battery is an essential factor in securing satisfactory service from your vehicle. Where maximum service and minimum costs are shown, there the Electric Commercial Vehicle is "Ironclad-Exide" equipped.

The "Ironclad-Exide" battery embodies all the strength, capacity and durability required for this class of service—it is the power up to which successful Electric Commercial Vehicle Service must measure.

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HETZEL'S PIPE-JOINT COMPOUND

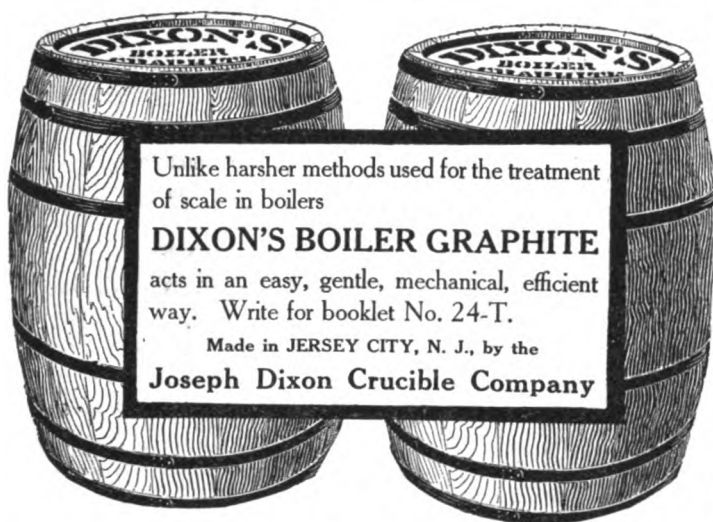


It makes absolutely tight joints in Gas, Steam, Ammonia, Air Pipes, etc., etc.
Never sets and permits the fittings to be disconnected at any time without injury to the same.

Goes twice as far and gives better service than either red or white lead.

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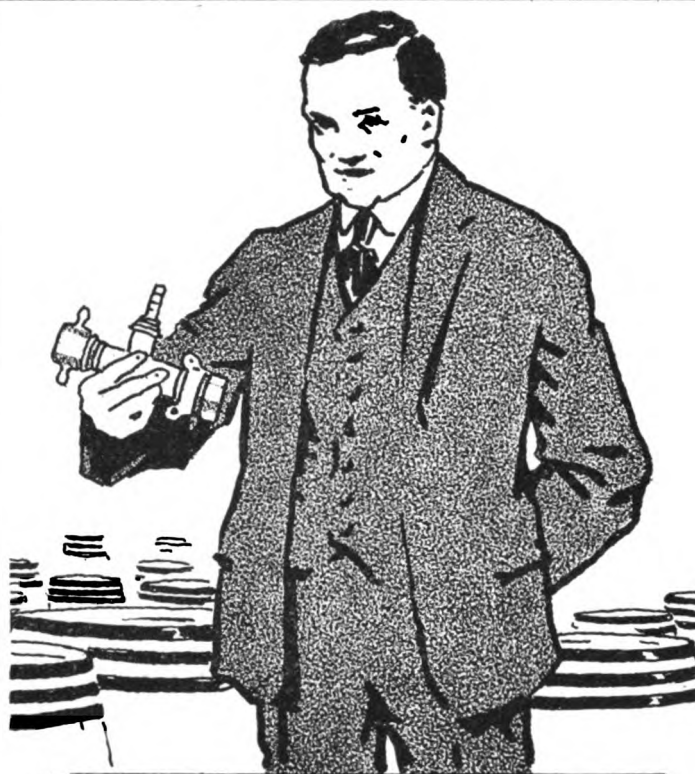


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—IN—

The Brewers' Journal

IF YOU WISH TO OBTAIN
RESULTS



If Barrels were a Nickel Apiece

the Peerless Tapping System would still save you money.

Why?—Because it is so convenient and earns its cost many times over in time saved.

You don't have to fuss with the Peerless. Bore a hole in the head of the package, screw in the bush and there you are, ready for years of service.

The Peerless will tickle your customers, too. With a simple twist of the wrist they can slip in the tap. Thirty seconds does the trick and then they forget about it until the package is empty. Another twist removes the tap.

Best of all, the barrel comes back to you unharmed. Nobody has been battering or disfiguring it, because there's no need to. Some day the barrel will wear out, but the bush will be as good as ever.

*And you will be away ahead in time
saved by this modern tapping system*

American Tap Bush Co.
Detroit, Michigan

SCHAEFFER & BUDENBERG
NEW YORK

Announcement

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In a measure we anticipated this generous support of our many friends, and have been making preparations accordingly.

To-day, therefore, we are pleased to announce that we are now prepared by added facilities to accommodate a substantial increase in production and therefore solicit a larger share of your requirements.

We take this opportunity of thanking you for past patronage, and look forward with pleasure to a continuance of same.

THE Schaeffer & Budenberg MFG. CO.
BROOKLYN, N. Y.
Chicago Pittsburgh
St. Louis Philadelphia
Los Angeles Washington

1850
EXPERIENCE
SERVICE
QUALITY
CAPABILITY

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FOR APPEARANCE'S SAKE USE
DRAGON IMPERVO
 ICE-PROOF LABEL GUM

Holds the Labels Fast Indefinitely in Ice-Water or Chipped Ice. Easily Removed in the Soaker.
 For Every Style Labeling Machine.

WE ALSO MANUFACTURE A FULL LINE OF MACHINE LABEL PASTES (Non-Ice-Proof ; ALSO HAND-WORK PASTE AND GOVERNMENT STAMP PASTE
 Working Samples cheerfully furnished on request

THE GENERAL ADHESIVE MFG. CO., Inc.
 467-469 GREENWICH STREET
 NEW YORK CITY

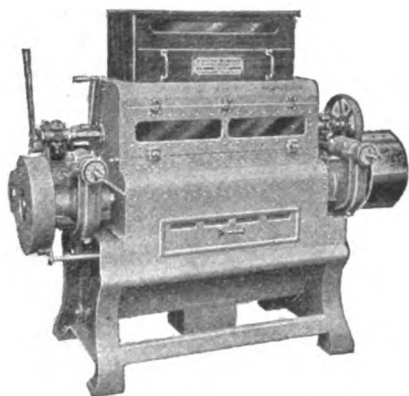
Beware of Infringements!

FOOD FOR THOUGHT

THE mere statement of a manufacturer that he is not infringing our patent rights, no matter how reassuring such a statement may seem at the time, is absolutely no protection to the **USER** in the eyes of the law, as the user of infringing apparatus is equally liable with the manufacturer and cannot evade his responsibility.

Longitudinal or lengthwise splitting of grains is one of the basic claims in the process covered by Boniface Hehle's Patent. This, with other broad claims, tends to make the patent feature a consideration of vital importance.

The best safe-guard against litigation and worry is to buy the Hehle **LITTLE WONDER** Malt Mill (Process Patented). Such a step, by positively relieving you of all anxiety with respect to lawsuits, is worth more than dozens of empty phrases and smooth statements.



The "LITTLE WONDER"

PROTECT YOURSELF, and at the same time **REALIZE** on your investment. Remember, the **LITTLE WONDER** will **PAY FOR ITSELF** by saving of malt, in less than a year's time. After that the saving is clear profit.

Our guarantee covers not only patent rights, but applies equally to increased production and output.

Booklet of remarkable testimonials will be mailed on request.

TODAY IS HERE! *Tomorrow never comes.*

The B. Hehle Malt Milling System Co.

Gerke Building, Cincinnati, Ohio

"E.F."

(ENZYMIC FERMENT)

**Saves over 50 cts per barrel of Beer
without changing its Flavor or Quality.
Produces Finest Temperance Beers.**

80% of the Brewers Using It

BALDWIN F. SCHIRMER CO.

21 Park Row

NEW YORK, N. Y.

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ELIMINATION OF LEAKERS

Ask your Crown Cork man about the block tin foil lined Cork Disk. No loss of carbonic acid gas. A cork that does not deteriorate, and keeps the bottle hermetically sealed indefinitely.

Silver Crown Disk Co., 1463 Broadway, New York, N. Y.

Emken's



Pure Malt Color

When in the Market for Beer Coloring, insist on Emken's Pure Malt Coloring which is an extract of browned malt that is roasted with the special object of yielding browned albuminoids. It is more effective to produce roundness and fullness of taste than ordinary Roasted Malt or Caramel Malt.



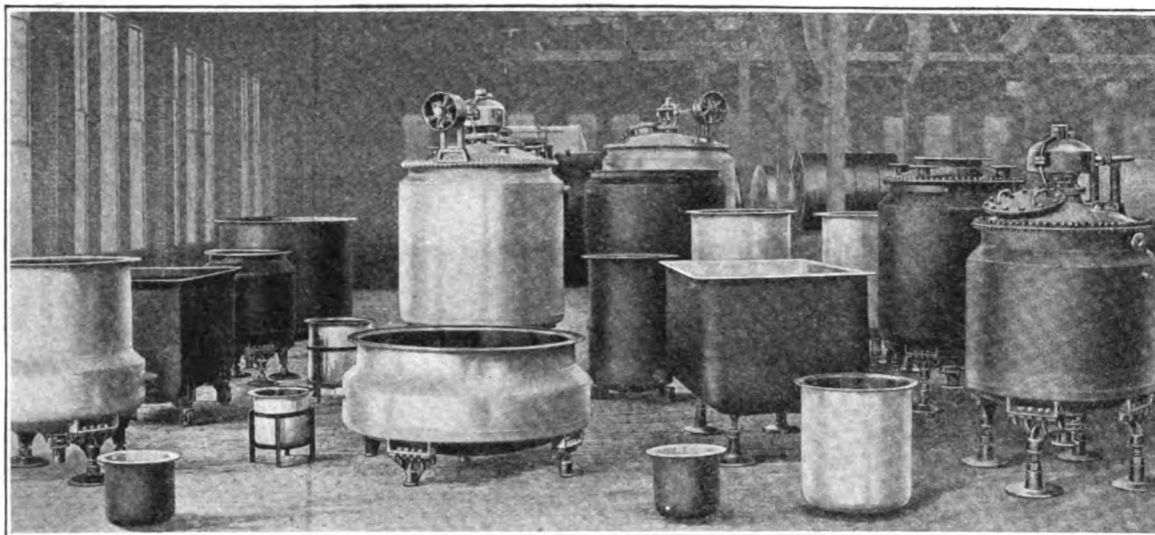
Insist on the "SHEAF BRAND"
Your Guarantee of the Best Quality

MANUFACTURED ONLY BY THE

NEW YORK MALT ROASTING COMPANY

Emken Chemical Company, Proprietors

33 EAST 27th STREET, NEW YORK, U. S. A.



Keeping Step with Events

The photograph reproduced above was taken recently in the assembling department of our plant at Rochester. It shows various types of

PFAUDLER GLASS ENAMELED STEEL TANKS

for the preparation of Non-Alcoholic Beverages, Syrups and Essences, Preserved Fruits, Condiments, Salad Dressings, Fresh and Condensed Milk, Chemical and Pharmaceutical Products, and many other liquids and semi-liquids requiring sanitary and non-corrodible apparatus.

A great many Brewers are extending their activities into these other fields, and have found it to their advantage to patronize an old friend who had anticipated their requirements in Kettles, Mixing Tanks and other Apparatus.

The Brewing Trade is our Alma Mater. We are true to it, and are serving its members by anticipating such changes as may occur in their requirements. We have progressed not only in construction, but in the development of acid resisting Glass Enamels as well.

**Whether it be Beer or Ale, "Near Beer,"
Fruit Juices, Milk, Preserves or other Pro-
ducts, our Representative can help you.**

THE PFAUDLER CO., ROCHESTER, N. Y.

NEW YORK
110 West 40th St.

CHICAGO
1001 Schiller Bldg.

SAN FRANCISCO
512 Sharon Bldg.

SUCCESS

To be a success a material must return to its user or consumer an equal value for the money he pays for it.

Measured by this valuation

Wyandotte Alkali Special

and



must be all that they are claimed to be.

Each has been on the market for a number of years, and each for the purposes they are recommended to be used are recognized as having no equal.

But this is not all, for in addition to their recognized superiority their extended use proves them to be an economy. In other words, they return to the user such a high degree of efficiency that they are not figured as an expense but an economy.

Yes, these are big claims, but no bigger than the records easily proved to be true. And should you, Mr. Brewmaster, not be familiar with

INDIAN IN CIRCLE



IN EVERY PACKAGE
OF WYANDOTTE
SANITARY CLEANER
AND CLEANSER

the results these materials produce for other Brewmasters who have the same problems that you have, why not ask your supply man to send you a barrel of each, with the understanding each will prove to be all that is claimed for it or the trial will cost you nothing. Is not this a fair proposition?

INDIAN IN TRIANGLE



IN EVERY PACKAGE
OF WYANDOTTE
ALKALI SPECIAL

THE J. B. FORD CO., - Sole Manufacturers, - Wyandotte, Mich.

These Cleaners have been awarded the highest prize wherever exhibited



Modern fire-proof plant with splendid shipping facilities

Sterling

BODY SUGAR

Light or Amber

A better brewing sugar for the production of beer, stout, ale, porter and also beverages low in alcoholic content or entirely non-alcoholic.

Better foam stability will be obtained by the use of Sterling Body Sugar, and the brew will keep better because it will contain considerably less fermentable matter after fermentation than with the use of any other material.

Sterling Refining Co.

Dept. A

Evansville, Ind.

RIPLY ISINGLASS

MANUFACTURED BY

HOWE & FRENCH ISINGLASS CO.

89 STATE STREET, BOSTON, MASS.

CHARLES ZOLLER CO., New York, N. Y.

BAUMBACH REICHEL CO., Milwaukee, Wis.

A. MAGNUS SONS CO., Chicago, Ill.

MEYER SUPPLY CO., St. Louis, Mo.

BAUER-SCHWEITZER H. & M. CO., San Francisco, Cal.

CLEVELAND BREWERS' SUPPLY CO., Cleveland, Ohio.

ARE THE ONLY AUTHORIZED AGENTS

No other Person, Firm or Corporation, has the right to brand

Isinglass with this trade mark.

INFRINGEMENTS WILL BE PROSECUTED.

Barry-Wehmiller Machinery Co.

4662 West Florissant Ave., St. Louis, U. S. A.

Read what the Users of these Machines have to say:

St. Louis, March 24th, 1917.

BARRY-WEHMLER MACHINERY CO.,
ST. LOUIS, MO.

GENTLEMEN:—We have been running our complete 150 barrel unit consisting of your Soaker, automatic connected Washers, bottle feeders, Pasteurizer and automatic Labeller since January 15th.

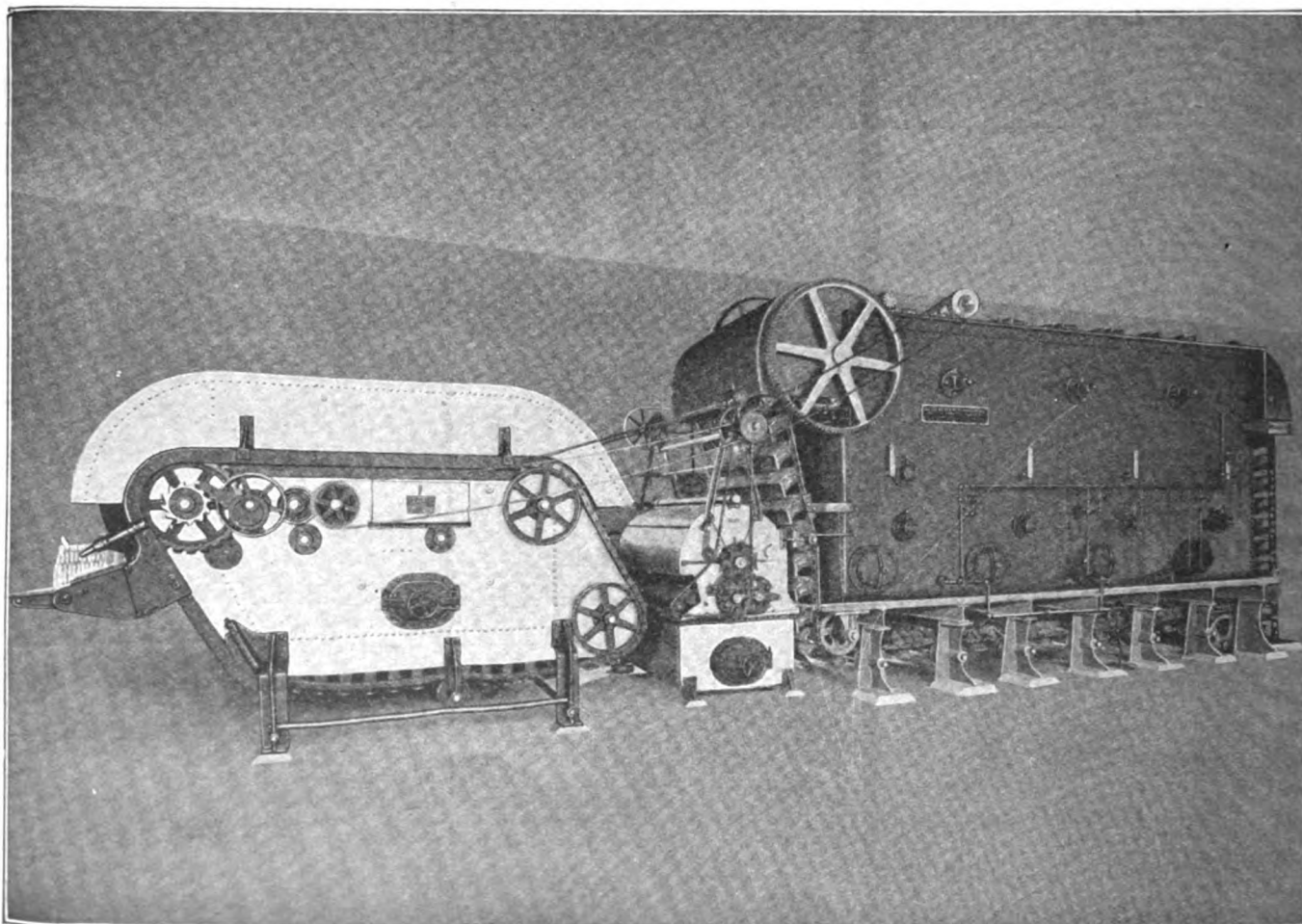
We were well pleased from the beginning and better satisfied every day since, particularly with the B-W Washers and B-W Labeller.

We are proud of the outfit and will be glad to show it to any other interested brewers that call.

Yours very truly,

SCHORR-KOLKSCHNEIDER BREWING COMPANY

JOHN J. SCHORR, *President.*



Branch Offices

NEW YORK CITY

CHICAGO, ILL.

FT. WORTH, TEX.

BIRMINGHAM, ENG.

SOAKERS—WASHERS—PASTEURIZERS—LABELERS—CARRYALLS

(See following page)

Barry-Wehmiller Machinery Co.

4662 West Florissant Ave., St. Louis, U. S. A.

Read what the Users of these Machines have to say:

Newark, N. J., March 27th, 1917.

BARRY-WEHMLER MACHINERY CO.,
ST. LOUIS, MO.

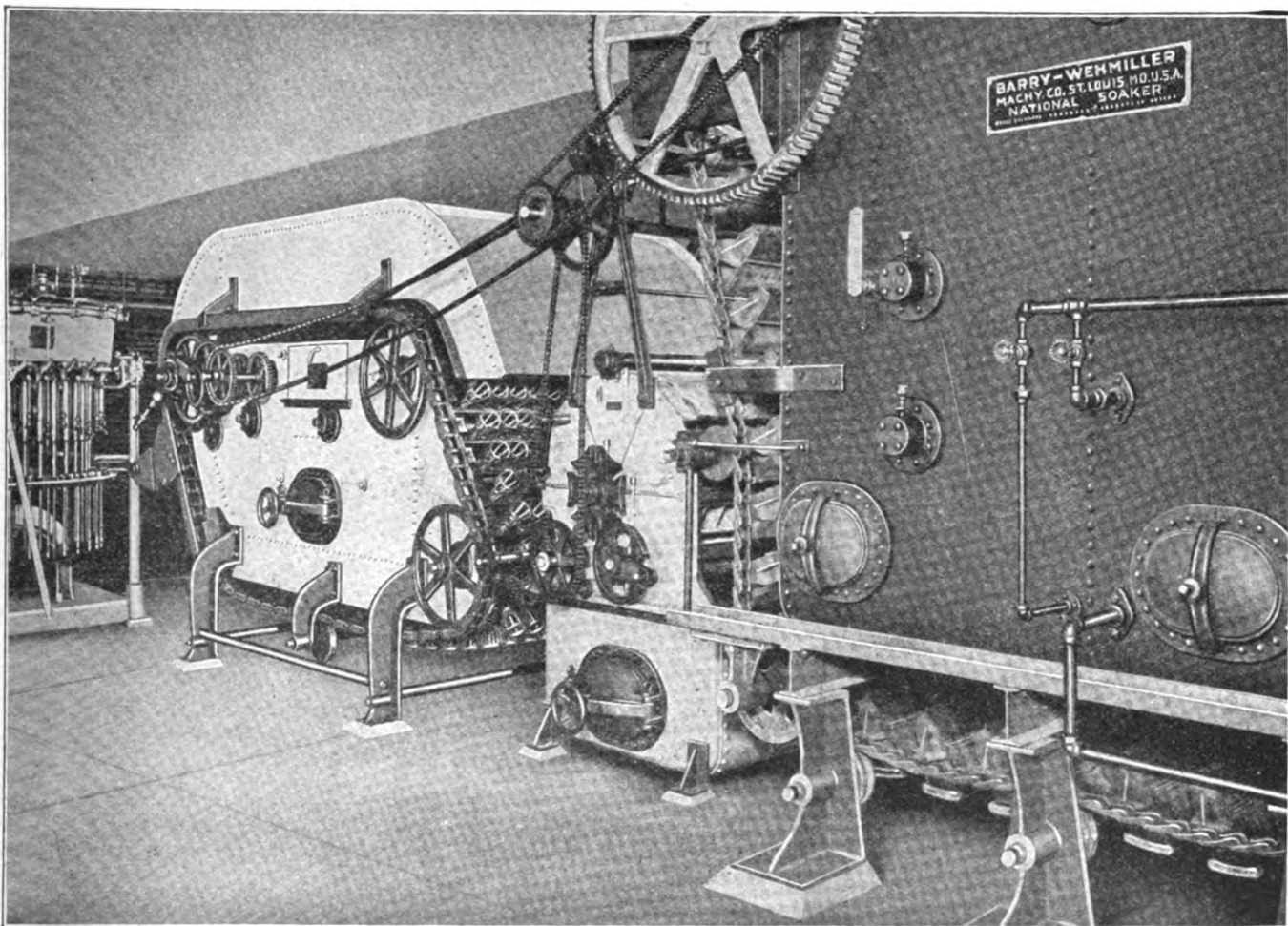
GENTLEMEN:—Inasmuch as we have heard some mis-information circulated around the trade in regard to your Washer, we feel that we should give the following facts of the true situation of this matter.

Your Washer was installed about a year ago, and since then has been running every day, a greater part of it more than 8 hours per day. We are pleased to state that during this time we have been entirely satisfied with it. It has proven to us to be a very reliable, economical, efficient and fully automatic Washer in all its details. The proof of all of this is that we have given you another order for a second Washer to replace one of the so-called Automatic Brush types, which we only had in operation for two years.

Trusting this will help you to convince the trade of your machine's true merit, we remain

Yours very truly,

GOTTFRIED KRUEGER BREWING CO.
F. FINK, Supt. of P. B. & M.



ANGULAR VIEW OF WASHERS

Branch Offices

NEW YORK CITY
(See preceding page)

CHICAGO, ILL.

