J. J. MURPHY.

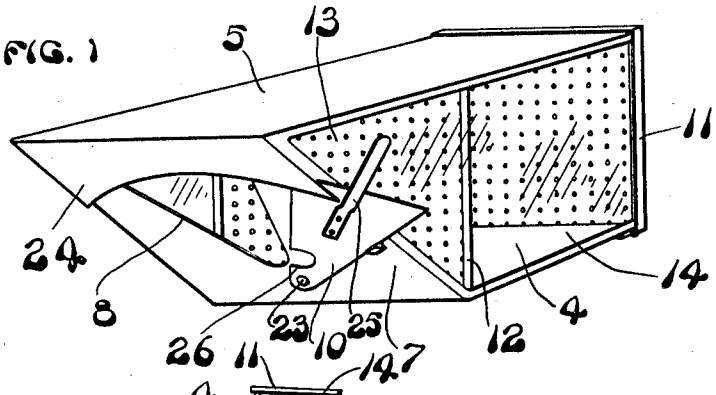
BEER COOLER.

APPLICATION FILED MAR. 6, 1911.

1,004,459.

Patented Sept. 26, 1911.

FIG. 1



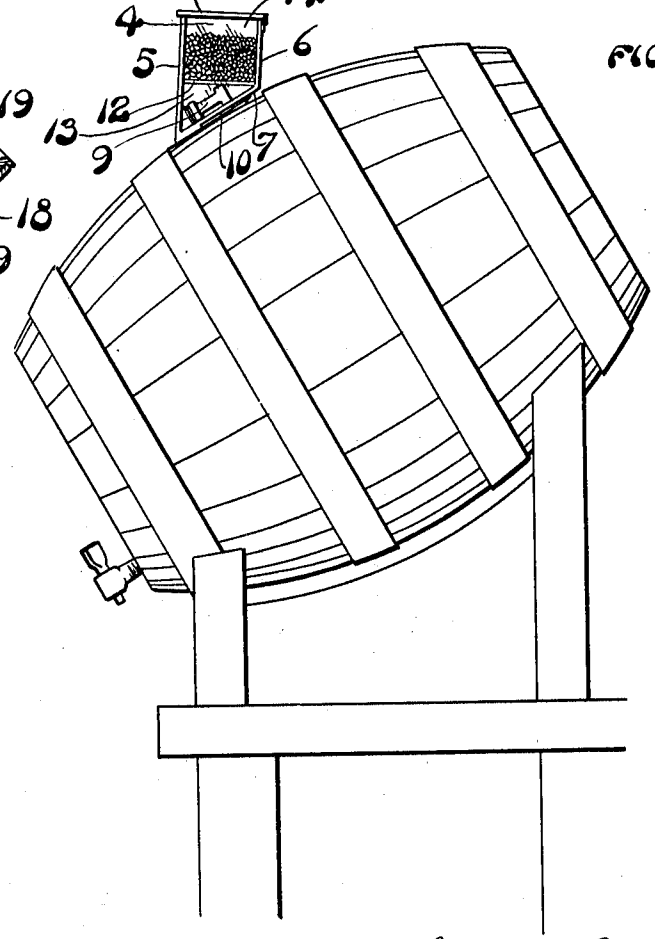
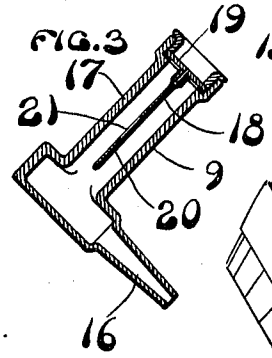


FIG. 2

FIG. 3



Witnesses

H. Thornton Bogert

E. M. McCallister

Inventor

John J. Murphy

By Walter D. Murray

Attorney

UNITED STATES PATENT OFFICE.

JOHN J. MURPHY, OF CINCINNATI, OHIO.

BEER-COOLER.

1,004,459. Specification of Letters Patent. Patented Sept. 26, 1911.

Application filed March 6, 1911. Serial No. 612,595.

To all whom it may concern:

Be it known that I, JOHN J. MURPHY, a citizen of the United States of America, and resident of Cincinnati, county of Hamilton, and State of Ohio, have invented certain new and useful Improvements in Beer-Coolers, of which the following is a specification.

