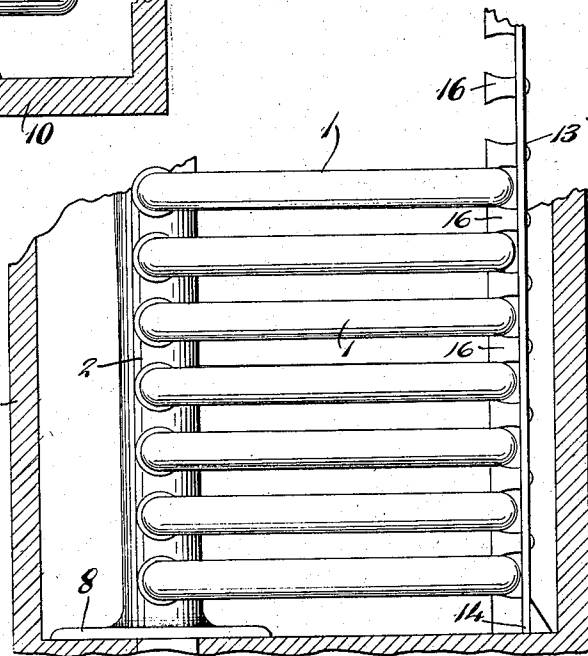
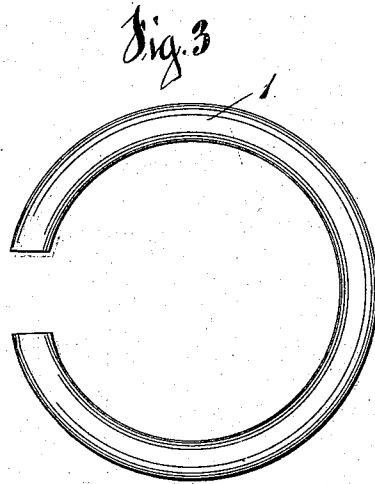
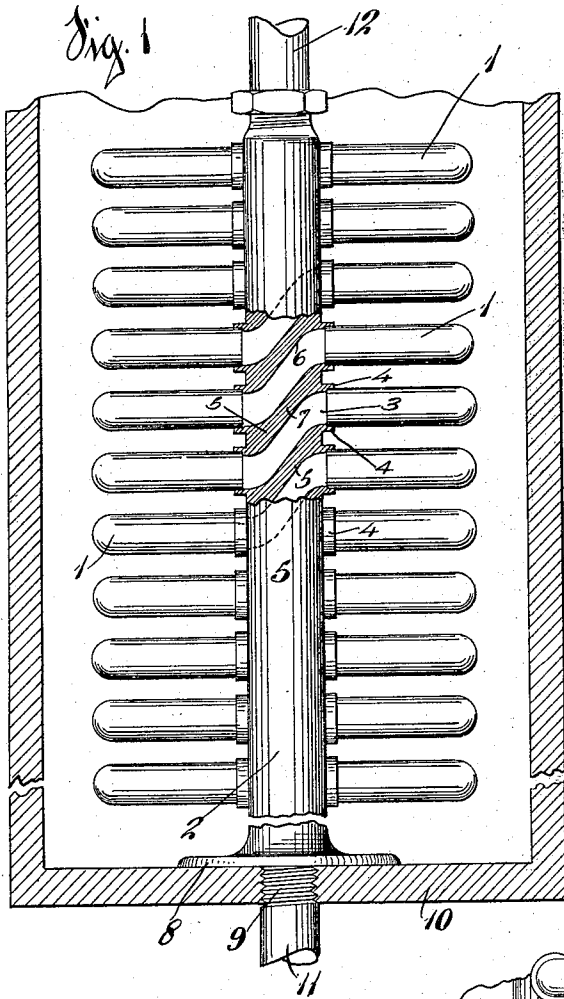


W. F. VOSELER.
 BEER COOLER.
 APPLICATION FILED SEPT. 24, 1915.

1,218,724.

Patented Mar. 13, 1917.



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WILLIAM F. VOSSELER, OF CINCINNATI, OHIO.