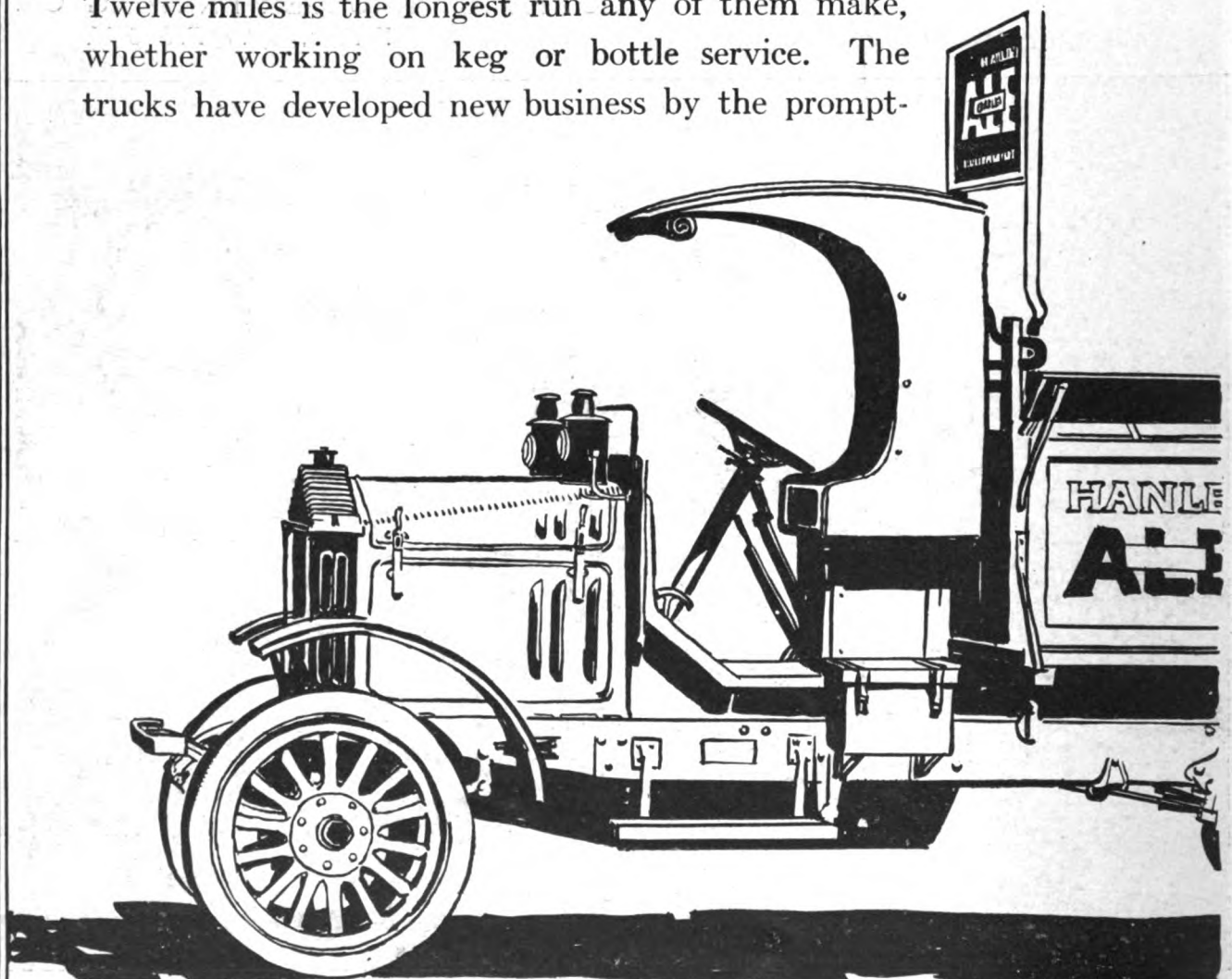
FT. WORTH, TEX.

BIRMINGHAM, ENG.

Pierce-Arrow Trucks Efficient and Economical on Short Haul Work of the James Hanley Brewing Co.

THE James Hanley Brewing Company of Providence, R. I., has proved to its own satisfaction that Pierce-Arrow Motor Trucks are efficient and economical on short haul work.

The Company operates two 5-ton and two 2-ton Pierce-Arrows. Twelve miles is the longest run any of them make, whether working on keg or bottle service. The trucks have developed new business by the prompt-



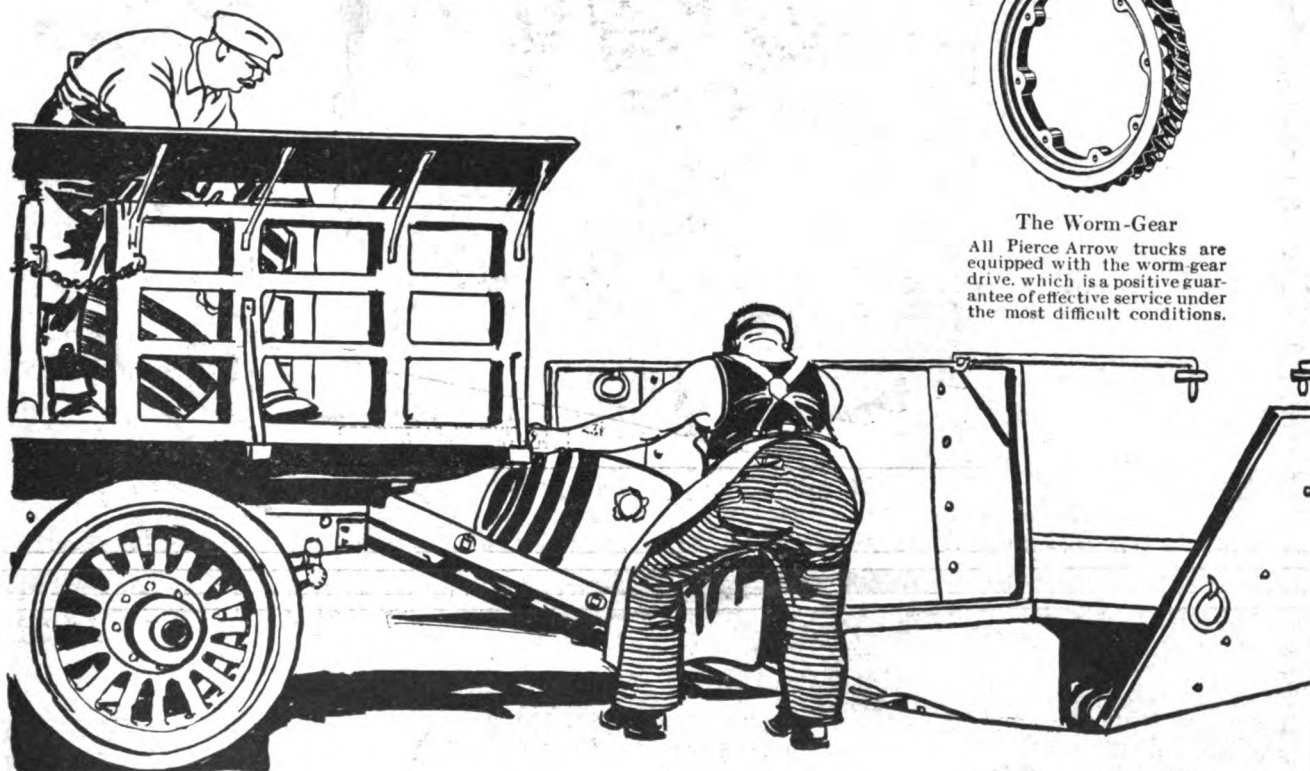
ness and regularity of their deliveries, and at some points six calls a week are required where formerly one delivery a week covered all orders.

On short haul work the mileage is naturally not high. The average is probably a little below 5,000 miles a year, but the Pierce-Arrow trucks can always be depended upon for their schedule mileage on schedule time under all conditions of weather and traffic.

The Hanley Company operates trucks of other makes besides Pierce-Arrow, and an official of the Company recently stated that his delivery problems would be much nearer solution if all the trucks gave as good results as the Pierce-Arrows.

A number of other interesting installations are shown in our booklet "What Pierce-Arrow Motor Trucks are Doing in the Brewery Business." We shall be glad to send you a copy.

THE PIERCE-ARROW MOTOR CAR COMPANY
BUFFALO, N. Y.



The Worm-Gear

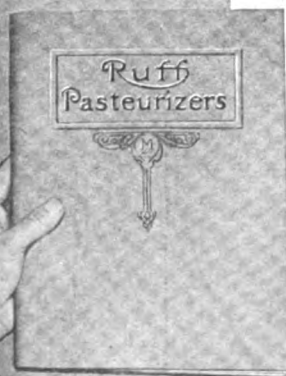
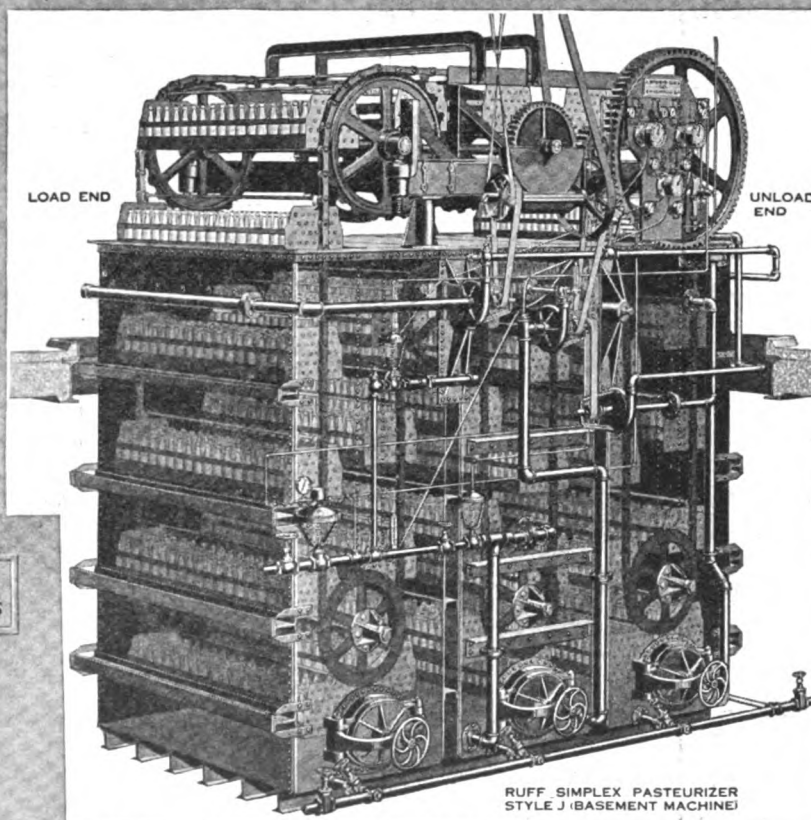
All Pierce Arrow trucks are equipped with the worm-gear drive, which is a positive guarantee of effective service under the most difficult conditions.



A. MAGNUS SONS CO.
 BREWERS AND BOTTLERS MACHINERY AND SUPPLIES
 CHICAGO · ILLINOIS
 ESTABLISHED 1867



RUFF PASTEURIZER



By its *reliability* the *Ruff Pasteurizer* has won the confidence of the large bottlers. Any of its users (write for a list) will gladly testify. If you are using the Ruff, consider it as your safeguard; it is covered by broad patents. These patents have been fully sustained to date by the courts, found valid and infringed.

Warning to the trade:

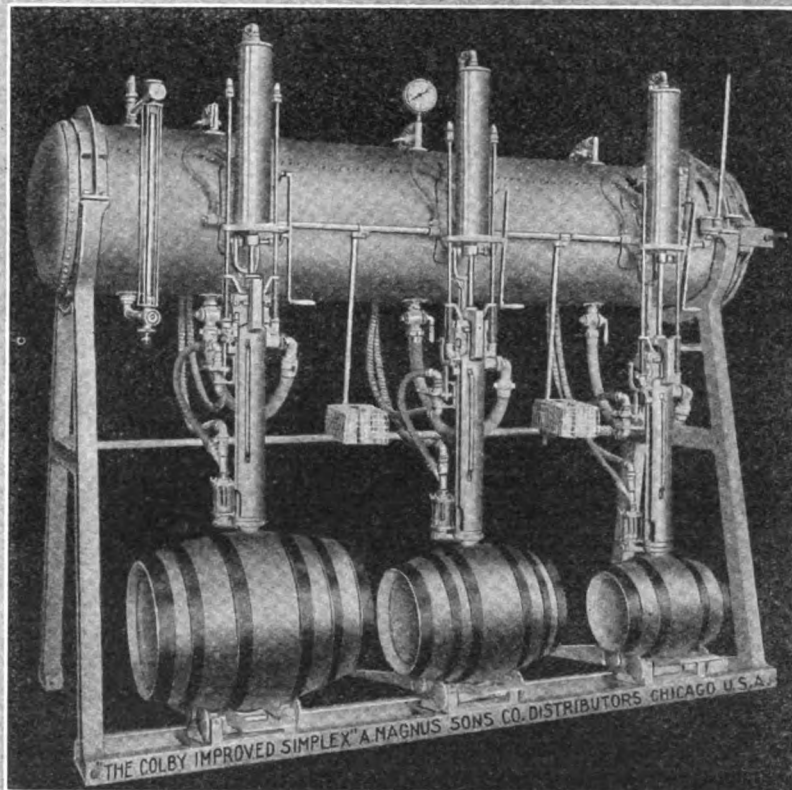
Any pasteurizer using pumps for circulating and interchanging the pasteurizing water is a *direct infringement* on our *Ruff patents*. *Don't buy a law suit* but rather a *pasteurizer* that will pay for itself in one year by its saving in steam, water, bottle breakage and beer. Catalog for the asking.



A. MAGNUS SONS CO.
 BREWERS AND BOTTLERS MACHINERY AND SUPPLIES
 CHICAGO · ILLINOIS
 ESTABLISHED 1867



COLBY RACKER



OPERATED BY AIR
 FULL PACKAGE GUARANTEE

CAPACITY
 90 TO 100 BARRELS
 PER HOUR

First in the field and keeping ahead with all of its latest improvements, easiest to operate, simple, saving and strong.

Yes, the Colby Racker collects royalties from all other manufacturers and the money is used to supply the highest grade material and workmanship.

Hundreds of testimonials are listed in our catalog. Hundreds more will tell you the same story. Write for list of users.

NOTICE to the Users and Prospective Purchasers of Crown Bottle CAPPING MACHINES

UNITED STATES DISTRICT COURT,
SOUTHERN DISTRICT OF NEW YORK.

BENJAMIN ADRIANCE AND
ADRIANCE MACHINE WORKS, INC.,
Plaintiffs,
against
EBLING BREWING COMPANY,
Defendant.

The above is a copy of the title of the suit entered in the United States District Court, Southern District of New York, against the Ebling Brewing Company of New York City for the infringement of a patent owned by the ADRIANCE MACHINE WORKS, INC., of BROOKLYN, N. Y., because of the use by the Ebling Brewing Company of a Bottle Capping or Crowning Machine known as the Triumph Bottle Capping Machine.

It is our intention to vigorously protect our rights and we shall immediately begin suit against all users of these machines who persist in infringing our rights. We quote from our complaint as follows:

"On information and belief, that the defendant, Ebling Brewing Company, having such notice as aforesaid, has infringed said letters patent since the date thereof and within six years prior to the filing of this bill and since the plaintiff Benjamin Adriance became the owner thereof and since the plaintiff Adriance Machine Works, Inc., became the sole and exclusive licensee of the plaintiff Adriance, under said letters patent, by using or causing to be used in said Borough of Manhattan, within this District and elsewhere in the United States, a machine or machines made in accordance with and embodying the improvements set for in said letters patent, wilfully, and without the consent of the plaintiffs, and is continuing so to do, and has derived unlawful gains and profits from such infringement which plaintiffs would otherwise have received, and has therefore caused irreparable damage to the plaintiffs.

"Wherefore the plaintiffs pray: For a writ of injunction, issuing out of and under the seal of this court, enjoining the defendant, Ebling Brewing Company, its officers, clerks, servants, agents and workmen from infringing said letters patent; that defendant account to the plaintiffs for the profits made by it and the damage sustained by the plaintiffs; that upon rendering a decree herein the actual damage so sustained be trebled in view of the unjust and wilful infringement by said defendant; that plaintiffs recover the costs and disbursements of this suit; and for such other and further relief as may appear proper and as the equities of the case may require."

Plaintiffs hereby waive verification of defendant's answer.

(Signed)	ALFRED C. COXE, Solicitor.	(Signed)	BENJAMIN ADRIANCE, ADRIANCE MACHINE WORKS, INC., Per
(Signed)	JOHN W. STEWARD, of Counsel.	(Signed)	FRANCIS H. MOSES, Secretary and Treasurer.

ADRIANCE MACHINE WORKS, Inc.

BENJAMIN ADRIANCE, President

254 Van Brunt Street

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BROOKLYN, N. Y.

ESTABLISHED 1888

ADRIANCE

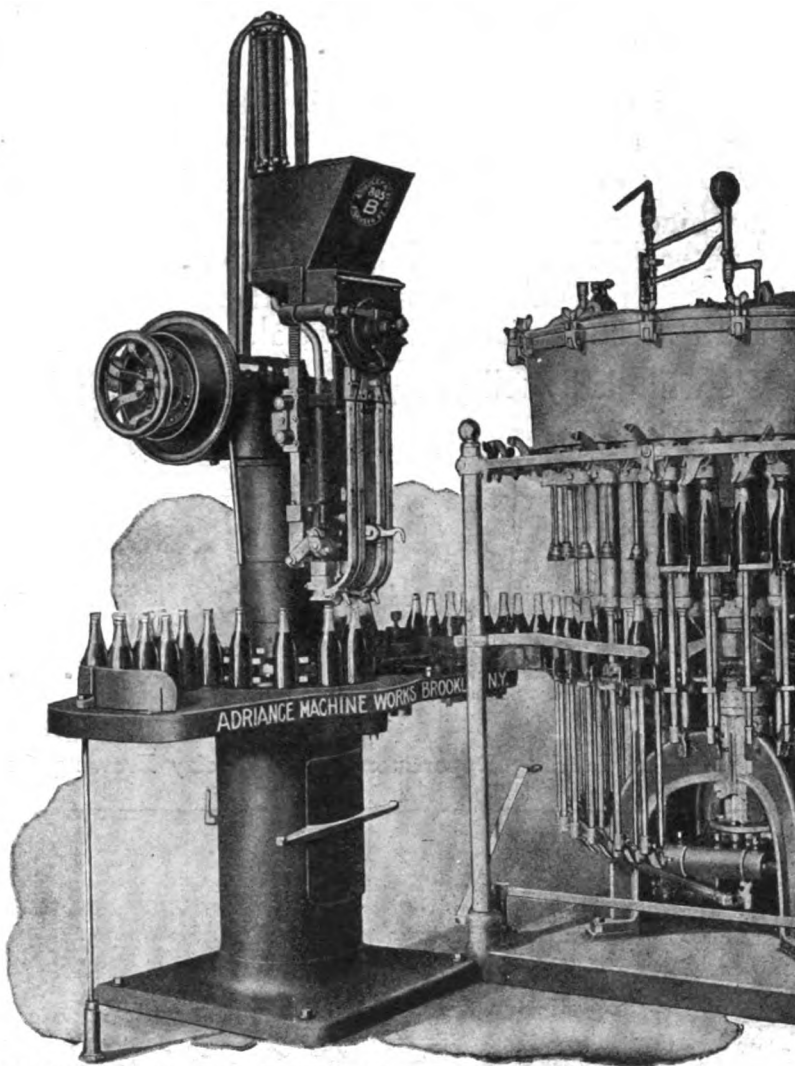
No. 805B Duplex "Crowning" Machine Improved Design (1916 Model)

THIS IMPROVED MACHINE INFRINGES NO PATENTS
SPEED EQUAL TO THE OUTPUT OF THE LARGEST FILLER

\$25.00

will cover the cost of
"Spring-lift" parts,
that, when applied,
will convert either
a No. 805 or a No.
805A (the infringing
machines) into
a machine that is
fully purged from in-
fringement.

WRITE US ABOUT
THIS and learn how
easy it is to become
free from future an-
noyance.



PATENTED AND PATENTS PENDING IN ALL COUNTRIES

This machine works perfectly in connection with any standard filler, such as is built by the Bishop-Babcock-Becker Company, the Henes & Keller Company, the Liquid Carbonic Company, etc.

This and smaller types for both still and carbonated liquids.

PLEASE NOTICE: "We can sell you direct during the year 1917. All agreements granting exclusive territory for the sale of our machines expired December 31st, 1915."

ADRIANCE MACHINE WORKS, Inc.

BENJAMIN ADRIANCE, President

BUILDERS OF "CROWNING" MACHINES AND CROWN CAP EQUIPMENT

254 Van Brunt Street

BROOKLYN, N. Y.

ESTABLISHED 1888

Canadian Offices and Sole Agents for Canada: FREYSENG CORK CO., Ltd., Toronto and Montreal

EFFICIENCY

THE Loew Hydro-Pressure Soaking and Cleaning Machine requires less floor space, uses less water and steam and less soaking solution, requires less labor and gives cleaner bottles than any other machine, method or system. The "Hydro" not only means an increased efficiency, but also a considerable saving in real dollars.

These were the claims we made when the first "Hydro" was put in operation and the acid test of time has fully proven the truth of every claim we made. It has also proven that the "Hydro" will stand the hardest knocks, year after year, with a minimum of trouble and expense.

Why not write us for a list of bottle shops where you can see this wonderful machine in operation; watch the dirty bottles going into the feed end, covered with old labels and filth, and then see the same bottles coming from the discharge end in an unbroken stream with every bottle absolutely clean, sterilized inside and out and sparkling like crystal.

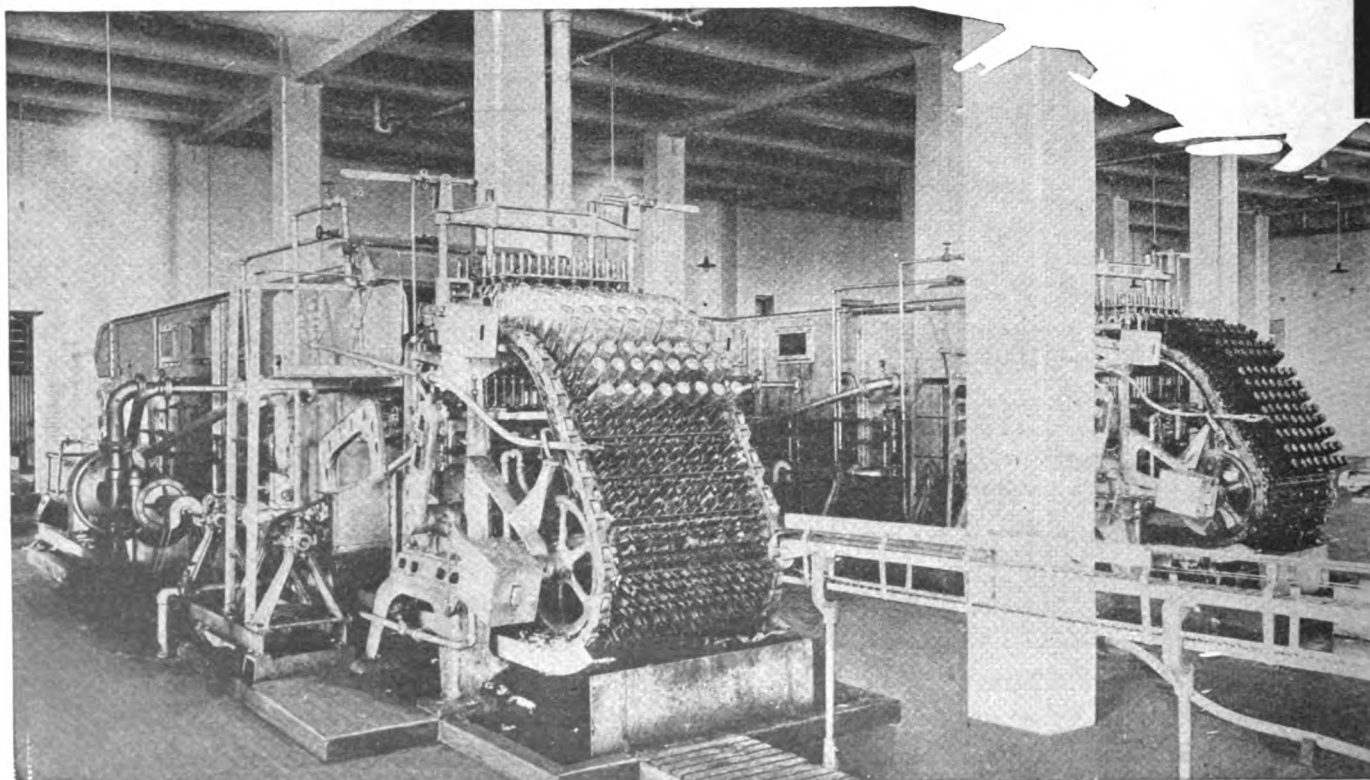
We will gladly tell you where there are "Hydros" hard at work every day in your vicinity.

