CONSOLIDATED BUNGING APPARATUS CO. *ET AL. V.* H. CLAUSEN & SON BREWING CO.

Circuit Court, S. D. New York.

June 21, 1889.

1. PATENTS FOR INVENTIONS—PROCESSES FOR MAKING BEER—NOVELTY.

The first and second claims of letters patent No. 215,679, granted to George Bartholomae, May 20, 1879, are as follows: "(1) The process of preparing beer for the market, which consists in holding it under controllable pressure of carbonic acid gas when in the *'kraeusen'* stage, substantially, "etc. "(2) The process of treating beer when in the *kraeusen* stage, which consists in holding it in a vessel under automatically controllable pressure of carbonic acid gas, substantially," etc. *Held*, that these processes are invalid for lack of novelty. The vent-bungs known as the "Shaefer Bung," the "Guth Bung," the "Bach-man Bung," and others are the vent-bung of this patent, in the sense that they have the same functions, and are automatic valves designed to control the pressure of the gas, and were used commercially in many breweries between 1861 and 1876; being applied to shavings casks after the beer had reached the *kraeusen* stage, and, before the end of that stage, for controlling the pressure of the gas.

2. SAME-INFRINGEMENT.

The third claim of the patent, viz., "the process of preparing and preserving beer for the market, which consists in holding it under controllable pressure of carbonic acid gas from the beginning of the *kraeusen* stage until such time as it is transferred to kegs and bunged," etc., must be limited to the application of the apparatus at the beginning of the *kraeusen* stage, and is not infringed by defendant's apparatus, which, though the same vent-bung as that of the patent, is not applied until several days after the *kraeusen* has been introduced; the beer in the interval being allowed to work out of the bung-hole of the shavings cask.

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In Equity. Bill for infringement of letters patent No. 215,679. On final hearing. For a full description of this patent, see the opinion of the supreme court in *Fermentation Co.* v. *Maus*, 7 Sup. Ct. Rep. 1304. See, also, same case in 20 Fed. Rep. 725.

Banning & Banning & Payson, for complainants.

Josiah Sullivan, C. P. Jacobs, and B. F. Thurston, for defendant.

WALLACE, J. This suit is founded upon letters patent granted May 20, 1879, to George Bartholomae, as assignee of Leonard Meller and Edmund Hofman, inventors, for an improvement in processes for making beer. The application for the patent was filed February 12, 1879. The patent has eight claims, four of which are in controversy in this suit. These claims are as follows:

"(1) The process of preparing beer for the market, which consists in holding it under controllable pressure of carbonic acid gas when in the *'kraeusen'* stage, substantially as set forth. (2) The process of treating beer when in the *kraeusen* stage, which consists in holding it in a vessel under automatically controllable pressure of carbonic acid gas, substantially as described. (3) The process of preparing and preserving beer for the market, which consists in holding it under controllable pressure of carbonic acid gas from the beginning of the *kraeusen* stage until such time as it is transferred to kegs and bunged, substantially as described. (4) The method herein described of preserving beer in a marketable condition after it has passed the *kraeusen* stage, which consists in holding it under pressure of carbonic acid gas; said pressure being automatically regulated by a counteracting hydrostatic pressure, substantially as described."

These claims relate to the treatment of the beer in the shavings cask after it has been drawn from the *ruh* casks, and after the *kraeusen* in the beer has been added to produce the secondary fermentation during which the beer is to be ripened and clarified and prepared for market use. The term "*kraeusen* stage," as that term is used in the claims, is the period of active fermentation in the shavings cask induced by the introduction of the *kraeusen* into the old beer, and this period ends when the beer becomes clarified and brilliant. It begins as soon as the active secondary fermentation commences. The "holding" the beer "under controllable pressure," mentioned in the claims, describes the means by which the pressure is controlled, consisting of a vent-bung applied to the shavings cask, which vent-bung is of the kind particularly described in the specification, or any other self-acting valve adapted to control the gas and permit or prevent its escape at any predetermined degree of pressure.

Aside from the language of some of the claims themselves, the general Statement of the nature of the invention, and the description of the bunging apparatus, the patent does not point out specifically how the processes of the claims in controversy are to be practiced. The specification seems to assume that it is only necessary to describe the apparatus used in order to enable any person skilled in the art of beer-making to use it so as to

carry out the processes, claimed. Inferentially, the specification suggests that the processes claimed involve holding the beer under

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the gas pressure during the whole period of the shavings cask stage, beginning as soon as the secondary fermentation becomes sufficiently active to cause the beer to flow through the bung-hole of the cask and the gas to escape, and ending when the beer is ready to be drawn off for market. This is to be implied because the specification states that, the "cask being closed, none of the beer wastes by running over, and the foul smell and washing of the casks and cellars are avoided," and "the escaping carbonic acid gas does not settle in the brewing cellars to endanger life." Referring to this part of the specification when the patent was considered by the supreme court in Fermentation Co. v. Maus, 122 U.S. 413, 7 Sup. Ct. Rep. 1304, the court said: "This is fairly to be read as a statement that the beer is to be thus treated during the whole of its subjection to the shavings cask stage of the process, whether in one closed cask or in two or more closed casks connected together. The statement is that the cask or casks are to be closed; that is, closed throughout the shavings cask stage of the process, and kept during that process under automatically controllable carbonic acid gas pressure, generated either by the mild fermentation of the beer, or artificially. It is also stated that none of the beer wastes by running over, and that the foul smells and washing of the casks and cellars are avoided, and that the escaping carbonic acid gas is conducted to the open air. These consequences cannot follow, nor can the advantages of the invention set forth be fully availed of, unless the casks are closed from the beginning of the shavings cask *kraeusen* stage."

