LAGER BEER:

A TRIP THROUGH THE BREWERIES OF WILLIAMSBURGH - HOW THE TEUTONIC BEVERAGE IS MANUFACTURED - A MILLION KEGS OF BEER - THE SUBTERRANEAN REGIONS OF KING GAMBRINUS

Any one who has not been through the lager beer breweries in Williamsburgh, and especially if he is fond of the beverage, has missed both a treat and a sight worth seeing. There are in Brooklyn from thirty to forty breweries, but the most of them are small affairs and do not turn out beer either at regular periods or in large quantities. There are a few to which are attached beer gardens where the lovers of the drink can sit and get it fresh from the tap at their pleasure; the Bedford Brewery, for instance, at the corner of Dean street and Franklin avenue, is one al this kind, and commands a large local retail trade. "Bedford beer" has a very good reputation too, and if any one knows this, certainly the Germans who frequent this brewery ought to. The principal breweries are situated in Williamsburgh, and the following comprises a list of the largest and mast noted: Seitz Sons, Manjer street and Bushwick avenue; Henry A. Urbans, corner Bushwick avenue and Scholes street; Otto Hubers, in Bushwick avenue; Leibmann & Sons, in Bremen street; Obermeir & Lelbmann, opposite Leibmann & Sons, in Bremen street; Vejellins & Ullmers, at the end of Myrtle avenue; Alderman Kelfer's, No. 136 to No. 142 Scholes street; and Markgraf's, corner of Graham avenue and Messerole street.

There are a number of others, but they are comparatively small affairs and do not compare with the ones above mentioned. The largest brewery that Williamsburgh boosted of was the Kings County Brewery, but this is no longer in existence. It was an immense establishment and used to turn out 1,800 barrels of lager a week, and the barrels, it must be remembered, are not the kegs which are sent out, a keg is merely one quarter of a

barrel, but the beer is always sent out to customers in quarter packages, so by this it will be seen that the Kings County Brewery, when in full operation, turned out in the busy season

SEVEN THOUSAND TWO HUNDRED KEGS OF BEER PER WEEK,

and could, if pressed, have sent out 8,000. This establishment had two large horizontal engines and seven steam pumps for forcing beer to vats, coolers, barrels, &c.

Alderman Keifer's brewery, already spoken of, gives employment to about twenty-five men, turns out in the busy season from 600 to 700 barrels per week (2,800 kegs) and uses two steam kettles (of which more soon) of a capacity of 125 and 135 barrels respectively.

It is a particular business this brewing of beer, and each brewer vies with the others in placing before the public a glass of lager which will stand the criticism of those consumers who may be said to be experts. It is a noticeable fact, too, that while all the beer is made essentially in the same way and from the same articles, yet there is a difference in the strength, taste and quality of each which a regular lager drinker can immediately detect. The writer has known one or two Germans who could take a glass of beer blindfolded (the drinker, not the beer,) and tell from one swallow at which of the many breweries it had bean manufactured. One man in particular, a burly, good natured German, who prided himself on his accuracy in this particular, was not mistaken when, on one occasion, he was given a foaming

"stein" into which several kinds of lager had been poured, and when, after quaffing it slowly and with apparent deliberation, he said, "That was a brewery I had not known yet."

It is a great business this manufacturing of lager, and one that in this city gives employment to hundreds of men. The most at the employes who do mere manuel work about a brewery receive but comparatively small wages, but there are others such as the brewer, the foreman, superintendents, &c., who receive for their labor a very fair compensation. Some of the brewers, that is the men who do the actual brewing, get as much as \$60 per week, and in one or two cases have been brought out from Germany for this express purpose. It would be almost an impossibility to give an estimate of the quantity of lager made and consumed in Williamsburgh alone daring the year, the money value of the beverage would reach to such an enormous amount that it would hardly be credited.

A MILLION KEGS OF BEER

would not supply the German of the Eastern District for one year.

Possibly the largest breweries now in running order in the 'Burgh are Leibmann & Sons and Obermier & Leibmann's, both of which are situated in Bremen street. To give the reader of this article a good idea of how the beer is made the reporter went through one of the breweries which was the largest at present in operation, and from roof to cellar has tried to detail intelligently the process of cooking and brewing, of fermenting, cooling, freezing, clearing stocking, testing, barreling and all the incidental matters which are connected with the ultimate perfection of this well known drink.