THE LOEW MANUFACTURING CO.

Manufacturers of Bottle Cleaning Machines and Pasteurizers

CLEVELAND, OHIO, U. S. A.

The Bottling Department of The Leisy Brewing Co., Cleveland.



ECONOMY

IN the production of a perfect bottled beer the Monitor Pasteurizer is an almost indispensable adjunct to the "Hydro." The "red ink record" on every "Monitor" pasteurization chart proves it to be the most efficient and your own cost sheets will prove it to be the most economical.

The "Monitor" has no moving parts except the large rack which makes one turn per hour, no chains to wear out or stretch and nothing to wear out or get out of order. All mechanism is outside of the machine and always accessible.

It is more sanitary, breaks less bottles, occupies less floor space, uses less steam and water than any other pasteurizer; and only one man is required to load and unload the "Monitor," making less labor cost. It can be easily painted inside as well as out, insuring it against rust which ruins a pasteurizer quicker than hard use.

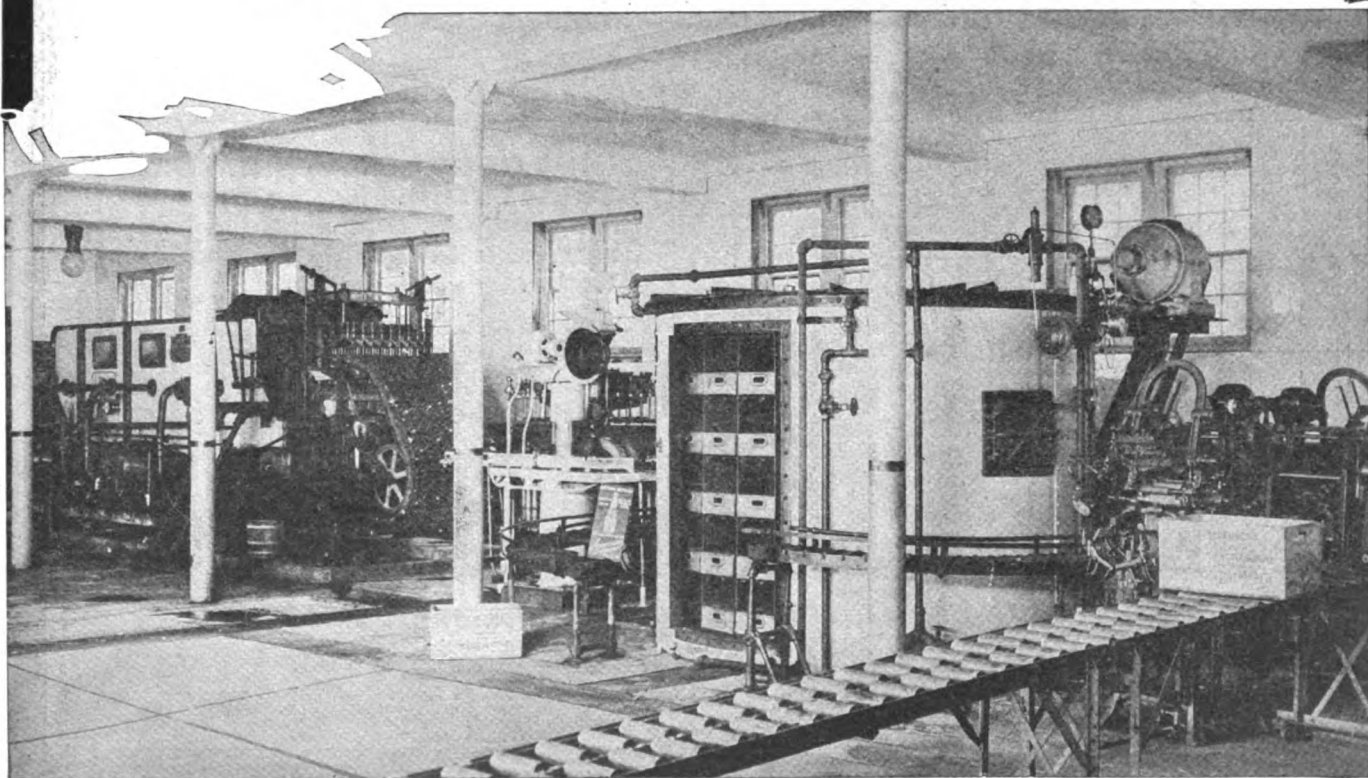
There are "Monitor" Pasteurizers in all parts of the United States as well as foreign countries, and every one of them is giving absolute satisfaction.

THE LOEW MANUFACTURING CO.

Estimates on Complete Bottling House Equipments Furnished

CLEVELAND, OHIO, U. S. A.

The Bottling Department of The American Brewing Co., Philadelphia.



"LOEW TIGER" FILTERMASS



YOU can not produce a perfect beer unless you use a perfect filtermass. The filtermass is the last medium through which the beer passes and must be pure.

"Loew Tiger" Filtermass is guaranteed to be chemically pure, absolutely odorless and tasteless. It will not become stringy, ball or knot, the fibres are tough and strong, it will filter clearer and last longer than any other filtermass. It furnishes a high speed to the filter, produces a brilliant filtrate and retains its fleecy, fluffy condition after being washed.

"Loew Tiger" is made in three grades, fine, medium and coarse, to suit varying conditions and is furnished in cases of 100 to 250 pounds. A single cake weighs about seven pounds.

THE "LOEW MAGIC" FILTERMASS WASHER. Finer fibres and fluffy condition of filtermass retained during rapid cleaning process.

Economizes time, labor, water and filtermass.

More than 1000 in use.

THE LOEW "BLITZ-BLANK" BEER FILTER. Never fails to give absolute satisfaction. Discharges a brilliant, sparkling filtrate.

Simple and durable, easily and quickly handled, has the largest filtering surface, and purifies the most turbid beers.

THE LOEW MANUFACTURING CO.

Manufacturers of Bottle Cleaning Machines and Pasteurizers

CLEVELAND, OHIO, U. S. A.

10,000 Miles On Rocky Roads

Hauling magnesite day after day over rock-strewn mountain roads from mines in Napa County, California, is a strenuous test of the vitality of even GOODRICH DE LUXE Truck Tires.

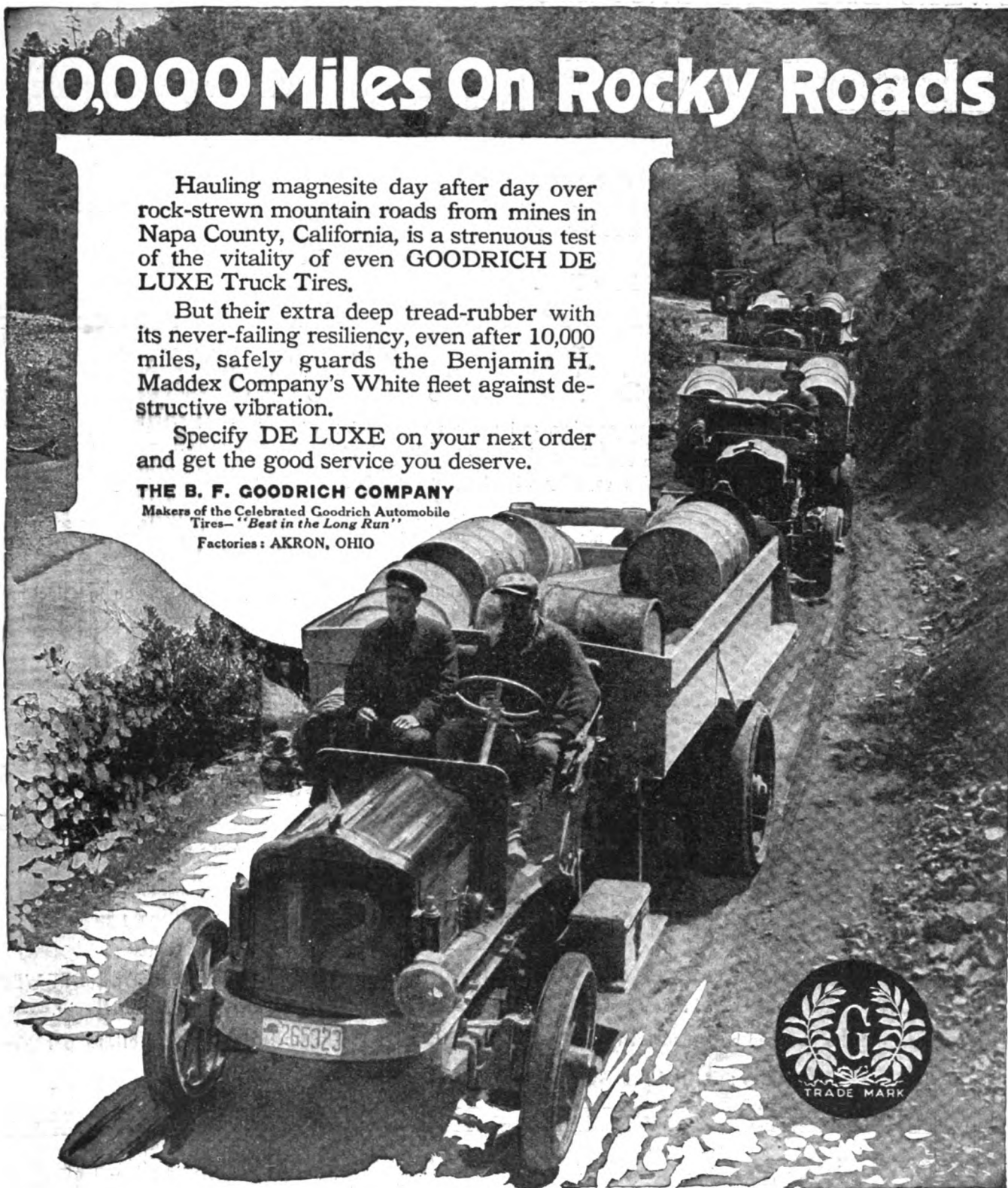
But their extra deep tread-rubber with its never-failing resiliency, even after 10,000 miles, safely guards the Benjamin H. Maddex Company's White fleet against destructive vibration.

Specify DE LUXE on your next order and get the good service you deserve.

THE B. F. GOODRICH COMPANY

Makers of the Celebrated Goodrich Automobile
Tires—*"Best in the Long Run"*

Factories: AKRON, OHIO



GOODRICH TRUCK TIRES

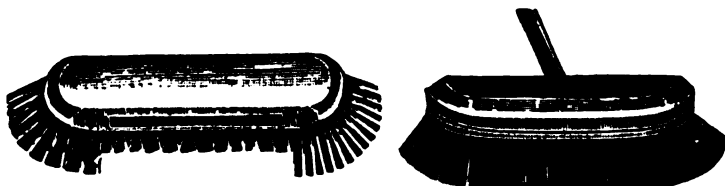
C. GERHARDT

MANUFACTURER OF

BREWERS' BROOMS AND BRUSHES

of every description exclusively.

Keg Scrubbing Machine Brooms, Steel Wire Brooms, Kier Cellar Scrubbers, Upright Kier Brooms, Cooler Brushes, Hoes and Condenser Brushes



Brewers' Keg Brushes, all kinds and materials.

Brewers' Slant Hole Kettle Scrubbers.

All orders promptly attended to by addressing

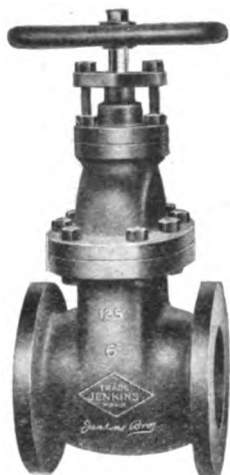
C. GERHARDT, 591 Hudson St., New York**DO YOU REALIZE**

that the

American Malting Company

has an established reputation for
the production of high-grade malt
and for prompt and reliable service?

See details page 82

**Jenkins Bros. Gate Valves**

Present a full straightway opening, and possess many points of merit that make them surpass the average gate. This superiority is due, among other things, to distinction in design, accuracy of workmanship, interchangeable construction, use of metal of highest quality, and a high safety factor.

Maximum transmission capacity with longest possible service is always assured in Jenkins Bros. Gate Valves.

Made in every pipe size and style, in standard, medium and extra heavy patterns, either screwed or flanged for steam, water, air and gas. Furnished inside screw, stationary spindle or outside screw and yoke rising spindle with cast steel, cast-iron or brass bodies. Brass valves are either rough, polished or nicked. Handwheels are made of wood, iron or brass.

Consult us on any valve problem. Our engineers will gladly cooperate with you in selecting the right valves for your requirements.

Write for No. 20 Jenkins Bros. Catalog

JENKINS BROS., New York, Boston, Philadelphia, Chicago**Tovey's Official Brewers' and Maltsters' Directory****OF NORTH AND SOUTH AMERICA****For 1917.****AN ANNUAL SUPPLEMENT TO THE BREWERS' JOURNAL.**

It contains, alphabetically arranged, the NAMES and POST OFFICE ADDRESSES of LAGER BEER and ALE BREWERS and MALTSTERS in the United States and Canada; also in all other American countries where breweries exist.

The Directory can only be obtained by subscribing to The Brewers' Journal; Subscription, Five Dollars per Year.

Office: 1 HUDSON STREET, NEW YORK.**BETTER CORN PRODUCTS****FLAKES**Guaranteed $\frac{1}{2}\%$ or less oil.**GRITS**Guaranteed $\frac{3}{4}\%$ or less oil.**MEAL**

Guaranteed 1% or less oil.

Write for Market Letter and Samples

Daily Capacity 10,000 bu. White Corn

BALTIMORE PEARL HOMINY CO.

Howard Street Pier

BALTIMORE, MD.

Brewery for Sale or Rent.

In eastern Pennsylvania. Capacity, 15,000 bbls. Ice Plant. Artesian Well. Price and terms on application. Address:

M. E. 1059, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

For Sale.

Controlling interest in a small incorporated brewery and ice plant in central Pennsylvania. In first-class condition, good money maker and no trouble about license. If interested, write:

G., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

Position Wanted as Brewmaster.

Brewmaster, middle age, graduate of National Brewers' Academy, with many years' experience, desires position. Can produce first-class lager beers, ales and porter. Thoroughly familiar with brewery efficiency in the saving of labor, materials, apparatus, etc. Excellent references. Address:

W. J. 88, care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

[Nov. 17]

We Buy**HOP SACKS
RICE BAGS**

AND ALL OTHER KINDS OF BAGS

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11 LEWIS ST. NEW YORK

We Pay Spot Cash for All Kinds of
Second-Hand
Machinery, such as Generators, Motors, Engines, Leather
Belting and scrap metals of all kinds. Also have on hand
all kinds of Machinery entirely overhauled.

HARRY E. SALZBERG & COMPANY
30 Church Street - - - New York City

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— IN —

The Brewers' Journal

IF YOU WISH TO OBTAIN
RESULTS

Wanted in France and Belgium

The Brewers' Association of the Invaded Regions of France and Belgium herewith asks the brewers and maltsters and supply men to offer them for the rebuilding of 3500 destroyed breweries:

3,000 Copper or Iron Brew Kettles of 60 to 150
hectoliters capacity;

1,500 Copper or Aluminum Coolers;

2,000,000 Kegs and Barrels of 50, 75 and 100
liters capacity each;

Malt Mills;

Mash Tubs;

and all other Brewery Equipment.

Write to

Secretariat, Association des Brasseurs des Régions Envahies

9 Rue Belzunce 9, PARIS (Xe), FRANCE

For Sale.

Beer Filters; Loew Blitz Blank, Loew Improved, Theurer with press, Gold man Double Cell with press, Karl Kiefer with press; large Cyclone Filtermass Washer; all in excellent condition. Address:

N. M. Heyman.
438 East 59th Street, New York, N. Y.

For Sale.

One Copper Round Hole False Bottom, 45,000 holes per square yard. 15' 9" diameter, number of plates 18, center hole 26" diameter, Brass Bars and Studs, in good condition. Price reasonable. Address:

August Roos' Son,
429 E. 91st Street, New York.

For Sale.

Brewery, in first-class condition, with modern up-to-date equipment. Capacity 20,000 barrels, and output always readily sold. Newly installed Ice Machine with 50 per cent. over capacity. Population served within 10 miles, 75,000; big iron industries. Best reasons for selling. Small amount of cash will secure controlling interest.

E. J., care of THE BREWERS' JOURNAL,
1 Hudson Street, New York.

FOR SALE

One (1) 200 bbl. Loew 4 Compartment Hydro-Pressure Soaker with Automatic Bottle Washer.

One (1) 75 Bbl. 20th Century Soaker, 2 Compartments.

One (1) 100 Bbl. "Goldman" Soaker.

One (1) 15 Bbl. Loew "Economic" Soaker.

One (1) 100 Bbl. Loew "Monitor" Pasteurizer.

These Soakers and Pasteurizers have been replaced by larger machines by the Loew Mfg. Co.

One (1) 16 Spindle Eick Washer with new crates.

One (1) 20 Cell Loew Improved Filter.

One (1) 12 Cell Loew Improved Filter.

One (1) 24" Tandem Filter.

AUGUST R. ROESCH

Brewers' and Bottlers' Machinery

930 N. 8th Street

PHILADELPHIA, PA.

List of Brewery Equipment for Sale

- 16 12-Hoop Wooden Casks, 8 ft. diameter by 7 ft. 10 in. long. Capacity, 85 barrels.
- 4 14-Hoop Wooden Casks, 9 ft. diameter by 8 ft. 10 in. long. Capacity, 100 barrels.
- 6 14-Hoop Wooden Casks, 10 ft. 3 in. diameter by 9 ft. 3 in. long. Capacity, 135 barrels.
- 4 16-Hoop Wooden Casks, 9 ft. 11 in. high by 12 ft. long. Capacity, 160 barrels.
- 10 5-Ring Upright Chip Tanks (Steel), 5 ft. 9 inches diameter by 15 ft. high. Capacity, 102 barrels.
- 4 4-Ring Upright Tanks (Steel), 5 ft. 9 in. diameter by 15 ft. 6 in. high. Capacity, 80 barrels.
- 6 5-Ring Upright Fermenting Tanks (Steel), 8 ft. diameter by 15 ft. high. Capacity, 130 barrels.
- 2 3-Ring Upright Storage Tanks (Steel), 8 ft. diameter by 12 ft. 6 in. high. Capacity, 75 barrels.
- 1 Small Gas Collecting Pump.
- 2 Single, Horizontal, Direct Acting, Vacuum Pumps. Size 8x10x12.
- 1 Marsh Air Pump. Size 10x8x12.
- 1 Beer Pump. 4 1/2 x 2 3/4, horizontal, duplex, double-acting.
- 1 Wort Pump. Size 6 1/2 x 5 x 7, single, double-acting, horizontal.
- 1 Water Pump. Size 6 1/2 x 5 x 7, horizontal, double-acting.
- 1 Copper Kettle, steam jacketed. Capacity, 180 barrels.
- 1 10-Drum Deckebach Patent Aerated Beer Cooling System.
- 1 Large Drum Deckebach Racking Cooler.
- 1 Small Drum Deckebach Racking Cooler.
- 1 Large Loew Filter.
- 1 Small Loew Filter.
- 1 Schlangen Improved Racker. Two arms on machine, room for another.
- 1 Large size Loew Filtermass Washer.
- 1 Chip Washer.
- 1 Olsen-Tilgner Keg Soaking and Scrubbing Machine.
- 1 Horizontal, Duplex, Double-Acting Brine Pump. Size 7x8x10.
- 1 Horizontal, Duplex Pump. Size 10x10 1/2 x 10.
- 1 Cook Deep Well Pump. Size 7x86 inch stroke.
- 1 Worthington Duplex Tank Pump.
- 2 New York Air Brake Cross Compound Air Compressors. Size 8 1/2 x 14 1/2 x 14 1/2 x 8 x 8 1/2.
- 1 Crate Soaker, with Crates. Motor drive.
- 2 16-Spindle Eick Washing Machines. Motor drive.
- 1 Monarch Filling Machine, 32 spouts. Motor drive.
- 1 Adriance Crowning Machine, No. 806A, Automatic Duplex. Motor drive.
- 1 100-Barrel Monitor Pasteurizer and Conveyor. Motor drive.
- 1 Ermoil Body and Neck Labeler. Motor drive.
- 200 feet of 24-inch wide Conveyor with Wooden Rollers.
- 1 Crown Cleaner.
- Plain Bottles, Plain Crowns, Cases and Bulk Beer Cooperage.

FULL DETAILS ON APPLICATION

AMERICAN BREWING CO.
INDIANAPOLIS, IND.

FOR SALE

50 Enamel-Lined Steel Tanks at \$2.50 per barrel.

COOPERAGE

Several cars of Peerless half barrels, 4 galvanized hoops, \$1.75 each.
One carload lively ale half barrels with triangle key, Golden Gate taps and vents, \$2.50 each; 6 hoops.
One car of lively ale whole barrels with triangle key, Golden Gate taps and vents, \$3.50 each; 8 hoops.
One carload Golden Gate diamond key tap and vent, whole barrels, \$4 each, galvanized hoops.
500 quarters with plain hole, galvanized hoops, \$1.35 each.

One car of cooperage consisting of 200 halves, at \$1.75; 200 quarters at \$1.35; and 70 whole barrels at \$3.00 each; all galvanized hoops and Peerless taps on all. This car at the National Capital Brewery, Washington, D. C.
10 closed tanks, 9 feet 4 inches diameter at the top, 10 feet in diameter at the bottom, 12 feet high, 2 3/4-inch staves; 9 flat iron hoops, 1 1/4-inch stay rods through head, \$50 each.
23 chip casks, 9 feet 8 inches long, 9 feet 7 inches in diameter at the middle. Made of oak staves 3 inches thick, 6 inches wide. Four 1 1/4-inch stay rods and 12 1/4 inches by 4 inches flat hoops, \$50 each.

ICE MACHINES, ETC.

50-Ton Upright De LaVergne with Ammonia receiver, oil separator and condensers, \$1,500 on cars

One 75-ton Linde ice machine, \$3,500.
One 25-ton Vilter ice machine, \$3,500.
One 50-ton De La Vergne, horizontal, \$2,500.
One 50-ton Upright De La Vergne, with Corliss engine, \$2,000.
One 25-ton Linde horizontal, \$1,500.
One 100-ton horizontal Wolf-Linde with ten stands of condensers and all equipment, \$4,500.
One 75-ton Vilter, complete equipment and condensers, \$3,500, on cars.
One 10-ton Remington refrigerating machine, complete equipment and condensers, \$800.

One 7 1/2-ton Wegner refrigerating machine, complete, with condensers, \$700.
A complete 500-lb. ice making outfit, 10 50-lb. cans, new, complete, for \$200.
One brine tank and coil, size 9 feet wide, 14 feet long and 8 feet deep, inner coils throughout of one inch pipe, \$700 complete.
One 30-ton York latest style, closed vertical brine cooler, 3 1/2-in. diameter, 11 feet high, rests on iron legs, brand new, never used, \$500.

SOAKERS AND PASTEURIZERS

One Loew square 50 barrel pasteurizer, with 6 trucks, like new, \$800.
Two Loew square 25 barrel pasteurizers, with trucks, \$500 each.
One 20th Century, 25 barrel Simplex Soaker, \$200.

One 20th Century 2-compartment Soaker, goes down into cellar, 100 barrels, used one year, \$1,500, from Interstate Brewery, Sioux City, Iowa.

PUMPS (RACKING OFF, PRESSURE, BOILER FEED, AIR, ETC.)

One Taber rotary carbonating and racking pump, 220 volt, D. C., \$200.
Schneible copper drum gas collecting compressor, used two years, large size, \$500.
One Foster pump, which has a 4 1/2-inch and 4-inch inlet and outlet. This pump is in excellent condition, having been used about 6 months, \$200.
One Foster pump, 3-inch, and 3 1/2-inch inlet and outlet, single acting, \$100.
One Wittemann pressure pump, 2 1/2-inch inlet and outlet, worm drive, with motor attached, \$200 each.
One Boyt's-Porter boiler feed pump, 10x5x12, self grinding, 3-inch suction, 2 1/2-inch discharge, bronze valves for hot and cold water, \$250.
One Smith & Vail pump, No. 33130, 5-inch inlet and 3-inch outlet, size 8x5x10, \$300.
One Huettman & Cramer air pump, \$125.
One Taber Rotary racking pump, motor attached, \$200.
Two Schneible Centrifugal racking pumps, 220 volt motor, 3 phase, 60 cycle, 5 H. P. motors, water proof, \$300 each.
One Hall compressor, 8x9x10, with tank, \$300.

