JOHN M. HEISS.

Apparatus for Cooling and Discharging Beer and other Liquids on Draught.

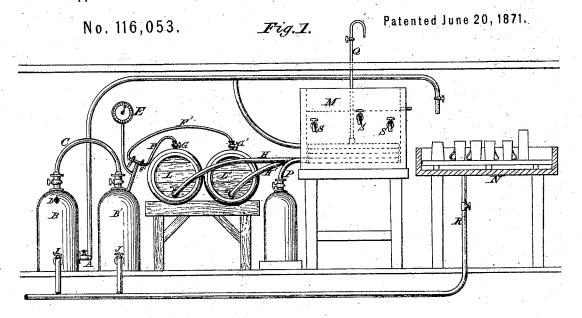
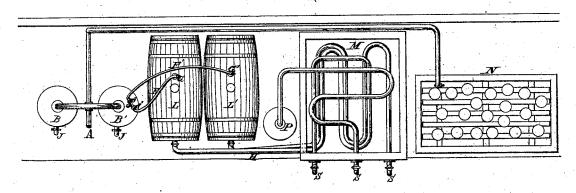


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN M. HEISS, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN APPARATUS FOR COOLING AND DISCHARGING BEER AND OTHER LIQUIDS ON DRAUGHT.

Specification forming part of Letters Patent No. 116,053, dated June 20, 1871.

To all whom it may concern:

Be it known that I, John M. Heiss, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Device for Forcing Beer and other Liquids out of Kegs, Barrels, &c., and for cooling the same; and I do hereby declare that the following is a full, clear, and exact description thereof sufficient to enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing making part of this specification, in which-

Figure 1 is a vertical or front view of my improved device, and Fig. 2 is a top view of

The nature of my invention consists in two vessels, of copper, iron, or other suitable material, holding compressed air, by which the liquid is forced through or out of the vessel containing it, then passes along pipes constructed for the purpose into a receiver, where ice-water surrounding the pipes keeps them cool, and, consequently, the liquid contained therein.

The air is compressed by inserting with force into the aperture A a sufficient quantity of water to compress the air within the vessel B, from which the water passes into the vessel B', while the cocks or faucets J J admit of the contents being emptied whenever desired. The cock or faucet D is the escape, by which the compressed air is blown off when not required for use. The pipe C is the conductor by which the air is conveyed from the first or original vessel to the second. The gauge E shows the degree of air force used, and the pipes F F', of the same material as the pipe C, namely, gutta-percha, or other suitable material, convey the compressed air from the vessels into casks L L', kegs, barrels, &c., which contain the fluid to be acted upon. These lastnamed pipes F F' have also stop-cocks G G' and g g' to cut off the supply of air whenever necessary, and when not used the compressed air passing through the pipes enters the cask, barrel, &c., at one side of and into the keg. impelling the fluid to leave the barrel, &c., at the spigot and enter a new set of pipes, H H', made of block-tin or other suitable material, by which it is carried into the receiver M, the

pipes therein winding around in a serpentine manner. The principle is precisely the same, although the arrangement is somewhat different, as shown at P, where my invention is applied to a soda-water fountain. Q represents a pipe to run through the ice-water the same as the others, but merely for drinking water, and which may be drawn on top of the count-Whatever waste water may be accumulated in the trough N, or elsewhere, is provided for by a pipe fastened underneath it, as shown at R, through which all the waste water is passed.

The great and principal advantage of my invention is that the pipes and fluids contained therein are cooled off by the ice-cold water contained in the receiver and surrounding the pipes, instead of lumps of ice, as now used, by which they are cooled unevenly; whereas, by my improvement, they are cooled evenly in

their entire length.

The fluids contained in the barrels, &c., are drawn through the cocks in the side of the receiver M, as shown at S S S, and, of course, there may be as many as are desirable.

I have shown but two barrels in the drawing, but any number of different kinds may be attached to answer the requirements of the establishment.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

1. The combination of the air-forcing vessels B B' with casks L L' and cooling-reservoir M, substantially as described.

2. The arrangement and combination of a series of casks, L L', and soda-fountain P with receiver M, provided with cooled pipes and spigots, so as to supply cool liquids of different kinds on draught, as described.

3. The combination of the vessels B B', the pipes C, F F', and H H', with their respective cocks and gauge acting upon any number of kegs, barrels, &c., that may be desired, together with the receiver M and its pipes and the trough N, the whole arranged for the purpose herein set forth, and substantially as described.

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m Witnesses:}$ T. C. BRECHT,

OSCAR C. Fox.

JOHN M. HEISS.