Now for

A TRIP THROUGH A BREWERY

to see how the beer is made. The reporter went through it from top to bottom, this was Henry Urban's Boulevard Brewery, corner of Messerole street and Bushwick avenue, and the foremen Charles Keller, accompanied the scribe on his travels. Charley is a very intelligent German and a valued man around Mr.

Urban's premises. The Boulevard Brewery consists of three large brick buildings, the first of these, where the beer is made, is a four story building neatly ornamented with stone facing. On the ground floor is the engine and boiler rooms, two or three steam pumps and other machinery for washing out kegs, etc. Ascending to a brick platform by means of a step ladder, the kettles are reached. Those kettles are enormous copper vats, one of them which is heated by fire, contains 140 barrels (not quarter kegs) and the other, which is heated by steam holds 50 barrels. After the malt has been mashed it is put in these kettles, the water being heated to a certain temperature and the hops are added to it, and here it remains for a certain time and at a regular uniform temperature, until the beer is brewed and ready to go to the cooling room. Accompanying Charley, the reporter went up to the fourth story, where the tin coolers are placed. The entire surface of this story is elevated to two enormous tin coolers and the beer is pumped up from the kettles below and run into these coolers. They are very wide and shallow, and not being more than six or seven inches in depth, but the surface of each is so large that the one will hold 160 barrels and the other about 60. After the beer has staid here until the brewer thinks it sufficiently cool, it is next sent down to

THE COPPER COOLERS,

which are situated on the second floor. Passing from the top to the third floor, the malt room is reached. Here are stored thousands of bushels of malt, and in one corner are the hoppers, which conduct the grain to the mill on the floor below. Down stairs again and the second floor is reached, and here are the malt mills, the hop room and the copper coolers before spoken of. The malt mill is merely a stationary piece of machinery in which the malt is crushed and ground. The hop room is partitioned off from the malt mills, and contains tremendous bales of hops of the very best quality. Still another partition and here are the two patent copper coolers. Each cooler stands about six feet in height, and consists of a series of copper pipes, running horizontally over each other until they attain the height mentioned. Ice water is forced into the lower coil of these pipes and it passes gradually up to the top one, from which it escapes through a waste pipe. The beer running down from the tin coolers above falls on the copper cooler and passes down on the outside of these pipes and thence to a sort of trench, and out of this it escapes by a pipe to the fermenting room. Thus the ice cold water running in at the lowest length of the pipe of the cooler first, becomes warmer as it ascends to the top, and so the beer, when it strikes the upper pipes, is not immediately chilled, but grows almost ice cold gradually as it trickles from the top to the bottom of the cooler. The tin cooler on the top floor cools the beer until it averages about forty or fifty degrees above zero. After passing over the copper coolers the temperature averages perhaps from ten to twenty degrees above zero.

From this second floor the reporter passed down to the first floor already spoken of, and through that to a trap door. This was raised; the reporter and the foreman provided themselves with lighted wax candles, and descended down a steep flight of stone steps and under an archway through which the cold air rushed, almost freezing the reporter on the spot. It must be remembered that on the floor above was the furnace, boiler, engines, steam pumps, etc., and it was comparatively hot there, while now, and in the space of two minutes, he had descended to the cellars where the temperature was exactly at five degrees above zero, and where his breath was condensed as quick as it left the nostrils and mouth, and disappeared in the shape of a miniature cloud in the darkness, beyond the glimmer of the candles. Traversing over a well bricked but damp floor, Charley led the way to that part of the immense vault where the fermenting tubes were. There were probably two dozen of these altogether, and of a capacity of from 400 to 500 kegs of beer each! The foremen placed a ladder against one of them, the reporter ascended, and saw the beer in a state of fermentation. The surface was covered with a dense white froth, so that the beer itself was not distinguishable. The lager remains in this state from ten to twelve days, and the strictest watch is kept on the thermometers so that a temperature of five degrees above zero may be constantly maintained. This is effected by having large cakes of ice placed around the door, and as they dissolve they are replaced by other pieces. Thousands of tons of ice are used in this brewery alone in a single month, and the item in the expense account for this article is therefore by no means insignificant. After fermentation the lager is forced by a steam pump through rubber pipes to the ice house, a distance of about 800 feet. Here it is placed in large casks, which are duly marked and bunged, and then the beer lays there until it is old enough to put in kegs and sent out to customers. The next place visited, therefore, was