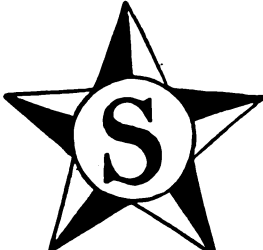

One Foster deep well steam pump (upright) 8x24 inch, pumping from 10 inch well, 4 inch discharge pipe, \$100.
One Foster rotary pump—direct connected 2 H. P. motor, 2 inch D. C. 115 volt suction, 2 inch discharge, \$90.
One Worthington steam pump, compound, 6 and 9x8 1/2x10, 7 inch suction, 5 inch discharge, \$175.
One Knowles double acting (steam pump), 4 inch suction, 3 inch discharge, \$95.
One Worthington double acting (steam pump), 9x5 1/2x10, 4 inch suction, 3 inch discharge, \$95.
One Foster Wort pump, No. 5 1/2, 4 inch suction, 3 inch discharge, \$175.
One Foster rotary Wort pump, 115 volt direct connected to I. H. P. D. C. motor, 1 1/2 inch suction, 1 1/4 inch discharge, \$125.
One Foster brine pump, 6x5 1/2x7, 2 1/2 inch suction, 2 inch discharge, at \$95.00.
One Gould triplex pump, with Westinghouse engine, 1 1/2 inch suction, 1 1/2 inch discharge, \$100.
One No. 5 Foster air pump, used in bottle house, \$300.
One No. 5 Foster air pump, used in engine room, \$225.
One Laidlaw-Dunn-Gordon Duplex Compressor, balance wheel in center, size 10x12, with large receiving tank, \$700.

MISCELLANEOUS

Two stands Schneible cellar cooler, enclosed, 11 feet over all, 4 1/2 inches outside, 3 1/2 inches inside, 16 pipes high, 32 pipes in all, \$600.
Deckebach cooler, 9 inches in diameter by 10 1/2 feet long, for ammonia, all connections, \$400.
Wittemann enclosed cooler for hot beer, 4 sections, 14 pipes high, 9 ft. long, 11 ft. over all, 6 in. pipe, 3 in. pipe inside, 56 pipes in all, \$1,000.
Two Bishop & Babcock, 34 spout automatic fillers, \$1,400 each.
One Jumbo crowner, \$500.
One 40-spout Monarch automatic beer filler, \$1,500.
Five latest style Ermold hand labeling machines, with motors, \$250 each, for body and neck.
Three World hand labelers for body and neck, with motors, \$250 each.
Two cars 24 ounce bottles with names, amber and light colored, \$4.25 per gross.
Direct expansion pipe, 20 cents per foot, with bends.
75 whole barrels, Peerless taps, galvanized hoops, \$3.50 each.
One 16-cell Loew Blitz Blank, with press attached, \$500.
One Universal pocket automatic washer, \$500.
One automatic single Adriance crowner, power driven, \$100.
One Henes & Keller rotary filler, 12 spouts, \$150.
16-Spout Eick bottle washers, each, \$100.
One National boiler water heater with separator, \$300.
One 65 K. W. 110 volt direct current Bullet generator, direct connected to a Skinner engine with switchboard, \$1,500.
One 100 K. W. Western electric generator, 110 volt, direct current, direct connected to a Skinner engine with switchboard, \$2,500.
One 180-lbs. Loew filter mass washer, \$200; size 3 1/2x6x8.
One 50-bbl. Loew filter mass washer, \$75.
One Karl Kiefer largest size filter mass washer, \$300.
One 3-arm White racker, \$300.
One Economic 3-arm racker, \$400.

One New York airbrake pump, \$50.
One Olsen & Tilgner shaving washer reversible, size of galvanized drum 3x6, \$200.
20 motors, 1/4 H. P. to 15 H. P., 220 direct current with switchboards, from \$25 to \$200.
30 motors, 110 volts direct current, 1/4 H. P. to 10 H. P., \$25 to \$150.
One No. 3 Karl Kiefer Filter, with press, \$1,500.
One 16-cell Kiefer filter, with press, \$800.
One 10-cell Loew filter, \$200.
One 22-cell Loew filter, \$500, used one year.
One 20-cell Theurer filter and press, \$600.
One 32-cell Union-Schalenfilter and press, \$2,000.
Wittemann complete carbonating and gas collecting set, No. 2, steam driven, \$1,400, with two gas collecting tanks.
Wittemann electric driven gas collecting and carbonating set, complete with four gas collecting tanks, carbonating pump, aluminum lined cooler and reducing tank, \$2,000.
Rauch single burner pitching machine, complete, \$250.
Kaestner keg scrubber, overhead barrel lift, with soaking tank, takes one-eighth to whole barrels, used 2 years, \$200.
Schock hogshead scrubber, \$200, complete.
One 16 feet copper false bottom, used two years, pin point holes, counterunk underneath, 5,000 holes to the square foot for hopjack, \$1,000.
One mashtub, bronze false bottom, 16 feet, same as above, \$1,000.
One 16 1/2 feet copper mashtub bottom, used a year and a half, same as above, \$1,200.
One 710 bbl. government pipe line, complete, used about two years, \$4,000.
Two malt bins, 8 feet diameter by 48 feet high, \$500 each.
One 5-ton malt scale and hopper, \$500.
One wet grain hopper, takes two 300-bbl. brews, \$300.
Schuster bottling trucks, \$25 each.

CHAS. S. JACOBOWITZ, 1208 West Ave., Buffalo, N. Y.
I can furnish anything needed in a Brewery, Bottling House or Ice Making plant, of any size
I Buy Any Size Brewery Complete—Nothing Too Large for Me to Handle.

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TELEPHONE: 55 JOHN.

BREWERY & MALTHOUSE INSURANCE A SPECIALTY.

THE REASONS WHY

So Many of the Prominent Brewers of the Country are Using

HAMRICK'S HARD-SHELL ENAMEL

In Preference to Varnish for the Inside of

**Fermenting Tubs, Storage Vats, Chip Casks, Mash Tubs, Hop Jacks, and
 Beer, Ale and Porter Packages.**



It is Odorless, Tasteless and Insoluble.
 No Risk of Explosion.
 Will last years without Renewing.
 It is more easily applied than varnish.
 Will remain hard and firm, while varnish softens and dissolves.
 Does not require renewing till after years of service, and then only when worn down by friction.
 It is more easily cleaned than varnish.
 Saves money and labor.
 Is no longer an experiment. In use 25 years.
 A long list of brewers recommend it.

ADDRESS FOR PARTICULARS:

THE HAMRICK TANK & BARREL HARD-SHELL ENAMELING CO., 5831 Wissahickon Ave. PHILADELPHIA, PA.

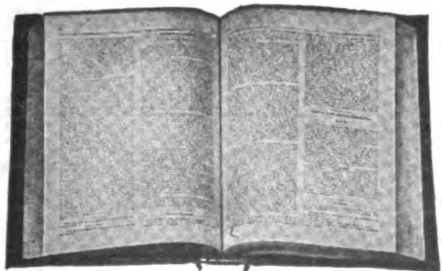
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Price of Binder, complete, to contain 12 numbers of THE BREWERS' JOURNAL, delivered, \$2.00.

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Fifteen Per Cent. More Mileage is Our Guarantee

ATLANTIC LONG DISTANCE ELECTRIC TRUCKS have solved the delivery problem for hundreds of merchants in varying lines. Prominent Brewers whose equipment is in continuous hard service have experimented with Atlantics with the result that great fleets of them have followed the single trucks that first blazed the way to greater delivery economy. Nothing counts like service with these concerns, and it is in hard, continuous service that Atlantic Trucks most emphatically make good.



THE BEST BY TEST

There is an Atlantic Chassis for every type of service. They are made in 1/2-Ton, 1-Ton, 2-Ton, 3 1/2-Ton and 5-Ton sizes. The factor of safety is in all cases far in excess of standard practice. They are better than need be. For example, the 3 1/2-ton truck has a 5-ton axle—which means not only absolute safety and freedom from “break-down” expense, but also permits heavier loads to be carried on occasion.

Catalog and full details on request

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Factory: 893 Frelinghuysen Avenue, Newark, New Jersey

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Without "ERMOLD LABELERS" your Bottling Department lacks the *most modern and efficient* labeling unit built.

The "Rush Season" demands **reliable equipment** that will stand the "grind" and the **"NEW ERMOLD"** excels, especially in this qualification, and gives the greatest output of **perfectly labeled goods** per operator.

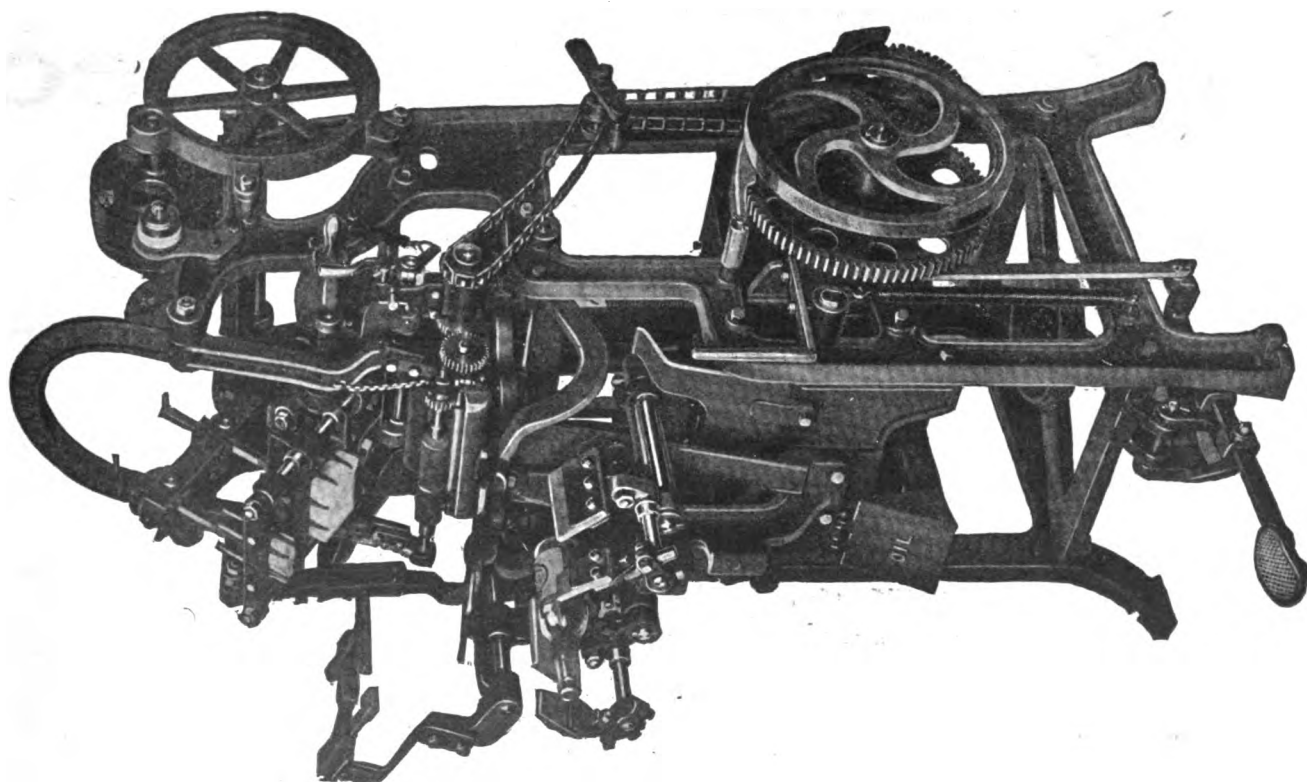
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EDWARD ERMOLD COMPANY

Largest Manufacturers of **QUALITY Labeling Machines**

Hudson, Gansevoort and Thirteenth Streets

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NOBODY EVER ESCAPES

paying the price. What you think you save by using cheap paint, you really pay many times over before you're through.

The safe way is the economical way—the way most good brewers do is to get GIMBEL'S Paints and Enamels in the first place. They may cost a wee bit more, but you will be glad of it in the long run. Drop us a line and we will tell you why.

GEO. GIMBEL & CO.

(INCORPORATED)

HIGH-GRADE PAINTS, VARNISHES AND ENAMELS

24 STONE STREET

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WM. F. KOELLE & CO., BREWERY ARCHITECTS AND ENGINEERS

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PLETE BREWING PLANTS
AND EQUIPMENTS

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ARCHITECTS REFRIGERATING-ENGINEERS & CHEMISTS

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SCIENTIFIC PRINCIPLES

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THERE is a big difference between “NABCO” beer cases and just ordinary cases, in that “NABCO” cases are **BUILT**, not just made. This **BIG DIFFERENCE** accounts for the tremendous business we are doing in the beer case business. With our modern equipment, skilled workmen, careful supervisors, who **KNOW** that **ONLY THE BEST** goes into our cases, we are in a position to offer quick, satisfying service to particular **BEER CASE** users.

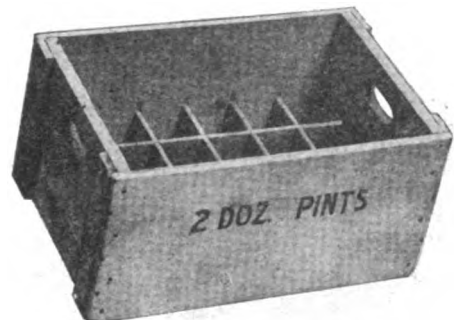
Building cases is **OUR BUSINESS.**

BUYING cases is **YOUR BUSINESS.**

Just send us a line and we will “**SHOW YOU**” what we can and will do.

With this **BIG SERVICE** we guarantee to give you **THE BEST** value for your money.

The secret of the strength of “NABCO” boxes is in the way they are **BUILT**, not made.



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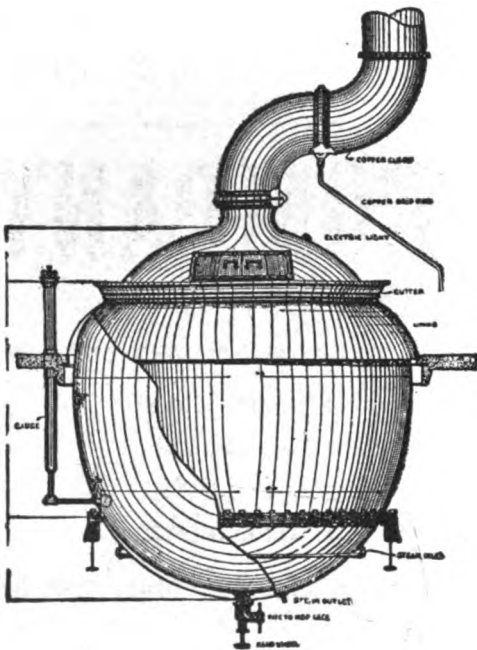
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CHICAGO, ILL.

KRUECKE BROS. MFG. CO.

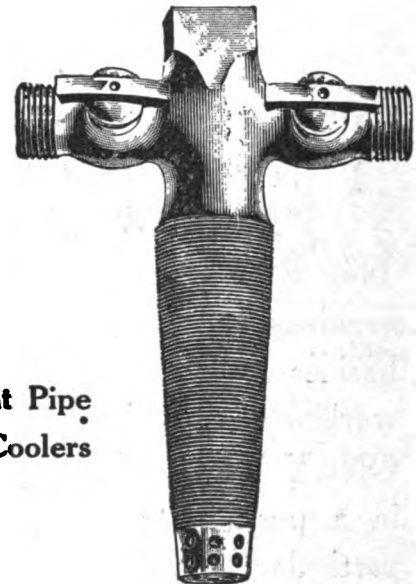
515-517 Park Street
MILWAUKEE, WIS.

Brewers' Copper and Brass Goods

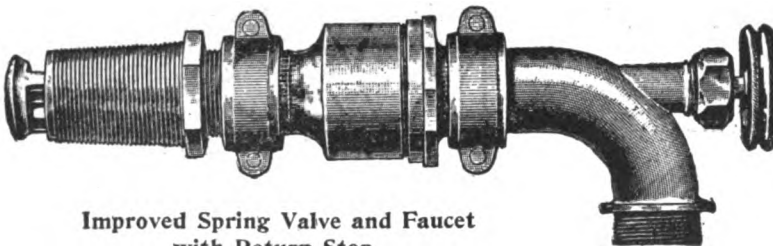


**Estimates Made
on
Furnishing**

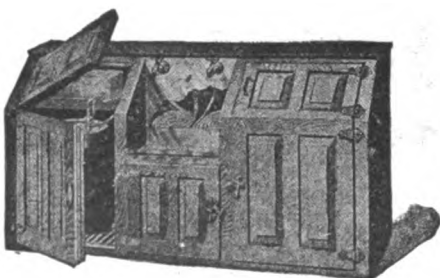
**Brew Kettles, Government Pipe
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**No. 29 Double Air Cock with
or without Couplings.**



**Improved Spring Valve and Faucet
with Return Stop.**



Novelty Box.

**Brass Goods for all Depart-
ments of the Brewery and
Bottling House. Novelty
Boxes, Coil Boxes, Hy-
draulic Beer Pumps, Car-
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Beer Pump Supplies.**



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We Do a General Line of Repairing

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CHR. HAFERS' IRON WORKS, 407 WEST 37th ST., NEW YORK. IRON WORK for BREWERIES

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IRON WORK FOR BUILDINGS, COLUMNS, GIRDERS, RAILINGS ETC.

ROLLED BEAMS ALWAYS!

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FOR SALE** } *Advertisements*
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in the classified columns of

THE BREWERS' JOURNAL

bring the *DESIRED RESULTS*

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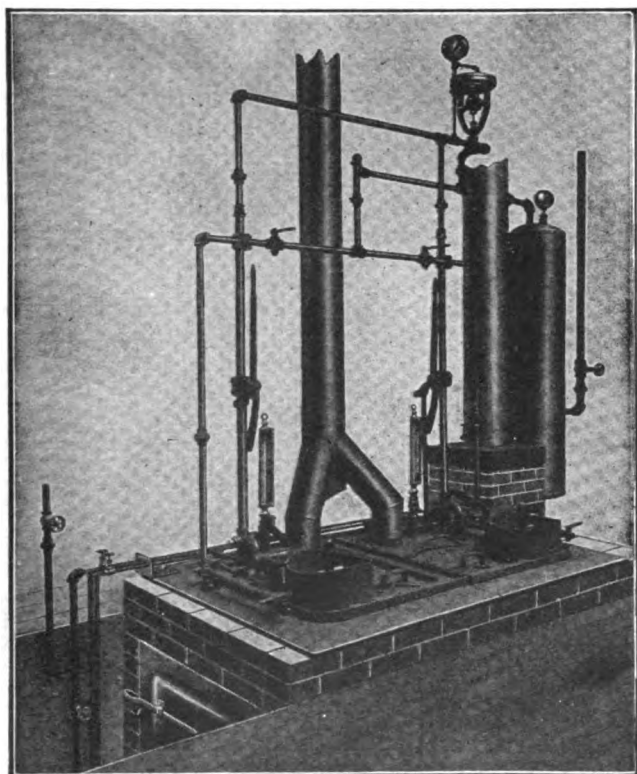
211 and 213 EAST 94th STREET, NEW YORK CITY

Cable Address: Zollerine, N. Y.

Telephones 5432-5433 Lenox

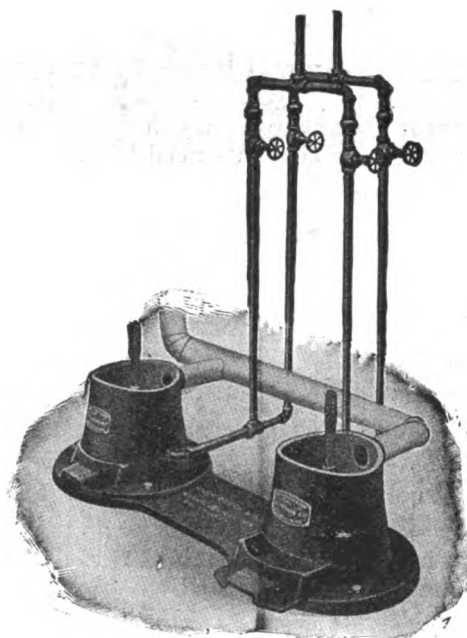
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1. Equipped with all safety devices.
2. Rapid and thorough pitching.
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5. No shafting or belting.
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The Brewers' Journal

IF YOU WISH TO OBTAIN
RESULTS

BREWERS

Ask Yourself These Questions

If you have the answer to each, you are on the right track; if not, your accounts need looking after.

* * *

1. Do you know how much you lose or make month by month?
2. Do you know what it costs to brew each barrel of beer, and what it costs to sell it?
3. Do you know what relation the costs of brewing and selling bear one to the other?
4. Do you know what percentage each avenue of cost bears to the whole cost?
5. Do you know how you stand with regard to your Bottling Department—making or losing?
6. Do you know the loss sustained through failure to return empty cases and barrels?

* * *

I can put your accounts in such shape that these questions will be automatically answered. Facts foster control,—control spells success,—success proclaims the man. Bet'er think it over and write me.

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Certified Public Accountant

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Factory, 243 South Street, Newark, N. J.

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COLUMBIAN TASTELESS PITCH, made in imported German Machinery.

MICROLIN, Brewers' Cleanser and Disinfectant.

ALUMILAC, a most durable, pure Aluminum Vat and Tank Coating.

CARAMEL, in solid and liquid form.

CALCIFORM, odorless Disinfectant and Mold Destroyer.

Precipitated Sulphate of Calcium, Brewers' Varnish, Brewers' Sugar, Paste, Boiler Compounds, Black Tank Enamel, Knickerbocker Cleaner and Cleanser, Knickerbocker Bottlers' Alkali Special.





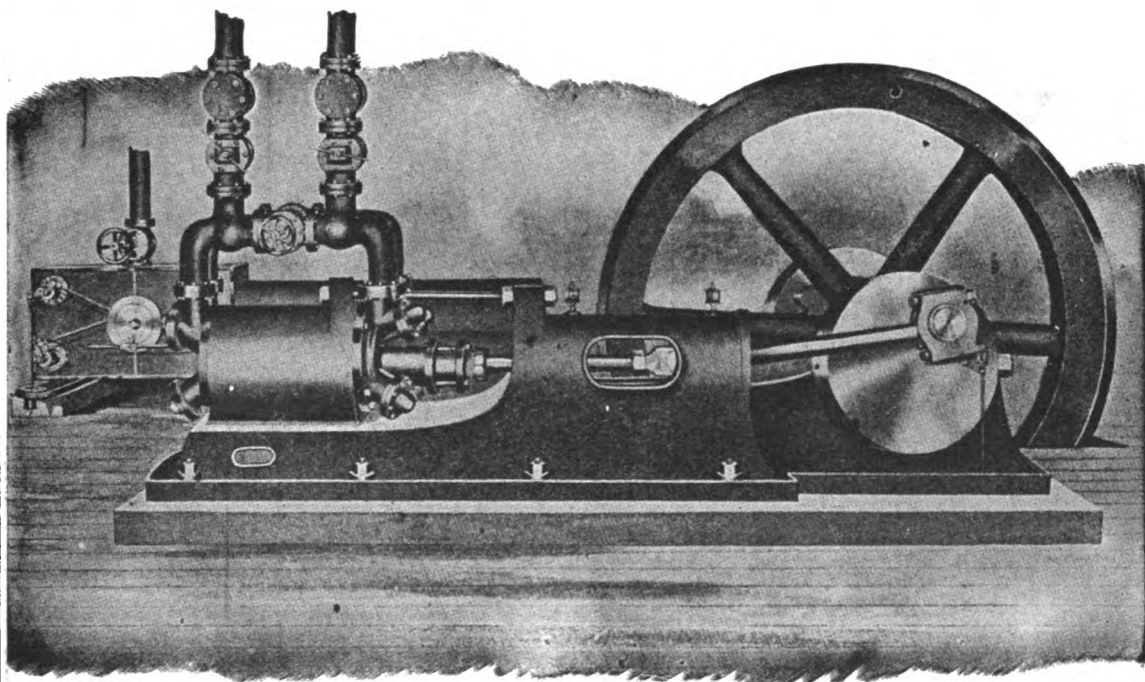
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Ammonia Packing has been the stand-by of engineers of Ice Factories, Breweries and Cold Storage Plants for more than a quarter of a century. We make a special packing or combinations of packings for every type of ice machine and for all conditions of service, and we will assume entire responsibility in selecting the proper styles or combinations of our packings to work successfully and economically under any stated condition. If goods are not wholly satisfactory to purchaser we will refund promptly the cost of them. A card will bring our catalog, which fully describes and illustrates our various styles of packing.