BEER-COOLER.

1,218,724.

Specification of Letters Patent.

Patented Mar. 13, 1917.

Application filed September 24, 1915. Serial No. 52,335.

To all whom it may concern:

Be it known that I, WILLIAM F. VOSSELER, a citizen of the United States, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Beer-Coolers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to beer coolers of the type in which a coil is provided through which the beer must pass in the presence of a cooling medium.

The simplest way of cooling beer as it is pumped from a barrel to a faucet is to send it through a coil which is packed in ice. In coils for this purpose, there must be as little obstruction to the flow of beer as possible. There must be also as much of an exposure to the ice as possible.

Accordingly in the Patent No. 1,099,329, of June 9th, 1914, to William Vosseler, is described a device in which an open coil is mounted in an ice box so that ice can be packed down inside the coil as well as around it. This is the best way of quickly and adequately cooling the beer as it passes through a cooler, but it opens the way to a number of difficulties. The first of these is that to make a strong coil which will withstand the jamming down in it of ice, it is hard to provide against agitating the beer during its passage through the coil. In the next place, it is difficult to hold the coil in place in the box against these strains, and finally it is requisite to make the whole structure as inexpensive as possible.

It is the object of my invention herein to provide against these difficulties so as to have an open coil of great durability and cheapness, in which there is little or no obstruction to the flow of the beer to cause it to foam out of the faucet, which is very undesirable.

I accomplish these objects by that certain construction and arrangement of parts to be hereinafter more specifically pointed out and claimed.

In the drawings,

Figure 1 is a front elevation of the coil, partly broken away and partly in section.

Fig. 2 is a detail elevation showing the pipe supporting standard in connection with the main standard.

Fig. 3 is a plan view of one of the rings of pipe used in making up the coil.

In making up my new coil, I employ preferably sixteen sections of pipe cut to form split rings 1. It is preferred that this pipe be made up of thin copper tubing, say of $\frac{5}{8}$ inch outside diameter. For mounting this tubing so as to cause an upward unobstructed flow, there is provided an oval standard 2, made up preferably of a single casting. On two sides of this casting are formed apertures 3, surrounded by annular flanges 4. The pipes are set into these apertures and welded in place so as to form a complete coil with the opening down the middle of it unobstructed.

The standard is cast with partitions 5, running from each aperture to the aperture next above it on the other side of the standard. These partitions are sloped away from the sides of the standard at 6 and 7, so as to form no obstruction to the flow of beer by leaving pockets in which it could eddy while being pumped. The partitions are spaced apart a distance substantially the same as the inside of the pipe, for this purpose. The flow of beer is then around each pipe and thence up at a slant through the standard to the next pipe, always flowing in the same direction.

The standard is provided with a wide base plate 8, of sufficient size to firmly support the coil at the base, and the end of the standard is screwthreaded at 9 so as to be firmly screwed through the bottom 10 of any desired ice box in which the coil is to be placed.

The beer enters the standard at the base through an extension 11 from the screwthreaded end, and passes out of the standard at the top through a like extension 12.

As an additional support for the pipes forming the open coil, I provide a bar 13, which has a base 14 to be screwed to the bottom of the box, and on this bar are mounted, by means of screws, a series of spacing and supporting blocks 16. The blocks are so arranged that between each block is set one of the pipes of the coil, and the bar is placed

at the farthest point away from the standard on the pipes, so as to best support the pipes.

It is obvious that this is a simple construction, amounting to no more than an open coil
5 of pipes and yet having the additional feature of strength to withstand the force in packing ice inside of the coil.

Not only is the device stronger than a plain coil of pipe, but it is cheaper to make
10 up, as small sections are used, and the standard is simple and made in one piece.

Having thus described my invention, what

I claim as new and desire to secure by Letters Patent, is:—

In a cooler for beer or other liquids, means
15 for providing a cylindrical coil open through the center for ice packing comprising a tubular side standard having horizontally alined apertures, with ascending partitions from
20 one of each set of apertures to the opposite one above and split coils of pipe set with their ends in the horizontally alined apertures.

WILLIAM F. VOSSELER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."