THE ICE HOUSE,

and such an ice house! An entire brick building in itself, and where 800 tons of ice are regularly stored. Entering this building to the wash house, where returned empty kegs are washed and thoroughly cleaned and if necessary tarred and pitched; then comes the temporary ice house, where the kegs after being filled are kept until such time an they are sent away. Then there is the filling room, where a steam pump draws the lager from the capacious casks in the ice house vaults and forces it into the kegs, which are then bunged and corked and packed away methodically in the temporary ice house.

And now Charley called for a couple more of wax candles, and looking at the reporter's alpaca coat suggests that he had better furnish him with a heavier one as the place to be visited would be rather cold.

"Where are you going now?" asked the scribe.

"In the vaults," he replied, "we have vaults here, and then there are those you just came out of, and then in that other building over yonder (pointing to it) are more yet, but these vaults are the largest, and we have the most beer stored in them, so you had better come down here."

The two wax candles having been brought, the scribe followed Charley to a large wooden door which swung heavily back on its hinges, and was about five or six inches thick and iron bound. Entering this it was instantly closed, and the reporter found himself standing in what was apparently a little room about five feet square, but Charley went ahead and pushed open another door equally large and heavy as the first one, and it seemed as though a blast from the Arctic Ocean rushed through the aperture.

Passing through this the reporter was told that it was necessary to have double doors, and the two doors are never allowed to be open at once for fear of affecting the internal temperature. Glancing around by the light of the candle, the reporter found himself at the entrance of a narrow passage, the walls whereof were immense beer casks, piled up three high, and from which water from the slowly melting ice dripped to the floor and was carried off in narrow and multitudinous gutters. The ice was above and below and the enormous brick arches

were dripping with moisture and, in some instances, revealed growth of fungus. These casks, let the reader imagine for himself of their size. Each holds forty barrels, or 160 kegs of beer, and into each of these casks a dozen men could enter and walk around without being very much crowded. At the bottom at these imminence receptacles is a place called the manhole, and the reporter saw a burly, broad shouldered German of five feet ten, first put his candle in and then got in himself and walk around, and just about able to touch the top of the interior of the cask. On this floor there were stored twenty-four of these casks, about twenty of which were full of beer. The temperature here is five degrees above zero. After passing through, a long flight of stone steps was descended, another door opened and another cellar entered. Like the one above it had a vaulted roof and was also filled with casks. In this cellar are stored fortveight forty barrel and forty-eight thirty barrel casks ninety-six in all. Still lower, more slimy steps of stone descended, another door opened, and into the third and lowest cellar. This cellar

FIFTY-FOUR FEET UNDER GROUND

is similar to the others and like them is devoted to the stocking of beer, and the reporter knows from experience that a glass or so of eight months' old beer, drawn from the spiggot of one of these casks and as clear as the purest amber, is something not to be thrown over the shoulder even if the crusaders are opposed to it. In this lower cellar there are tiered up 110 casks. In these cellars men are employed night and day cleaning off the

water which drips from the ice, cleaning out casks and doing the thousand and one things that are necessary to do. How they stand this constant cold temperature is hard to say, but every man around these brewery seems to be healthy and strong. There must be some virtue in beer, for they drink plenty of it. Mr. Urban told the reporter that his employes (about thirty) drank from five to six kegs of beer a day; a small fortune in a year. This establishment gives employment to twenty-eight horses and fourteen wagons, turns out about 800 kegs a day, and employs its own coopers. Extensive building is going on now, the entire brewery being altered so that the latest improvements can be put in, and the proprietor says that he determines to make it the model brewery of either of the sister cities, and one that can compete with any in the country.

Down in those immense cellars, then, after the beer has been brewed and cooled, it is left to clear and age in these casks, and at the expiration of a certain time is pumped up and placed in kegs for the retail supply. It is worth anyone's while to visit any of these establishments and watch the actual process in the manufacturing of beer which this article has attempted to describe. Lager certainly has gained ascendancy in this city, at least, over all other beverages, and no doubt its manufacture will be brought in time to such perfection as shall put it on a par with the beer of the mother country.

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