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8000

Machines
in use

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**WRITE
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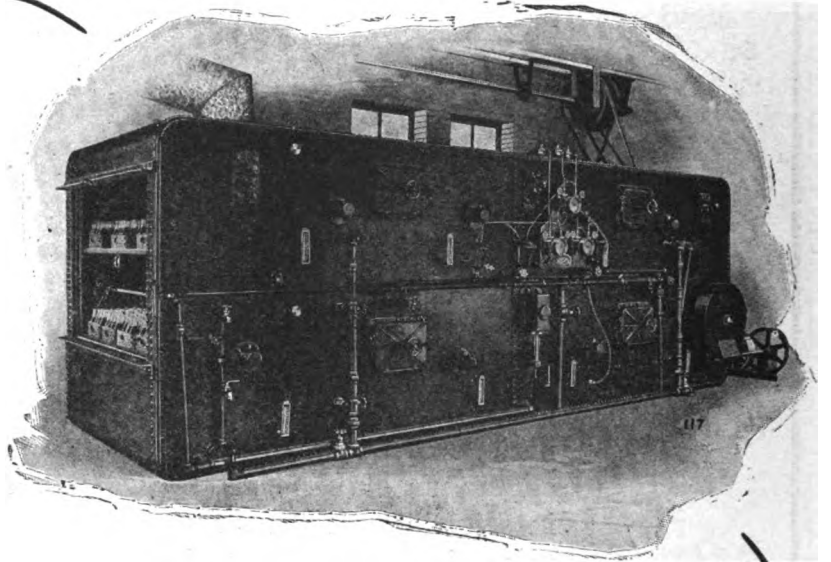
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MONTREAL, CANADA

REFRIGERATING AND ICE-MAKING MACHINERY

Manufactured and installed in Breweries on any system

The "Badger" Pasteurizer



Is in such perfect balance, and the mechanical construction of the chain and transmission is of such an improved type that a one horse power motor will drive the largest size machine

The Vilter Manufacturing Company

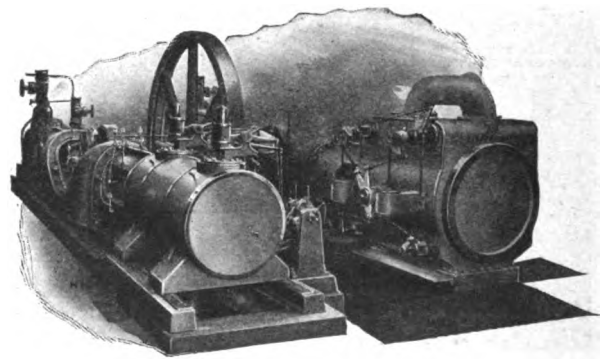
810-820 Clinton St., Milwaukee, Wis.

Ice-Making and Refrigerating Machinery, Corliss Engines, etc.

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QUALITY IS PARAMOUNT

FRICK EQUIPMENT holds its enviable position in the refrigerating field, due to the high quality of material and workmanship entering into its construction.



Repeat orders are frequent because of the reliable performance of former machines.

We have a corps of experienced engineers who are ready to aid you in planning your new plant or improvements. Write us when you're ready. Our business is built on reliable and efficient service to our customers. Write them about it.

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ICE MACHINERY SUPERIOR SINCE 1882

Branches in all principal cities



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*Flexible as a Belt
Positive as a Gear
More Efficient
Than Either*

Link-Belt Silent Chain is the first thought of the power user requiring a positive drive from motor to driven machine. He knows that this drive cannot slip, is efficient, easy on motor and machine bearings, because one side of the chain is run slack.

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On long or short centers, in hot, cold, damp or oily places, Link-Belt Silent Chain shows the highest efficiency of all mediums for the transmission of power.

Engineering counsel on Silent Chain Drives can be obtained from the Link-Belt Service Men located at convenient points.

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on the
Washers



Look for
the liners
in the
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*Solicit correspondence with
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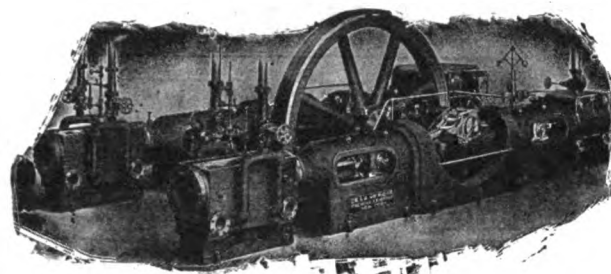


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NORTH-WESTERN MILLER, Minneapolis.

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Success turns on the ability to do a thing well. It is faith in this principle which has encouraged the **De La Vergne Machine Company** to devote a third of a century to the building and improving of **Ice and Refrigerating Machines**.

The actual worth of a refrigerating machine depends on three points—Safety, Reliability and Economy.

De La Vergne Ammonia Compressors are so constructed that if a valve should break, it cannot fall into the cylinder and cause a serious accident. They stand **first in regard to safety**.

Careful design, good materials and skilful construction assure a **large measure of reliability**.

The **fuel consumption per ton of refrigeration produced** is unexcelled by any machine of other make.

The **True Volumetric Efficiency** of the **De La Vergne Refrigerating Machines** excels that of any competitive machine. That is to say, a **De La Vergne Refrigerating Machine** compresses more ammonia per revolution than any other ammonia compressor of the same dimensions.

To-day **De La Vergne Refrigerating Machines** are universally recognized as the **best and most efficient in the market**.

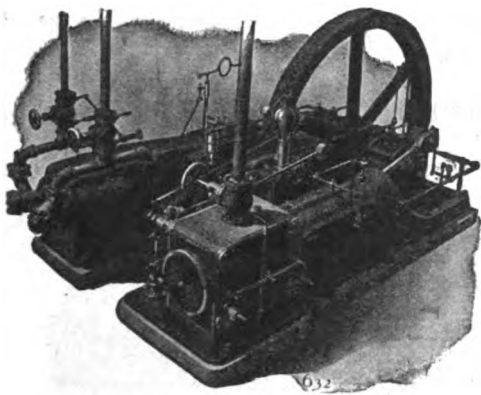
Our Bulletin 106 presents some pertinent points pertaining to **De La Vergne Ice and Refrigerating Machines**. Better write for a copy.

DE LA VERGNE MACHINE COMPANY

1117 EAST 138th STREET

NEW YORK CITY

We also Build Oil Engines and Gas Engines



Mechanical Refrigeration

is essential to success in many lines of manufacture, and YORK Products have played an important part in the development and expansion of these lines over the entire field.

We not only design and make a refrigerating Plant suited to the needs of our customers, but all the details are handled by our own organization, which assures the best service possible.

YORK Refrigerating Machinery is the result of years of careful research, exhaustive tests, and the labor of experienced engineers and competent workmen; and for the manufacturer who depends on the quality of his product for the continued success of his business, it is the logical equipment to buy.

Write for information and prices

YORK MANUFACTURING CO., York, Pa.
(Ice-Making and Refrigerating Machinery Exclusively)



Patented May 12th, 1903

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This cut shows our patented bottle brush which is positively the best stationary brush in the market; made of the best quality imported bristles, and can be used on all machines. We can also furnish other style brushes if desired, and refill tips of all makes. Samples and prices cheerfully furnished upon request.



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OF EVERY DESCRIPTION

BREWERY WORK A SPECIALTY

Steam and Fire Kettles
Steam Coils, Beer Coolers
Surface Coolers, False Bottoms
Hot and Cold Water Tanks, Stills

Government Pipe Lines
for Bottling Establishments

GEORGE KELLER

Wyckoff Ave. & Norman St., BROOKLYN, N. Y.

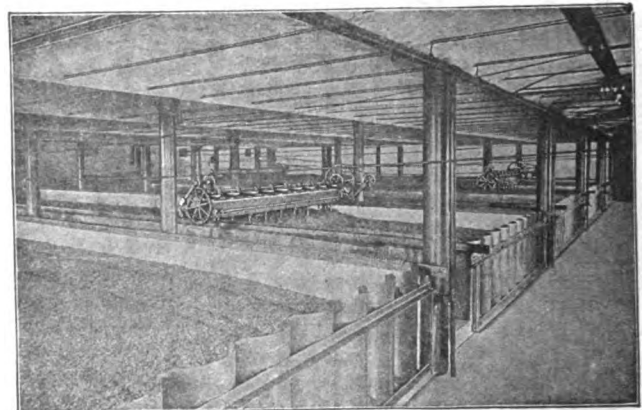
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MALTING MACHINERY AND APPARATUS OF EVERY
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Entire Malting Plants Designed, Built and Equipped

20,250,000 BUSHEL CAPACITY PLANTS EQUIPPED

ESTIMATES FURNISHED
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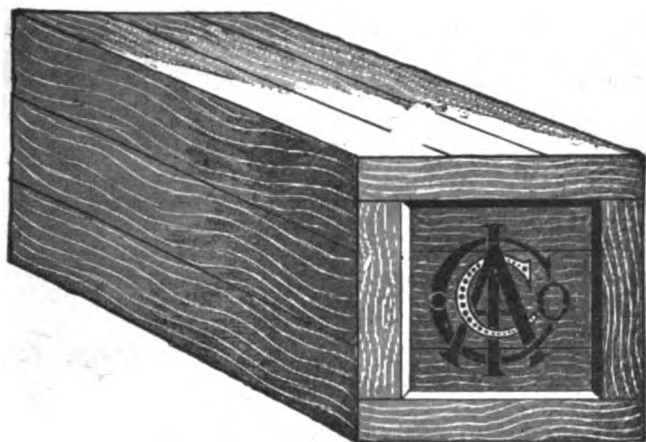
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LACHENMEYER THICK BREWERS' CHIPS

are made from thoroughly seasoned and
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AMERICAN GLUE COMPANY'S CELEBRATED CAPE ANN ISINGLASS

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BREWERS' SUPPLY HOUSES

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AMERICAN GLUE COMPANY

BOSTON NEW YORK PHILADELPHIA CHICAGO ST. LOUIS

1866

1916



49th Annual Statement

January 1, 1916

Capital	\$2,000,000.00
Surplus	1,570,753.42
Reserves	2,663,662.90
Assets	6,234,416.32

L. B. BRAINERD, Pres. and Treas.

L. B. ALLEN, Vice-Pres.

CHAS. S. BLAKE, Sec'y

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THE HARTFORD'S SPECIALTY

IS

POWER PLANT INSURANCE

BUSINESS ANNOUNCEMENTS

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The Brewers' Journal

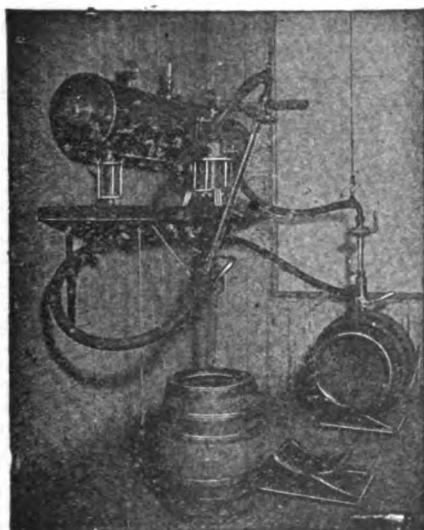
are bound to be paying investments
for the advertiser

because

THE BREWERS' JOURNAL

is the only *real*

Brewers' Paper



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Manufacturer and Patentee of the PERFECTED

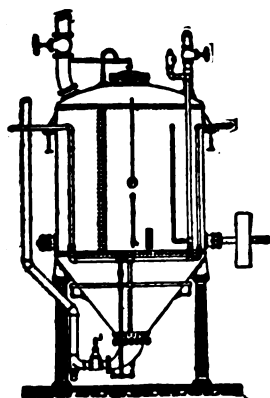
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This machine is acknowledged to be the only machine **working perfectly satisfactory** under any condition. No loss of carbonic-acid gas, **no rest beer, no overflow**, cleanliness in racking, moderate price. Testimonials from leading authorities. Send for particulars.

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(INCORPORATED)

MANUFACTURERS OF

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New York Office : 51 Front Street

BIDTEL'S ANTISEPTICUM is manufactured by us in crystal and in tablet form and in sizes for $\frac{1}{2}$ bbls. and $\frac{1}{4}$ bbls.

It is endorsed by all the leading scientific stations and breweries in the United States and other countries.

Samples, prices and further particulars will be submitted on application.

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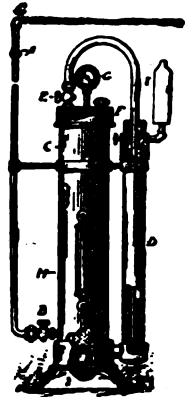
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PERKINS BOX COMPANY

GLOUCESTER, MASS.

No order too small or none too large for us to handle.

We solicit your inquiries.

Cleveland Brewers Supply Co.

SAFEST and CHEAPEST
MASHING APPARATUS

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DEALERS IN

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Maltoid**Flake-Malt****Grits****and Brewers' Meal**

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ESTABLISHED 1855.
INCORPORATED 1892.

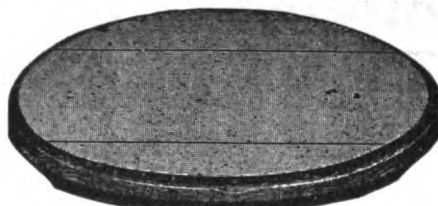
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UNION MADE BEER COOPERAGE

EIGHTHS, SIXTHS, QUARTERS, HALVES AND WHOLE BARRELS.



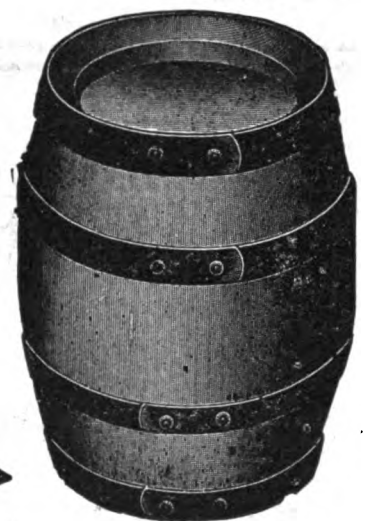
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ALSO DEALERS IN ALL KINDS OF

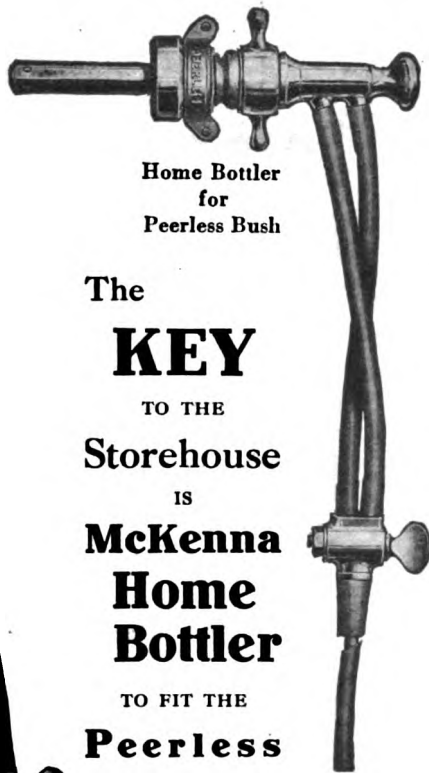
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Home Bottler
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The
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IS
**McKenna
Home
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TO FIT THE
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OR
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The Consumption of
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Bottler
for
Golden
Gate
Bush

Write
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Brewery Sidewalk Mats and Bumpers

**SIDE-
WALK
BUMPER**



Filled
with
pure
cork

A valuable help to drivers unloading barrels and packages. It prevents the breaking of sidewalks and return of broken packages

These mats are made double of tarred flexible rope and are absolutely the strongest and most durable mat on the market.

Size 18 inch x 16 inch x 6 inch thick.
Larger Mats made to order.

**DOUBLE
SIDEWALK
MAT**



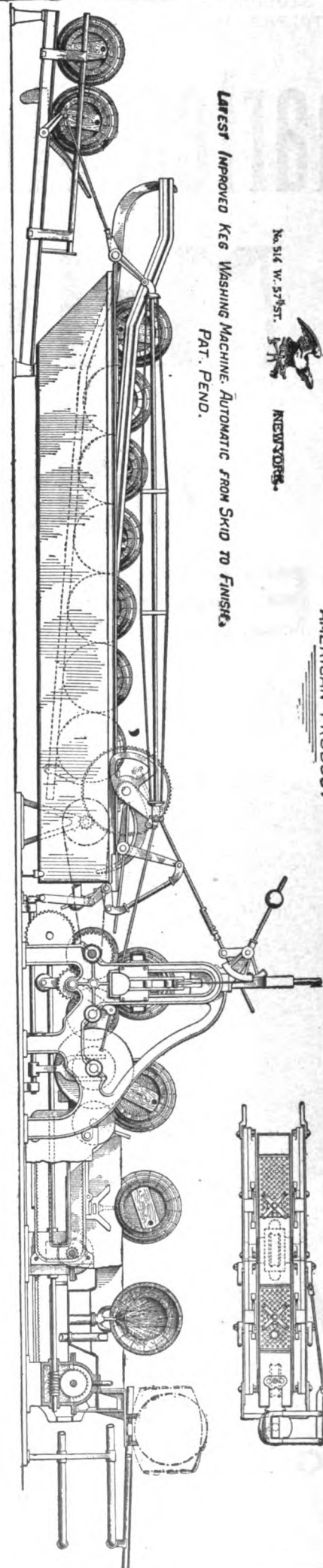
These bumpers are hand-made, with an interior filling of pure cork stuffed in a strong hand-sewed canvas bag, strapped with two rope rings crossways and lengthways. The Bumpers are braided on the outside with best-quality tarred rope.

Size 18 in. x 16 in. x 8 in. thick.

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GUSTAV SCHOCK & SON, 512 to 522 West 57th Street, NEW YORK, N. Y.
BREWERY MACHINERY A SPECIALTY



LATEST IMPROVED KEG WASHING MACHINE. AUTOMATIC FROM SKID TO FINISH.
PAT. PEND.

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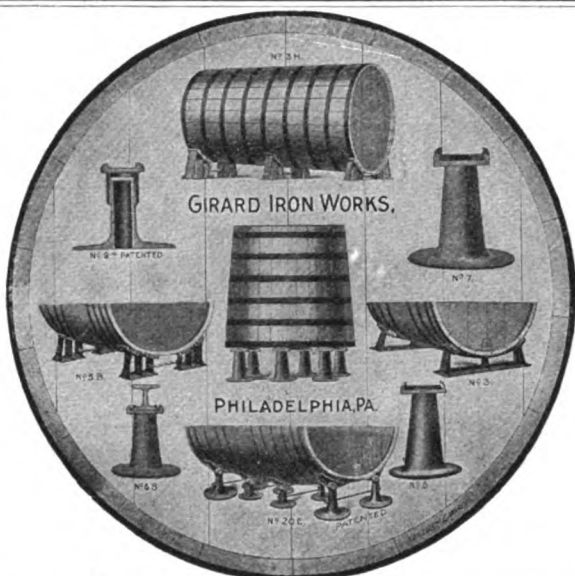


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SUPPORTS

For Chip Casks and Storage and Fermenting Vats.

COMPLETE LINE OF

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For Every Kind of Cask or Vat.

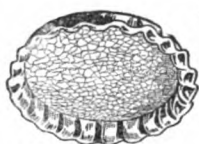
Hose Passers, Manhole Doors, Transmitters, and
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Casting of Every Description.

Girard Iron Works

Successor to H. RUHLAND & CO,

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ARE NOT ONLY DISTINCTIVE FOR QUALITY....
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Both Composition and Natural Cork PRICES Exceptionally Reasonable

Use the WILMINGTON STOPPER — Its Advantages are INCOMPARABLE

BOND BOTTLE SEALING COMPANY

WILMINGTON, DELAWARE

THE Brewing Trade Review

Official Organ of the Brewers' Society

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The WATCHWORD for 1916

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BY
PLACING YOUR ORDERS WITH US
FOR

BUNGS

THE NATIONAL BUNG CO., Inc.
FAR ROCKAWAY, N. Y.

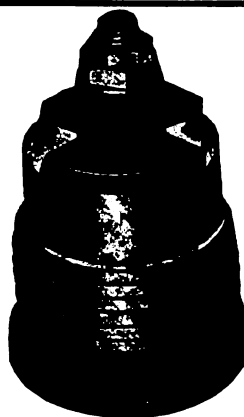
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WRITE FOR OUR CATALOGUE AND PRICE LIST

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**GOLDEN GATE
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for
RACKING AND TAPPING
Known Everywhere**

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Write for particulars about our Solar
Air Purifier which washes,
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NEW YORK CITY, U. S. A.

TELEPHONE CONNECTION

To the Owners and Users of Adriance 805 and 805A Duplex Crowning Machines

On the fourteenth day of November, 1916, a decision was handed down by the United States Circuit Court of Appeals for the Second Circuit, in the suit entitled, Columbia Machine & Stopper Corporation v. Adriance Machine Works, Inc., and Benjamin Adriance, affirming the decision of Judge Veeder and holding that the 805A construction, manufactured by the Adriance Machine Works, Inc., infringes the Lawson Patent No. 1095406.

The same day a decision was handed down by the same court in the suit entitled, Columbia Machine & Stopper Corporation v. Ferd. Neumer, Inc., affirming the decision of Judge Hough, which held that the Adriance Duplex Crowning Machine, 805B, or more commonly known as the Spring Lift Construction, does not infringe the Lawson Patent. The situation in regard to the Adriance Duplex Crowning Machines is as follows:—

The Adriance Duplex Crowning Machines, 805 and 805A, infringe the Lawson Patent, and any one using these machines without the consent of the Columbia Machine & Stopper Corporation, the owner of the patent, is an infringer. The 805B Adriance Spring Lift Construction, not being an infringement of the Lawson Patent, may be used by any one who desires to do so.

We are sending this notice to the trade because we have always played fair with the users of Adriance Duplex Crowning Machines, who, we feel, were led into the purchase of these machines through misrepresentations concerning them. We have no desire to injure the brewer or bottler, owning these machines, in any way. We must, however, insist that our rights be observed. Users of the 805 and 805A Duplex Crowning Machines must cease using them, or must make arrangements through our Licensees, or through this company, for the continued use of them.

We have a proposition which we would like to submit to you, should you be interested, whereby you will not be obliged to change your machine to the Adriance Spring Lift Construction, known as the 805B machine, but whereby you may obtain a perpetual license to use your 805 or 805A duplex crowning machines. The proposition which we have to offer you is a fair and reasonable one **AND DOES NOT INVOLVE THE PURCHASE OF CAPS.** We hope you will avail yourselves of our offer and thereby secure for yourselves the right to use your crowning machines without further annoyance, without changing them to an inferior construction, and without subjecting yourselves to further patent litigation from other sources.