There is nothing in the specification to restrict the scope of the first or second claims to a process for holding the beer under pressure at any particular period of the kraeusen stage, or for any length of time during that stage, or for treating the beer according to any special conditions. They are broad claims for processes, respectively, in which the controllable pressure is applied at any time during the kraeusen stage; the only difference between them being that the first includes pressure, whether applied automatically or not, while the second is restricted to automatic pressure. The limitations expressed in the third and fourth claims emphasize the interpretation of the first and second as claims for processes without any limitation or condition in respect to the pressure period. These claims must therefore be deemed as claims for the process of treating the beer whenever it is in the *kraeusen* stage, by holding it under the pressure of carbonic acid gas, by means of the vent-bung applied to the shavings cask. The third claim is for a process of like treatment, in which the pressure is applied at the beginning of the *kraeusen* stage,—that is, as soon as the fermentation is active,—and is maintained until the beer is ready to be drawn off for market. The fourth claim is capable of two interpretations. It may be construed as one for the process of the third claim continued after the beer has become ready for market, to preserve it in good condition, or as a claim for a process of treatment which does not begin until the end of the *kraeusen* stage. The latter seems the better construction.

It is doubtful whether the first two claims are not invalid upon the

face of the patent, as being merely for the functions of the bunging apparatus. Unless the method of using such apparatus was so well known as not to require to be pointed out to those skilled in the art, the specification is insufficient; and, if it was so well known that description was not necessary, there is no novelty in the claims. However this may be, these claims are invalid upon other grounds. Their novelty is negatived by evidence which establishes beyond any reasonable doubt the prior public use in this country of the respective processes claimed more than two years before the application for the patent was filed. The evidence is overwhelming that the vent-bungs known in the record as the "Shaefer Bung," the "Guth Bung," the "Bachman Bung," and others, which are the vent-bung of the patent in the sense that they have the same functions, and are automatic valves designed to control the pressure of the gas, were used in many breweries during the period between the years of 1869 and 1876. Some of them were used in large numbers, and they were applied to shavings casks after the beer had reached the kraeusen stage, for controlling the pressure of the gas. The proofs establish that in some instances these vent-bungs were used before the end of the kraeusen stage, but generally they were used after the active fermentation had subsided, when it was desired to hold the beer in the shavings cask for some period of time before drawing it off for market. The testimony of Mr. Sturm, a highly intelligent witness, shows the use of an equivalent vent-bung as early as 1861 in two breweries in Indianapolis. The bungs were designed and made by him at the request of the brewers by whom they were used; they were used, not experimentally, but commercially; were applied to the shavings casks before the active fermentation had subsided in the beer; and were intended and used to prevent the gas from escaping into the cellar, and the foam and yeast particles from running over the cask.

This evidence not only defeats the novelty of the first and second claims, but also the novelty of the fourth claim, unless that claim is merely a restatement of the third claim in different phraseology.

The complainants have failed to establish infringement by the defendant of the third claim of the patent. The Eureka vent-bung which the defendant employs differs in details of construction from the vent-bung particularly described in the patent, but is the vent-bung of the claim, because it performs the function of holding the beer under automatic gas pressure. But the testimony for the complainants does not show that the defendant has applied this apparatus in its brewery at the beginning of the *kraeusen* stage in the treatment of the beer, and the testimony for the defendant is explicit that the apparatus as it has always been used there is not applied until several days after the *kraeusen* has been introduced, during which time the beer is allowed to work out of the bung-hole. The direct testimony for the defendant is consistent with probability, because it appears that, as commonly used by brewers, the bunging apparatus particularly described in the

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patent, and equivalent apparatus, is not applied until the beer has been allowed to clean itself for a few days of the *kraeusen* stage. Mr. Schwartz, one of the expert witnesses

for the complainants, states that, as a practical brewer, he would not use the apparatus of the patent until the *kraeusen* stage is somewhat advanced; and that it is desirable to allow the beer to work out of the cask for a few days, and thereby eliminate the bulk of the impurities, before applying the apparatus. He states that, although some brewers apply it at the beginning of the kraeusen stage, brewers generally do not, but find the best results are obtained by allowing the active fermentation to proceed a few days before doing so. There is considerable other testimony in the record to the same effect as respects the use of this apparatus and of the several other equivalent devices. The proof seems clear that the defendant has used the Eureka device in just the same way in which the Guth vent-bung was used in its brewery in 1875, and just as the Meller and Hofman vent-bung was used in its brewery during the time it was authorized to use that device. The bill is dismissed, with costs.