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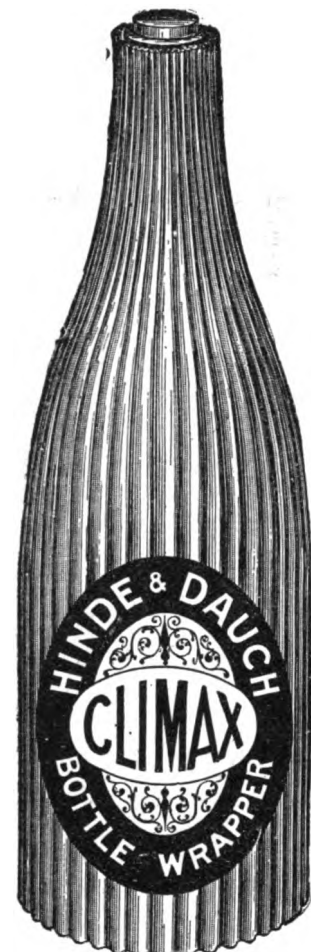
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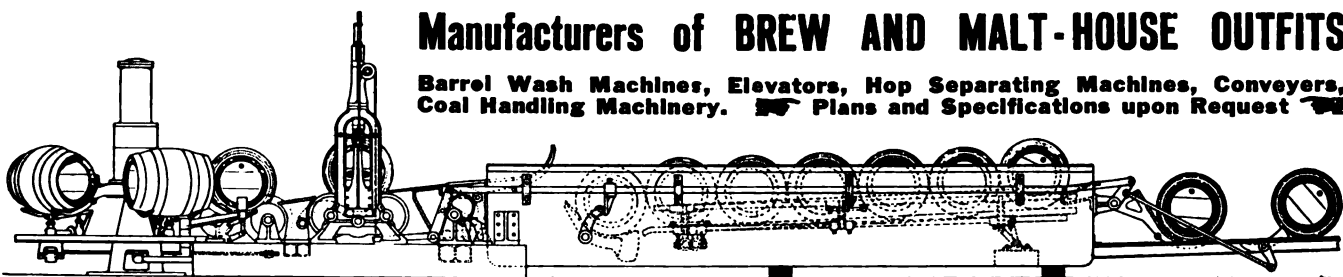


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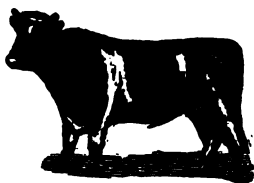
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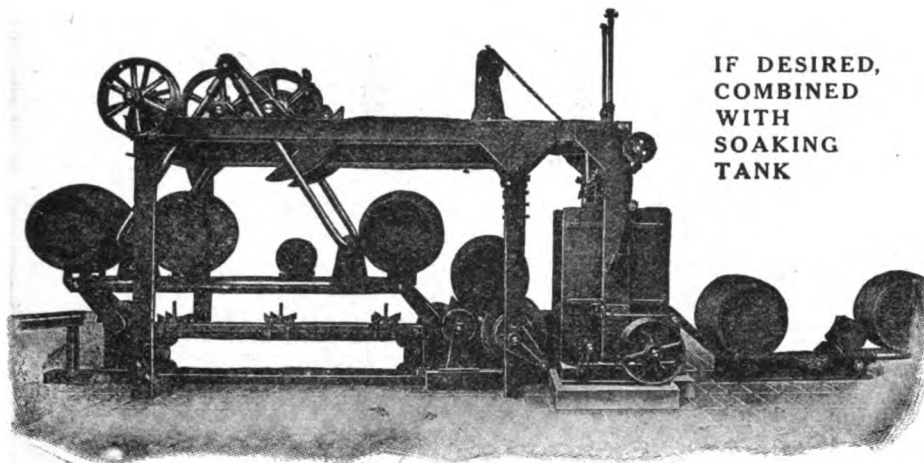
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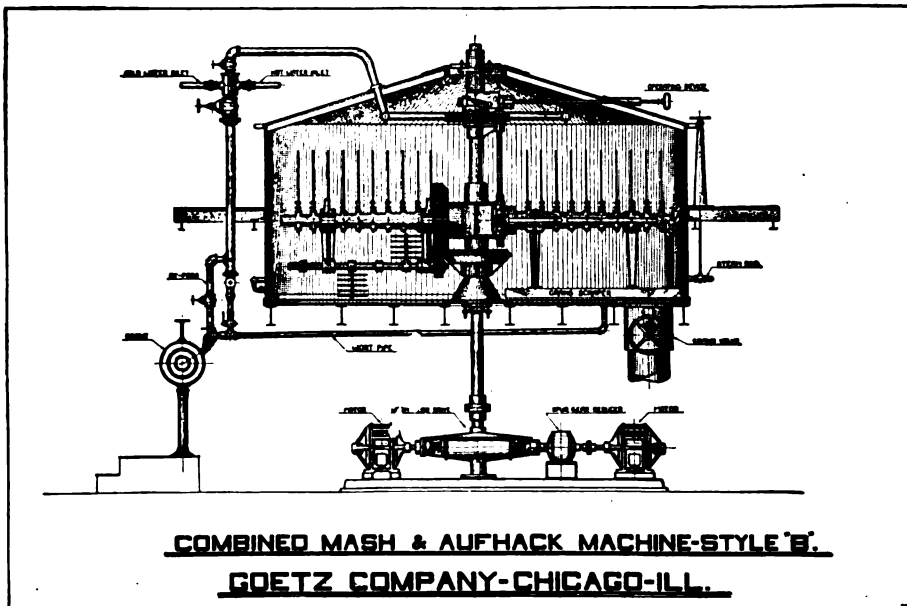
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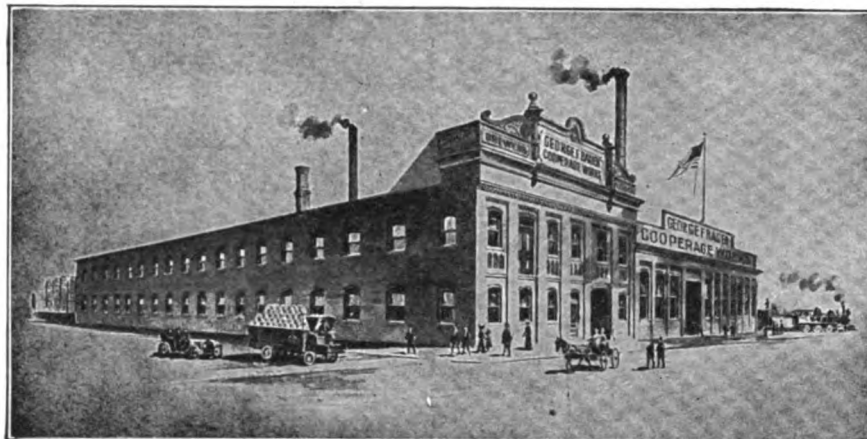
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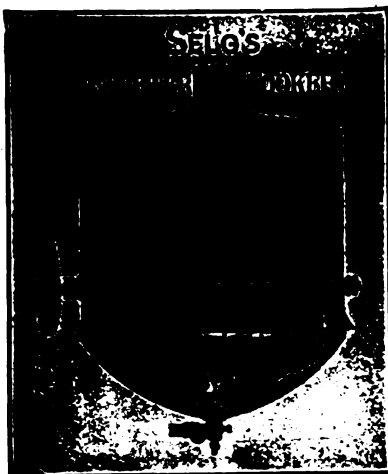
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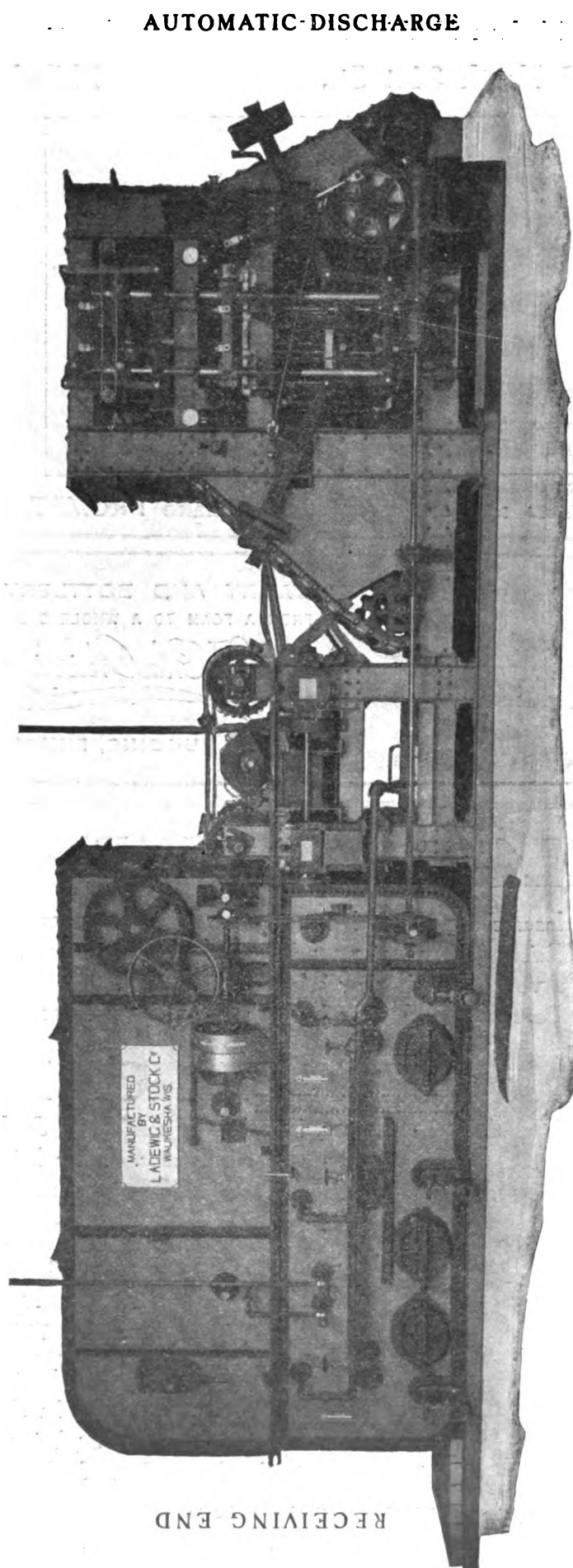
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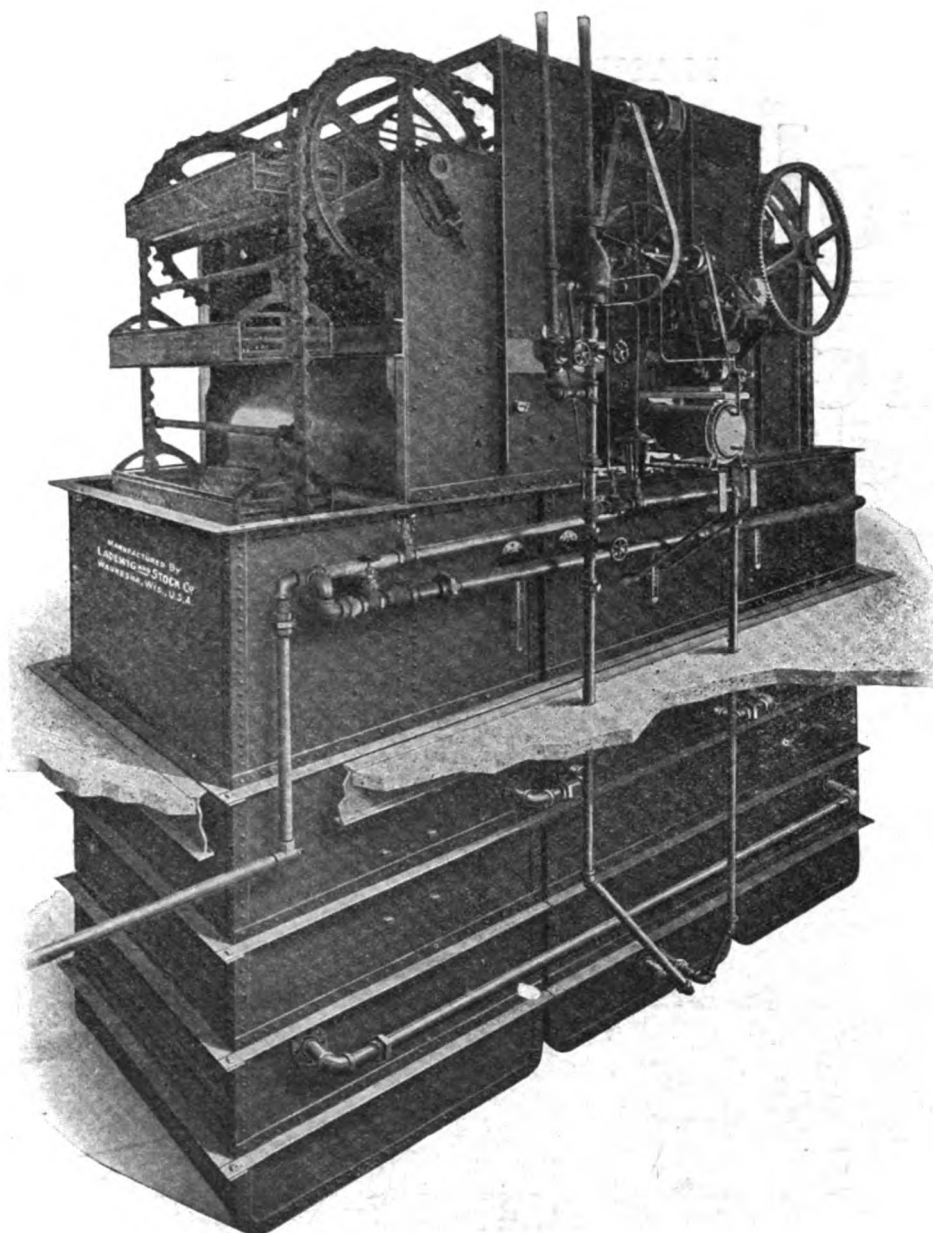
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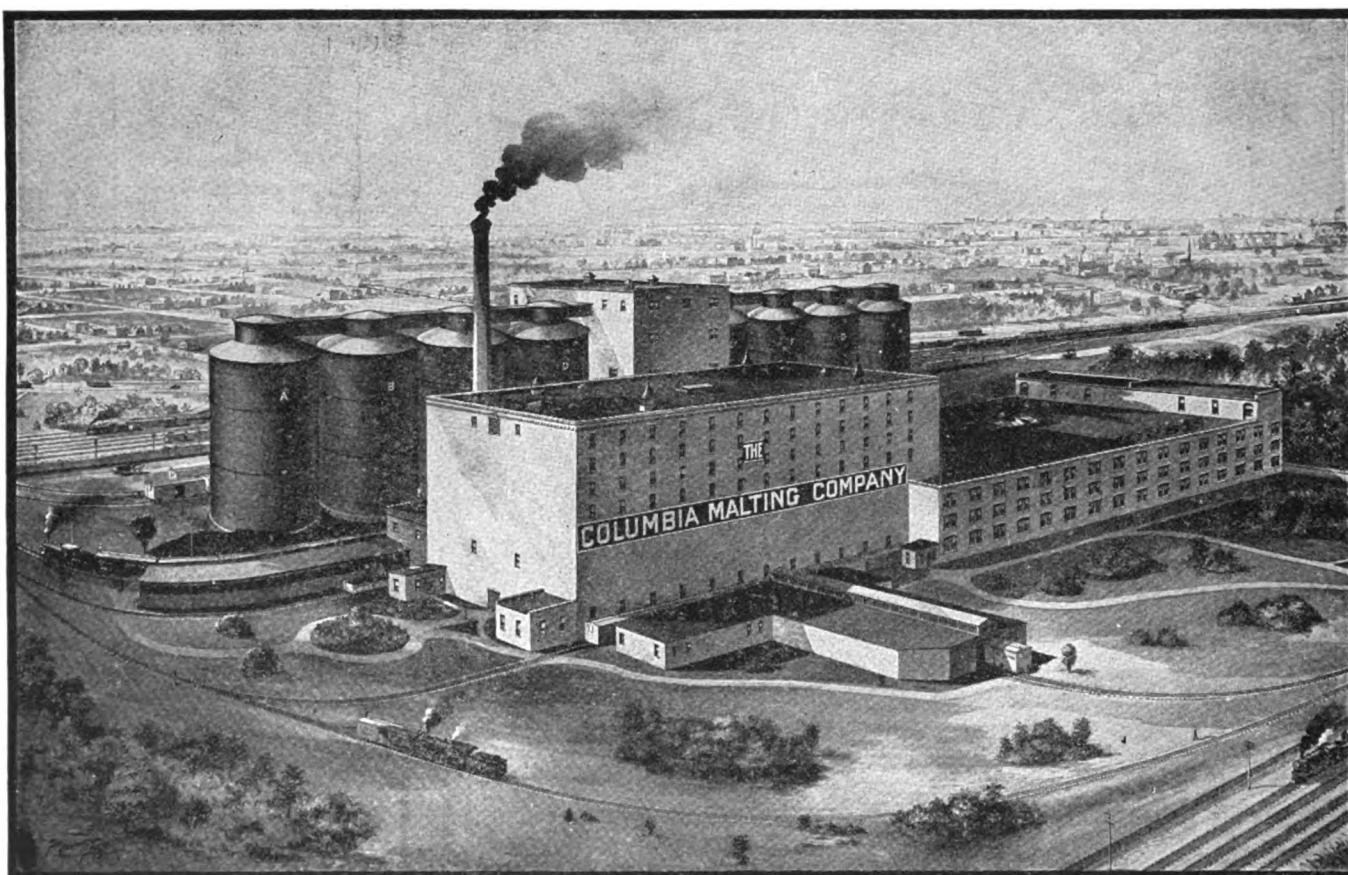
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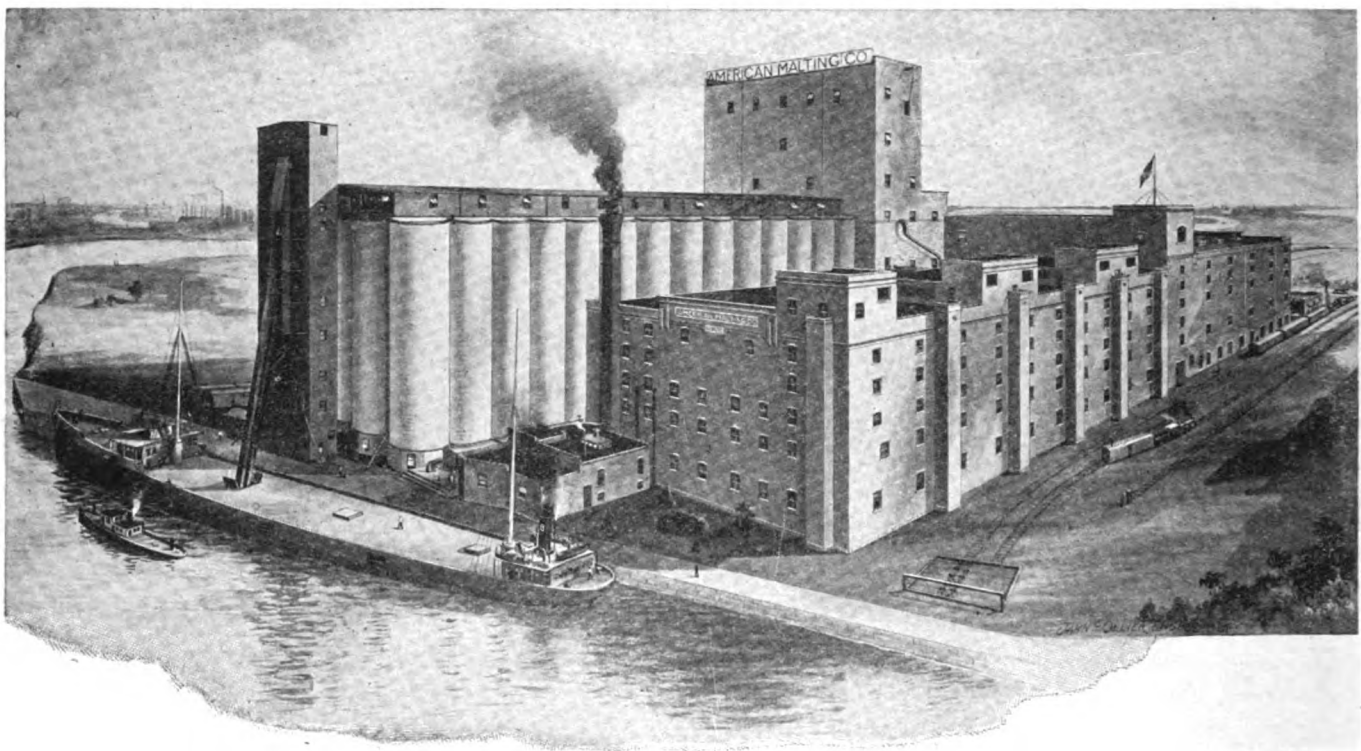
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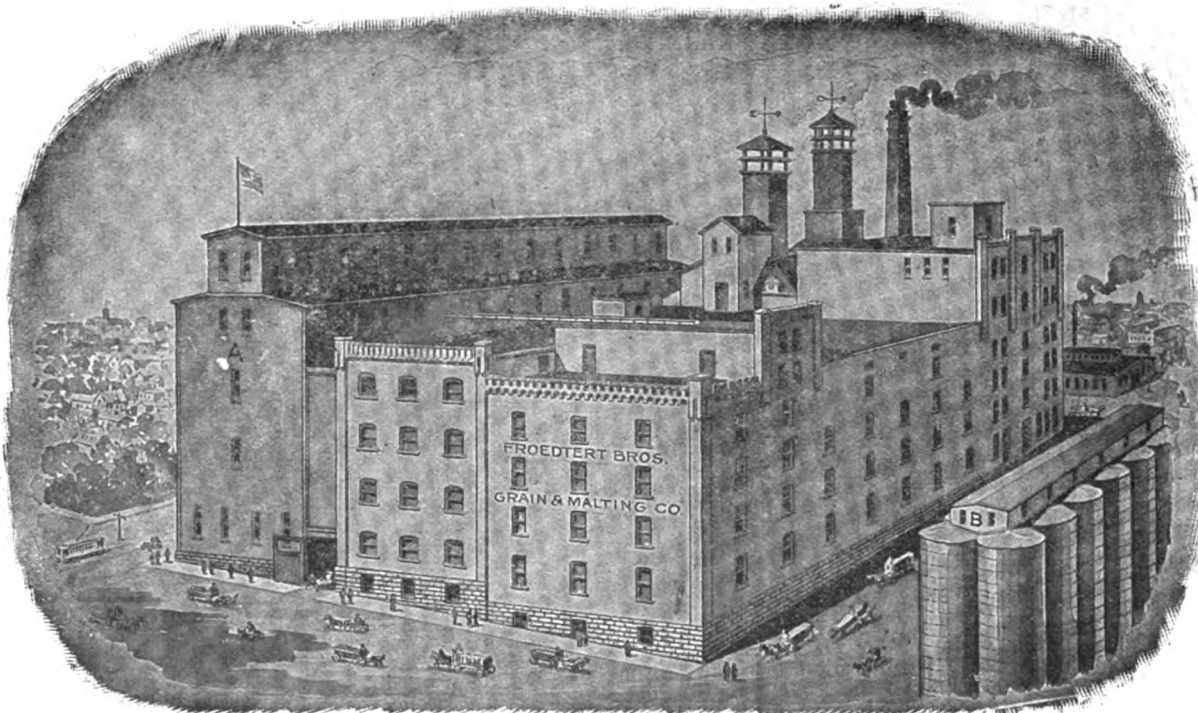
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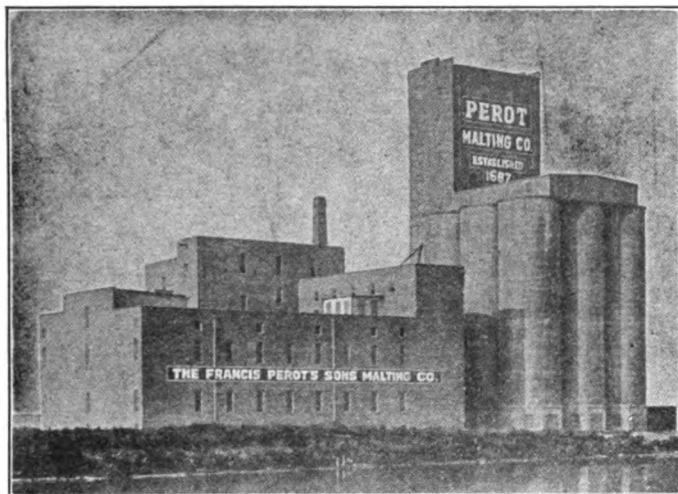
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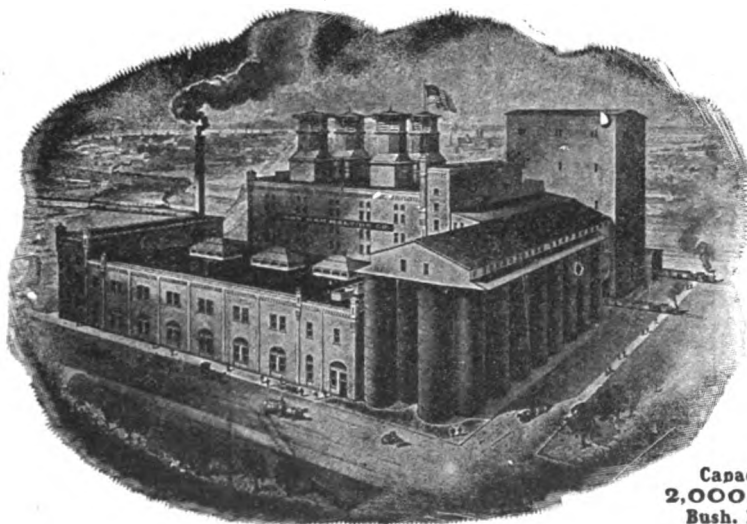
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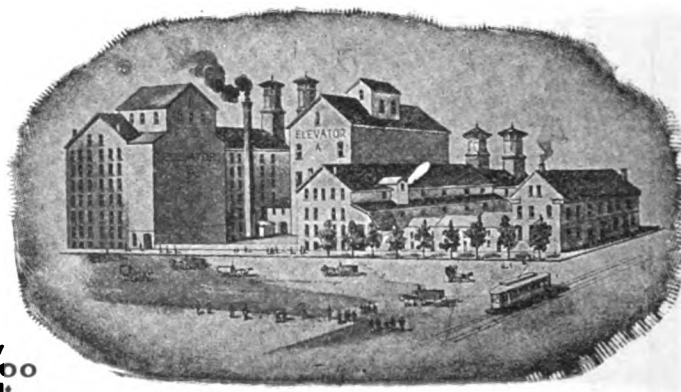
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Pitch Isinglass, Shellac Varnishes, Vent Bungs, Faucet Plugs, Chips, Shavings, Filtermass, Stamp Paste, Bisulphite Lime, Preserving Powders, Compressed Bi-Carbonate of Soda, Double Flange Bushes, Eureka Self-Closing Nozzles, Cyclone Filtermass Washer, etc.
Correspondence Solicited.

BREWERS' MATERIALS AND COOPERAGE

RECIPROCAL EXCHANGE

Established 1900

BRUCE DODSON, Manager

28th AND WYANDOTTE STREETS
KANSAS CITY, MO.

Brewers' Reciprocal Insurance FIRE and CASUALTY

Total Assets, January 1, 1917	- - -	\$1,153,241.86
Fire Losses Paid	- - -	1,267,333.23
Cash Savings returned to Policyholders	- - -	1,193,986.13

Reliable Insurance at half the usual cost.

Full information sent on request.

Ernst Zobel's Perfect-Opaque Brewers' Pitch

Is a Scientific Composition consisting of Waxes, Oils, and Rosin, that meets every requirement and positively eliminates all causes of Pitch trouble. We assure you it is the BEST Brewers' Pitch made To-day

Write for Sample and Price

Most of the Dealers carry it in Stock

ESTABLISHED
1881

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SECOND AVENUE AND TENTH STREET, SO. BROOKLYN, N. Y. Warehouse: San Francisco

JULIUS SCHWILL, } Vice-Pres'ts
CARL HEINZEN, }

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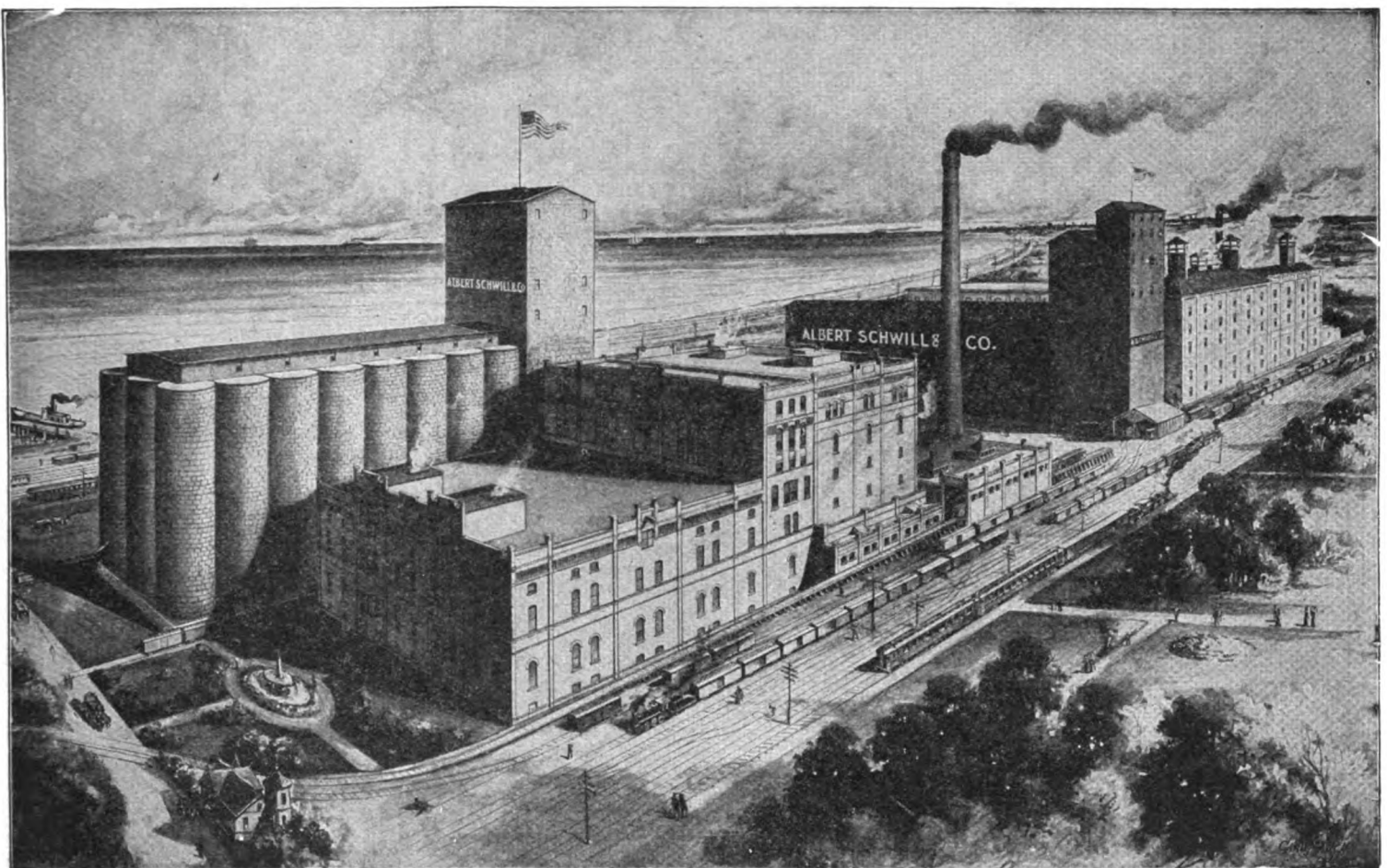
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ALBERT SCHWILL & COMPANY

THE LARGEST MANUFACTURERS OF

~ MALT ~

===== IN THE WORLD =====



Malt Houses and Elevators at Chicago, Ill.

OUR SPECIALTIES {
Chill-Proof Bottle Beer Malt
High-Power Diastatic Malt
Extra High Dried Aromatic Malt

Annual Capacity

6,000,000 Bushels



Storage Capacity

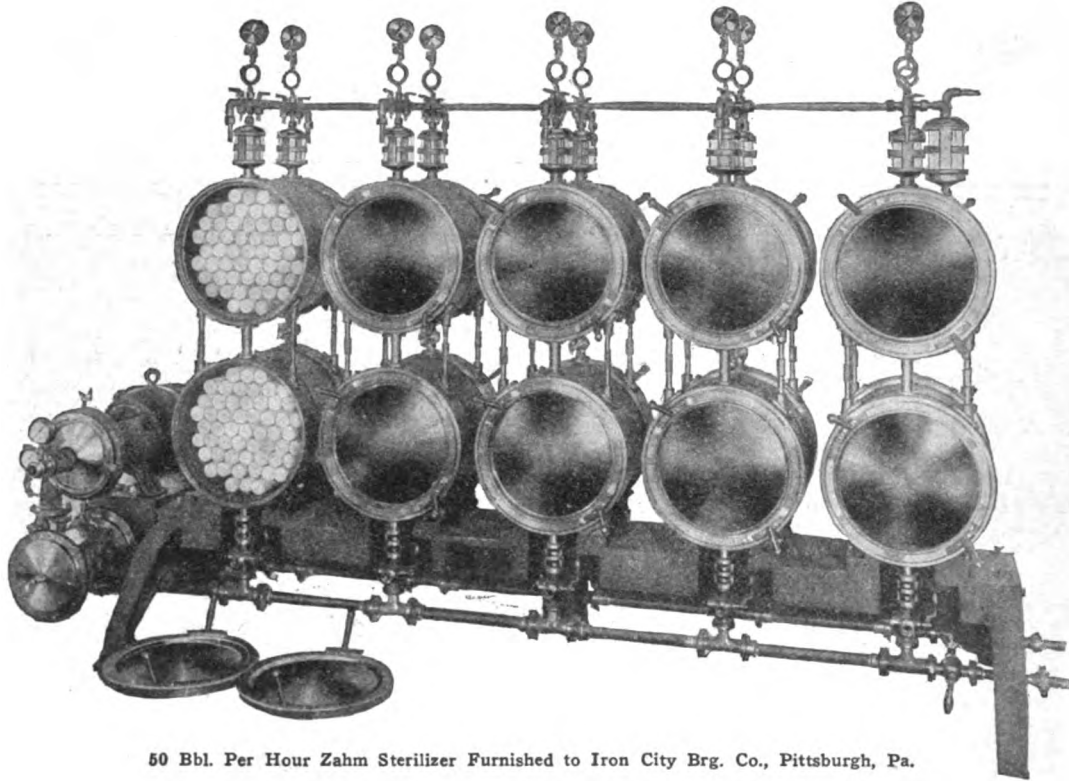
2,500,000 Bushels

GENERAL OFFICES:

TRADERS BUILDING, CHICAGO

We Produce Bottled Beers

which have THE DRAUGHT BEER taste with the
Stability of Pasteurization.



50 Bbl. Per Hour Zahm Sterilizer Furnished to Iron City Brg. Co., Pittsburgh, Pa.

In the construction of this unit we have reached a capacity which is suitable for the Sterilization of Draught Beers and for the Sterilization of Non-Alcoholic Beers to be marketed in the wood.

THE AMERICAN BEVERAGES COMPANY
73 BUFFALO STREET, CANANDAIGUA, N. Y.
Box 363

Both Phones

First Sterilized
Non-Alcoholic Beverage

ZAHM MANUFACTURING CO.,
74 E. Jewett Ave., Buffalo, N. Y.

May 16, 1917.

Gentlemen:—We have been using your Sterilizer for the last six months and same works to our entire satisfaction.

It is a great improvement over the old style of pasteurization as through pasteurizing the character and taste changes considerably; your methods do not interfere in the least, but in addition it gives the liquid the most brilliant appearance and makes the bottle goods stable for any length of time, regardless of climate.

We are using same in the manufacture of a non-alcoholic beverage and we consider your apparatus suitably adapted for such products.

We will be glad to communicate with anyone who desires full particulars.

Wishing you success, we remain,

Yours very truly,

AMERICAN BEVERAGES COMPANY.

(Signed) P. W. VAN DE WESTELAKEN, Supt.

The Zahm Sterilizing Apparatus is being operated or installed in the following breweries:

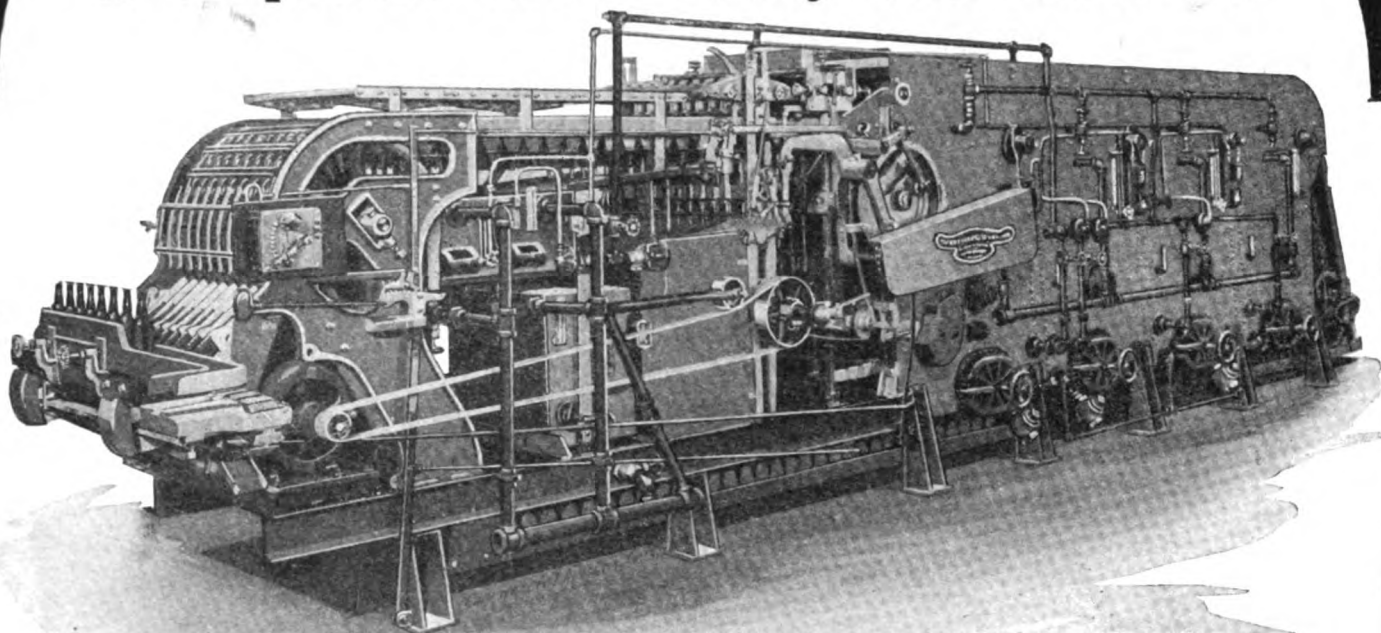
WAYNE BRG. CO.	Erie, Pa.
GERMAN AMERICAN BRG. CO.	Buffalo, N. Y., 2nd Outfit
FITGER BRG. CO.	Duluth, Minn.
A. SCHREIBER BRG. CO.	Buffalo, N. Y., 2nd Outfit
CATARACT BRG. CO.	Niagara Falls, N. Y.
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NIAGARA FALLS BRG. CO.	Niagara Falls, N. Y.
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PIEL BROS., INC.	Brooklyn, N. Y.
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PETER SCHOENHOFEN BRG. CO.	Chicago, Ill.
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Zahm Manufacturing Company

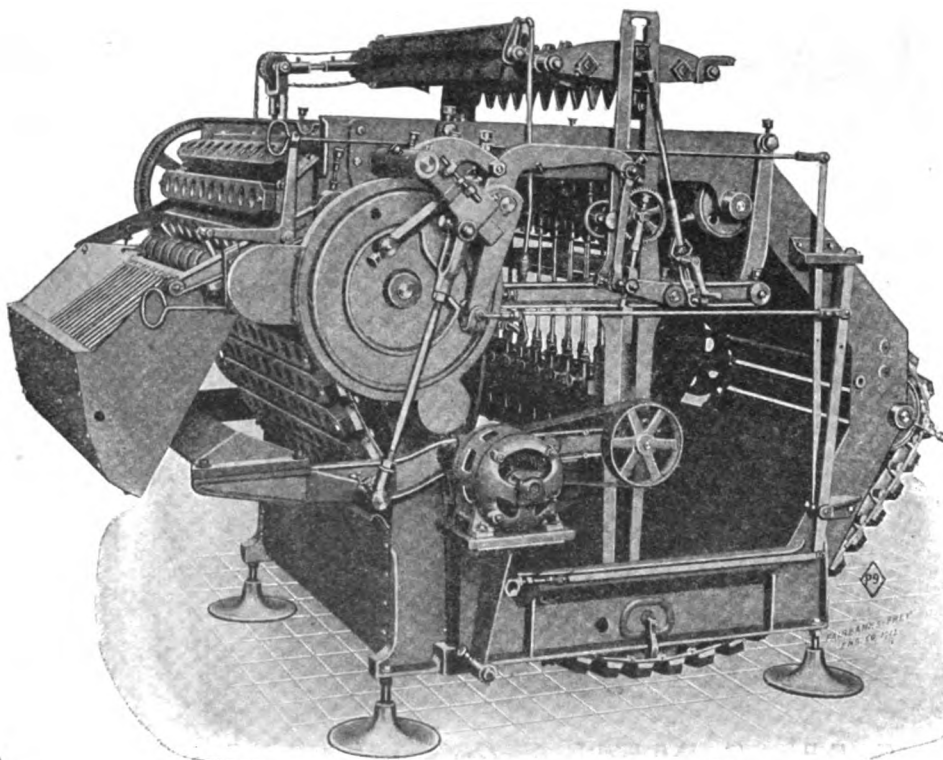
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QUALITY HOLDS LOYALTY

The aim of The 20th Century
is to please and satisfy the customer



THE NEW 20TH CENTURY BOTTLE SOAKER-WASHER-STERILIZER



The Progressive Bottle Washer is the only up-to-date high SPEED washer manufactured. No other has so many enthusiastic boosters. It is made to work automatically with any bottle soaker on the market.

Write for detailed description and list of satisfied users.

THE 20th CENTURY MACHINERY CO.

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USED THE WORLD OVER

For Cleansing, Disinfecting
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Kerkow Patent Hand-Hole Covers

FOR BEER CASES

Keep Out the Light,
Keep Out Bugs, Mice and Dirt,
Do Not Interfere with the Hand,
Easily Put on Your Cases,
Add but a Trifle to the Cost,
Are Permanent,
Keep Package Clean, Sanitary
and Attractive.



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DEXTRINE—SUGAR

"THE SUGAR THAT GIVES BODY TO YOUR BEVERAGE"

It keeps the alcohol down.
Holds lasting creamy foam.

Fermentation reduced to a minimum.
A great saver of materials.

Reduces Your Cost—Increases Your Beer Production
Invaluable for Near and Temperance Beers

SAMPLES AND PRICES ON REQUEST

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If your supply man cannot furnish it, write us and we will tell you who can.

N. H. HEYMAN

438 East 59th Street, New York

Brewers' Materials, Cooperage

AND

ANHYDROUS AMMONIA

SPECIALTIES:

Eagle Brand Isinglass

Perfection High-Test Pitch

Imported and Domestic Filtermass

Brewers' Hose

Bottle Covers

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Brewers' Varnish

Label Machine Gum

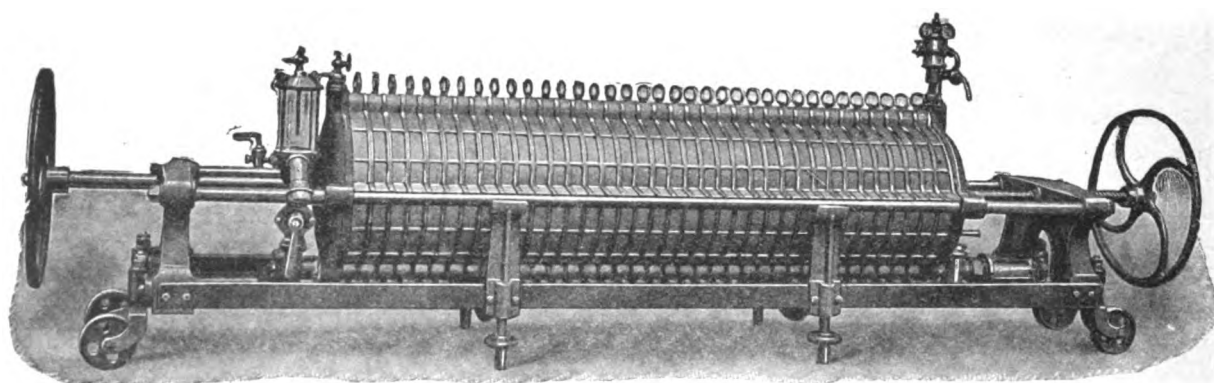
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COMMUNICATE WITH US WHEN IN NEED OF SUPPLIES



SOLE U. S. AGENTS

Union-Schalenfilter

"The Filter Without Sieves"

THE WITTEMANN SYSTEM

of Fermentation-Gas Carbonating

Savings Secured in
Time of Aging Beer—Time of Finishing Beer—Cold Storage Room—Cellarage—Cooperage
Equipment—Refrigeration—Investment

ENCLOSED DOUBLE-PIPE COOLERS

All Beer Tubes are Copper-lined or Solid Copper. Return Bends made of Bronze Metal.
Perfect Aeration and Air Filter. No Contamination or Discoloration of Beer Possible

BREWERY PUMPS

THE WITTEMANN and SCHNEIBLE PUMPS

No untrue statements are made about our Pumps. No guesswork on their rating.
We guarantee our work and back it up

RAPID HOP-STRAINERS

A brew, however large, can be strained as fast as it will be
brought to the Hop Strainer

INSTALLATION OF GOVERNMENT PIPE-LINES

THE WITTEMANN COMPANY

842 TO 852 ELK STREET

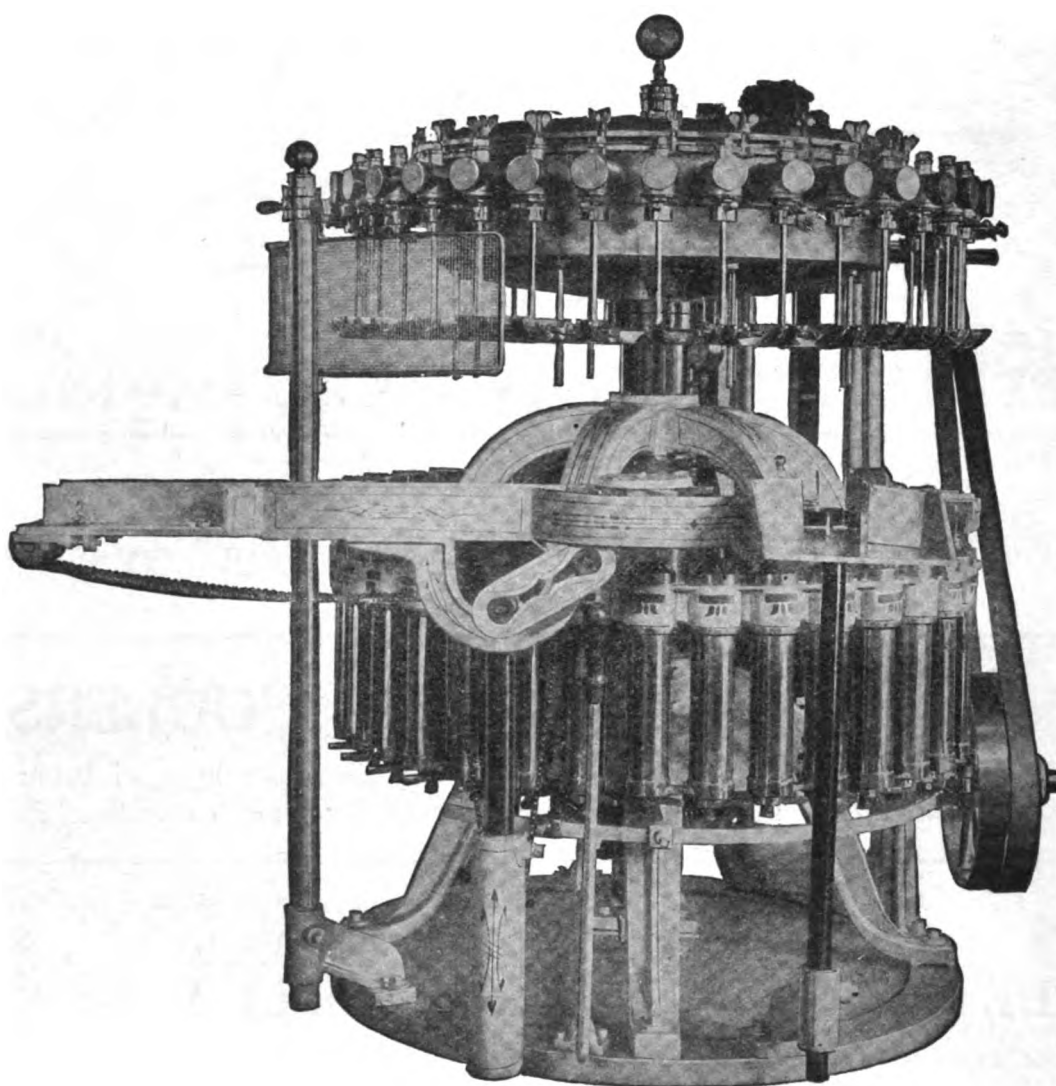
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Write for Catalogues or Request the call of our Agent



H. & K. Automatic Counter-Pressure Bottle Filler with H. & K. Automatic Bottle Feeding Device

¶ Our Automatic Filler with Bottle Feeding Device attached makes possible, with inexperienced help, the operating of filler to its full capacity of over ninety bottles per minute.

¶ The Henes & Keller Automatic Filler is not a high-pressure machine, but is an actual counter-pressure filler with which you can regulate the counter-pressure according to the character and temperature of the beer to be filled. Cold beer can be filled with about eight pounds pressure. Bottles can be filled absolutely foamless or, if you prefer, with foam filling necks of same.

¶ Broken, badly chipped or cracked bottles can not be filled, but will pass around on the machine and be discharged without waste of beer or effecting the filling of other bottles on the filler.

¶ Fillers manufactured in sizes of 18, 24 and 34 spouts, giving capacities respectively of 50, 70 and 100 pints per minute.

HENES & KELLER CO., Menominee, Mich.

THE HENES AND KELLER IMPROVED AND REVOLVING = COUNTER-PRESSURE = BOTTLE FILLING MACHINES

The BREWERS' and BOTTLERS' best and most reliable Standby

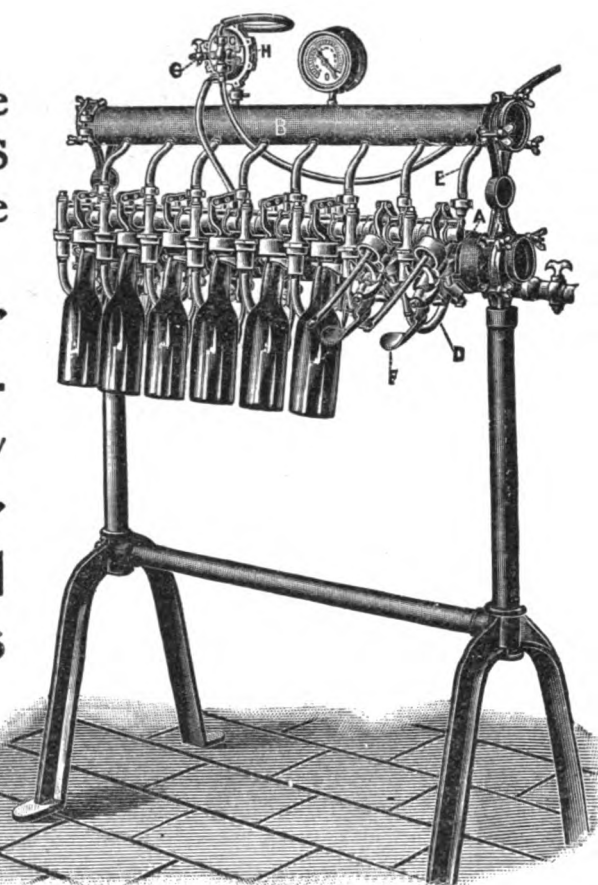
Are known the World over as the ORIGINAL STANDARD MACHINES which never have as yet failed to give Perfect Satisfaction.



The Number of our Machines now in use far exceeds all other Makes Combined.

The Sizes of Machines are made to conform to the Requirements of all

Bottlers, whether large or small, with Prices accordingly. By Improved Quality of Bottled Beer eliminating Waste, the Machines will pay for themselves in a short time.



Send for Catalogue and Further Information

HENES & KELLER CO.

MENOMINEE, MICH., U. S. A.

Crown Cork Service Unexcelled

"We do not believe Your Service can be excelled", writes one of our many customers.

The best interests of your customers are insured by ordering your Crowns and Crowning Machinery from the House in whom you can have "confidence" and upon whom you can "depend during these abnormal days.

It likewise means "satisfaction" and "protection" for you.

Our Baltimore Works, assisted by our local representatives and Twenty-four Branches, are ever ready to serve You.

Write, wire or telephone.

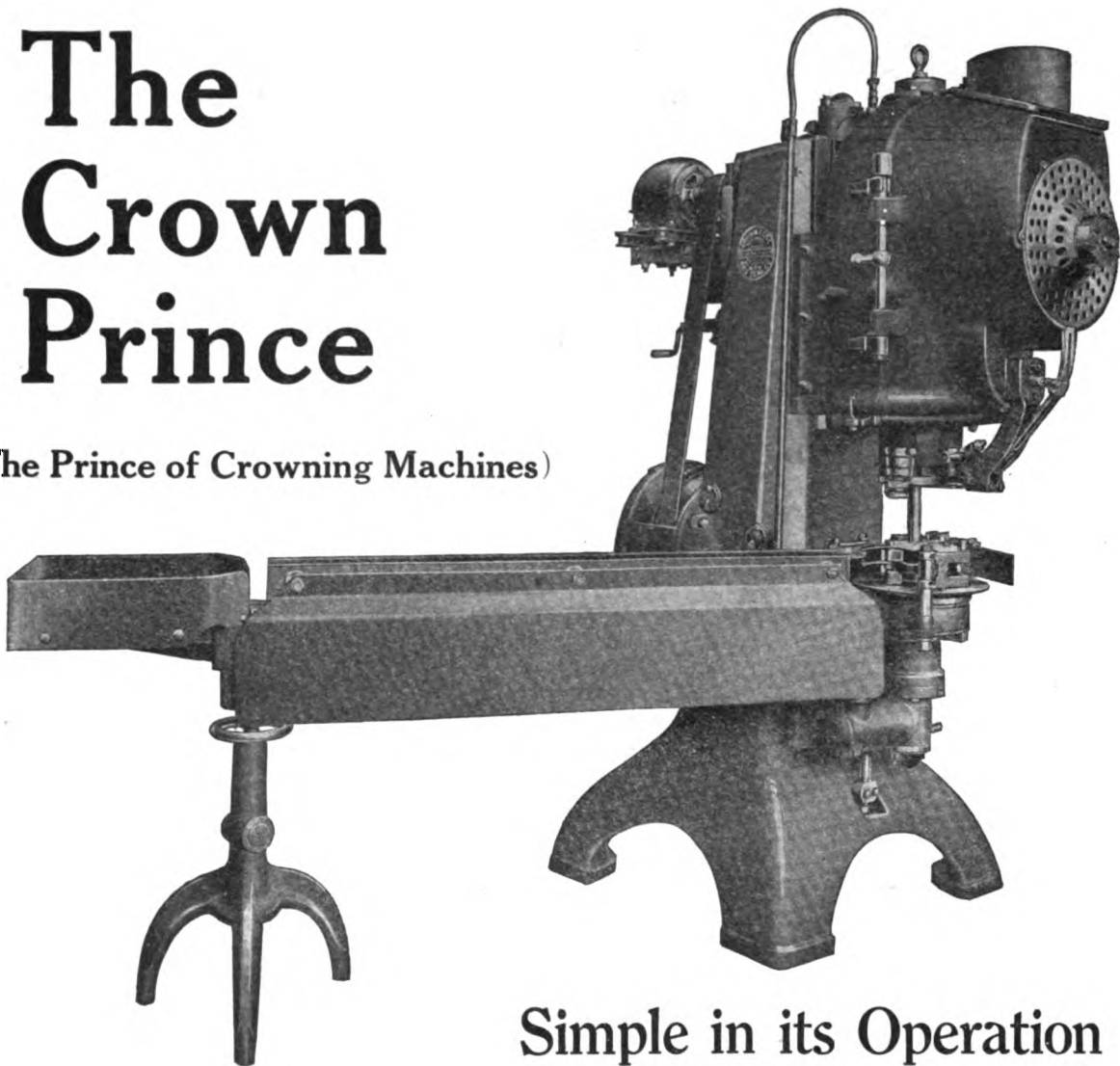


The Crown
Cork and Seal Company
Baltimore, U. S. A.



The Crown Prince

(The Prince of Crowning Machines)



PATENTS PENDING

Simple in its Operation

Wearing parts of high-grade alloy steel
and phosphor bronze throughout.

Sold without restrictions

Shipping reservations will be made in sequence of receipt of orders



The Crown
Cork and Seal Company
Baltimore, U. S. A.





Impress Your Drink on the Buyer's Mind

Every idea brings with it an association of thoughts. Upon these thoughts depend our actions.

For instance, you want some tobacco. With the idea of buying it comes the thought of "what kind." Pictures you've seen or Ads you've read make the suggestion and you do not merely *buy a package of tobacco* but you ask for *a certain brand*.

And so with bottled beverages.

A man doesn't ask merely for a drink. Through an association of thoughts he orders "Smith's Beer," "Jones' Ale" or "Brown's Soda."

Why not impress the name of your product upon the buyer's mind by sealing your bottle with a Private Decorated Crown in two or more colors, carrying your Name or Trade Mark?

Our Art Department, without charge, will develop your rough sketch or idea into a colored decoration of *real advertising and selling value*.

Now's the time of the year to take the matter up with us.

Get in touch with our local representative, nearest Branch or Baltimore.

The Crown Cork and Seal Company
Baltimore, U. S. A.

ARROW ROTARY BOTTLE FILLER

Full automatic.

True counter-pressure.

Mechanically perfect.

Simple and strong.

Large capacity.

Fills quietly, evenly and without foam.

Sanitary—may be quickly sterilized.

No delicate mechanism or adjustments.

No rubber diaphragms or gaskets.

No filler tubes enter bottle.

No loss of gas in the beer.

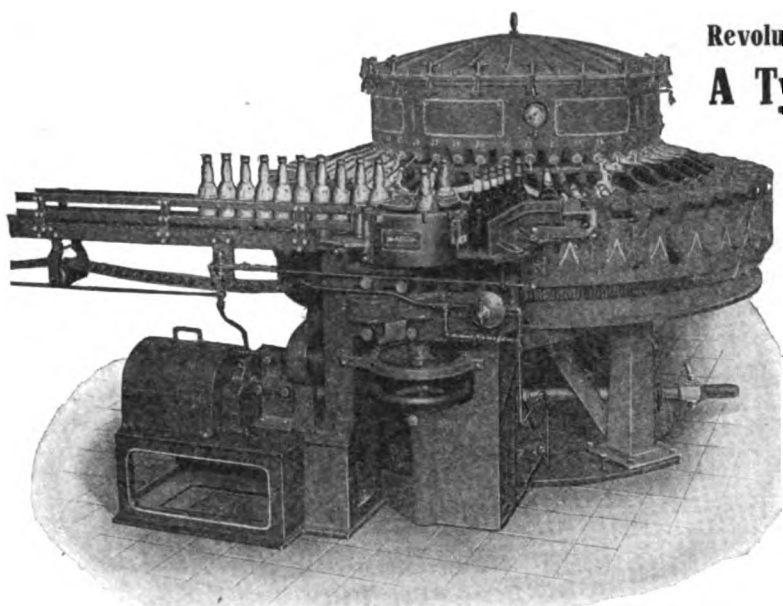
No air lifts to maintain.

No filler tubes to break.

Will not fill broken or chip-necked bottle.

Revolutionary in design, quality and efficiency.

A Typical "ARROW" Product



No experiment, but like all other "ARROW" products, thoroughly tested out during the past year under the most difficult conditions in a bottle shop and now offered to the trade for the first time.

Bottles are fed into the machine through a chain conveyor and star wheel and are gently brought to a reclining position on the bottle-holder, which is equipped with positive centering device. It is raised by means of a cam to the sealing rubber, locked, and filled in a reclining position, the filler tubes coming to the mouth of the bottle only, and the liquid flowing gently

down the edge of the bottle. After being filled, the bottle is released by means of a second cam, is raised to a vertical position and discharged direct to the crowner. The operation is simple and positive throughout.

All parts coming in contact with liquid may be quickly sterilized by filling tank with hot water or solution without the slightest injury to any part of machine.

Send for illustrated pamphlet and information as to where it may be seen in operation.

ARROW BOTTLERS MACHINERY COMPANY 17 N. La Salle Street
CHICAGO, ILL.

THE ARROW INVERTED or TYPE "C" ROTARY BOTTLE WASHER is without doubt the most perfect bottle washer that has ever been offered to the bottling trade, considered either from a mechanical standpoint or from the standpoint of results obtained by the use of same.

MECHANICAL FEATURES:

All parts continuous in motion.

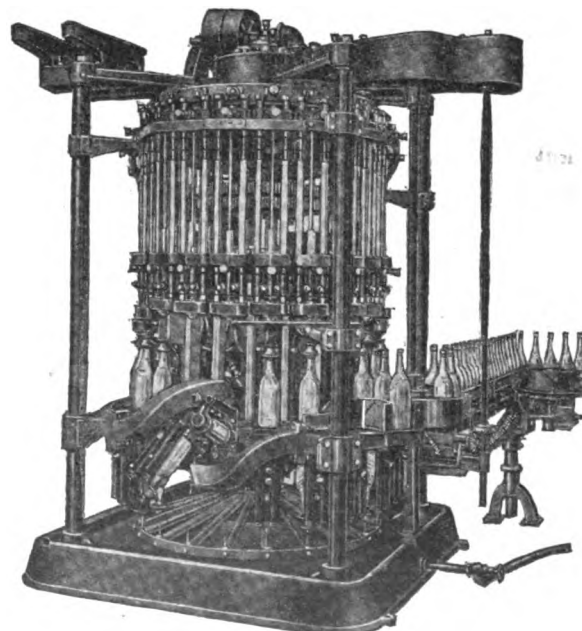
Automatic feed and discharge.

Safety devices protecting entire machine.

Capacity up to 120 bottles per minute.

Will use either bristle or rubber brushes.

No gears or other wearing parts in contact with water.



The above view shows the turn-over cams; also the feed conveyor, star feed and discharge chute.

BOOKS ON BREWING, MALTING, ETC.

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- Practical Points for Practical Brewers.** Edited by DR. FRANCIS WYATT and EMIL SCHLICHTING. Published by THE NATIONAL BREWERS' ACADEMY, New York. \$1.50.
- The Principles and Practice of Brewing.** By WALTER J. SYKES, London. Third Edition. \$6.50.
- Handy-Book for Brewers.** By HERBERT E. WRIGHT, London. Third Edition. \$5.00.
- Systematic Handbook of Practical Brewing.** By E. R. SOUTHEY, London. \$8.40.
- The Brewer's Vade Mecum.** By W. H. BLAKE, London. \$4.00.
- Brewing and Malting Practically Considered.** By FRANK THATCHER, London. \$8.50.
- Practical Guide to Malting.** By O. F. RUSSELL, London. \$1.25.
- Manual of Brewing.** By E. G. HOOPER, London. \$3.25.
- Laboratory Studies for Brewing Students.** By ADRIAN J. BROWN, London. \$2.50.
- Micro-Organisms and Fermentation.** By ALFRED JÖRGENSEN, London. Fourth Edition. \$4.50.
- Fermentation Organisms.** By ALBERT KLÖCKER, London. \$4.50.
- Manual of Alcoholic Fermentation.** By CHARLES G. MATTHEWS, London. \$2.75.
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- Analysts' Laboratory Companion.** By A. E. JOHNSON, London. \$3.00.
- The Brewers' Analyst.** By R. DOUGLAS BAILEY, London. \$5.00.
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THE BREWERS' JOURNAL,

1 Hudson Street, New York.

These full-size reproductions of positive (right) and negative (left) plates of an Edison Battery show active materials secured in steel tubes and pockets. This construction means long life and economy of maintenance and operation cost.

The **EDISON** is the **ONLY** Storage Battery **BUILT of STEEL**

It stands up under the heaviest Brewery truck service and makes possible a strict adherence to delivery schedules.

The Electric Truck is an economical, dividend-paying servant for short hauls and frequent stops,—but the greatest economy can come only from the most efficient, reliable battery.

The Edison Battery is constructed throughout of steel. The active materials are nickel and iron securely held in steel tubes and pockets. A non-acid solution is used. The Edison is free from breakage, buckling or growing of plates, corrosion, sulphation, deterioration, shedding of active materials. No plate renewals and practically no repairs, mean fewer idle days—greatest yearly service, lowest cost of maintenance.

Edison batteries are not injured by over-charging, or over discharging; can stand idle indefinitely either charged or discharged, without attention and without injury; can be charged whenever convenient regardless of amount of previous charge still contained; do not require frequent "health" charges to keep plates in good condition.

Edison batteries excel in Brewery service. The drivers you now have could give them all the care required,—occasionally refilling with a little distilled water and a renewal of solution in about nine or ten months. There is nothing complicated about them.

There is no other battery like the Edison.

WRITE FOR BULLETIN 500

Edison Storage Battery Company

Factory and Main Office: Orange, New Jersey

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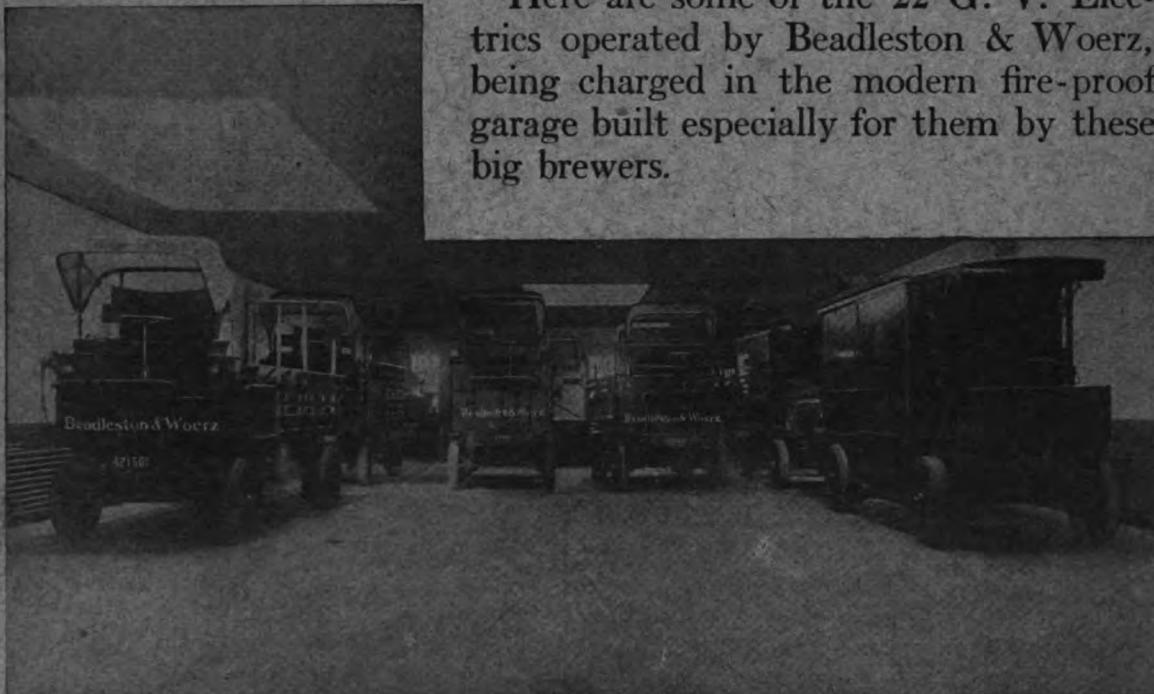
DETROIT
NEW ORLEANS



The Simplicity and Cleanliness of the
G. V. Electric Truck
Brightens the Garage

ABSOLUTE cleanliness is essential in the manufacture of good beer. Trucks which are easily kept clean are a necessity to the brewer since they save labor and other garage expense.

Here are some of the 22 G. V. Electrics operated by Beadleston & Woerz, being charged in the modern fire-proof garage built especially for them by these big brewers.



Beadleston & Woerz began buying G. V. Electrics in 1904 and the G. V. fleet has kept pace with their constantly growing business.

Look at the floor of this garage. The absence of oil, grease, and the litter of tools and repairing machinery is a revelation to one accustomed to the less clean and healthful gas truck garage. Or contrast it with the usual stable and wagon yard.

Horse drivers prefer the Electric because it lessens their labor and gets

them home at a given time each day.

From the standpoint of care, repair parts, fuel, and general operating expense, there is no comparison between the G. V. Electric and either gas trucks or horses. Brewers, recognizing their efficiency, have purchased over 1000 of these simple and always dependable G. V. delivery units.

Send for G. V. Catalog 74

GENERAL VEHICLE COMPANY, Inc.

General Office and Factory: Long Island City, N. Y.



New York

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Philadelphia



Six Models: 1,000 to 10,000 pounds

Dealers in unoccupied territory are invited to correspond

1771

UNIVERSITY OF CHICAGO

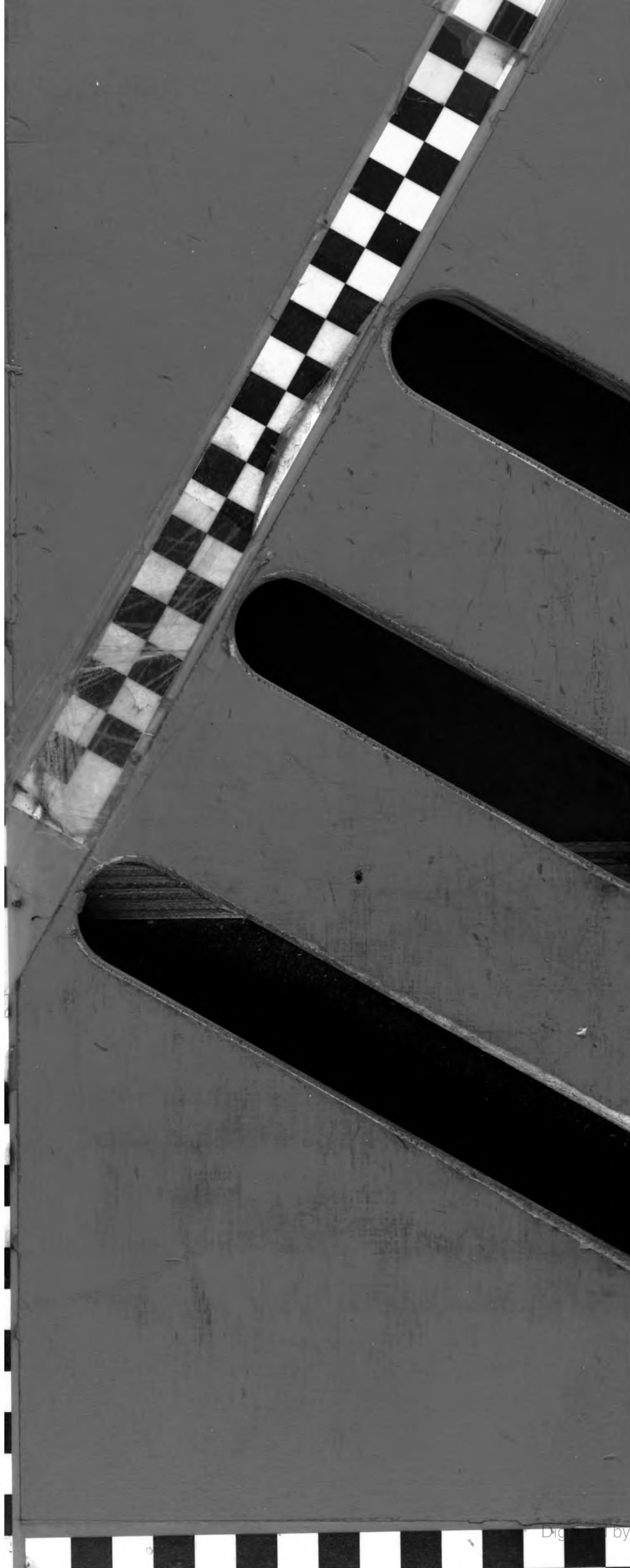


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