This invention relates to beer coolers, and has for an object to produce means for cooling and filtering the air entering a beer barrel or keg, during the operation of drawing beer from the barrel or keg.

A further object is to produce an air cooler or purifier, which may be mounted on a barrel or keg, and through which air entering the barrel or keg passes.

These and other objects I attain in a cooler embodying the features herein described, and illustrated in the drawings accompanying and forming a part of this application.

In the drawings, Figure 1 is a perspective view of a cooler embodying my invention. Fig. 2 is a side elevation of the cooler shown in Fig. 1, in connection with a side elevation of a keg on which the cooler is mounted. Fig. 3 is a longitudinal section of an air vent tube, which may be employed in connection with a cooler embodying my invention.

The cooler illustrated as an embodiment of my invention consists of a receptacle, which is adapted to be mounted on a barrel or keg, over the air vent tube, and is adapted to contain cracked ice for cooling and filtering the air entering the barrel or keg through the tube. The receptacle shown, is provided with glass sides 4, which extend at right angles to the front 5 and back 6 of the receptacle. The front is longer than the back and the bottom 7 of the receptacle is inclined relatively to the front and back and is provided with an opening 8, through which the vent tube 9 projects into the receptacle, and a pivotally mounted gate or slide 10 for closing the opening, when the tube 9 is in place in the receptacle. A cover 11 is hinged to the back of the receptacle and is provided with air admission apertures, through which air entering the cooler passes. A partition 12 is located within the receptacle and extends at right angles to the sides and front and back of the receptacle. This partition 12 divides the interior of the receptacle into a triangular chamber 13, below the partition, and a cooling chamber 14, above the partition. The partition is provided with a plurality of apertures, through which air entering the triangular chamber passes and through which water resulting from the melting of ice passes. When the receptacle is in place on the barrel, the partition is horizontal and is adapted to support the ice located in the chamber 14.

When a barrel or keg is on tap, its rear end is elevated, and the inclination of the bottom of the cooler is such, that the cooler will set upright, when located on a barrel or keg in such a position. The vent tube 9 illustrated, is L-shaped, consisting of a portion 16, which is adapted to be driven through the bung of the barrel, and a portion 17, which extends at right angles to the portion 16 and contains a check valve 18, which will admit air into the keg, to which the vent is secured, but will prevent air or gas from being discharged through the vent from the keg. The check valve 18 consists of a disk 19, provided on one side with a short hollow lug, over which a flattened rubber tube 20 is drawn and secured. The free end of the tube is closed and one flat wall of the tube is cut, so as to provide a slit 21, which forms an air admission port, through which air entering the keg passes. The disk 19 is located in the vent tube, so that it closes the outer end of the tube, and so that the rubber tube 20 projects into the portion 17 of the vent tube. The portion 16 of the tube is tapered, so that it can be more readily driven through the bung. When the vent tube is in place in the barrel or keg, air entering the barrel easily distends the rubber tube 20 and thereby opens the slit 21 and, passing through the slit, enters the barrel or keg. Air or gas cannot pass from the barrel or keg through the vent tube, since the rubber tube 20 is normally collapsed, and the slit is thereby normally closed. A preponderance of pressure within the keg or barrel will force the collapsed sides of the tube more firmly together, and will, therefore, more effectively close the tube 20 and prevent a flow of air or gas from the barrel through the vent tube.

After the vent tube is in place in the bung, the cooler is located on the keg, so that the chamber 13 receives the projecting portion of the vent tube 9. The opening 8, through

which the vent tube is introduced into the chamber 13, is substantially triangular in shape. The apex of the triangular opening is, however, curved to about the same diameter as the largest diameter of the portion 16 of the vent tube. The gate or slide 10 is also substantially triangular in shape and is pivotally mounted on a pin 23, which is secured to the bottom 7 of the cooler at a point near the curved edge of the opening 8, and which extends through the slide 10, near its apex. The edge of the slide 10, located opposite to the mounting pin 23, is engaged by a flange 24 formed on the bottom of the cooler, and which forms a guide for the slide 10 to hold it against the bottom 7 during its movement about the pin 23. A handle 25 is mounted on the slide 10 and projects beyond the bottom 7, and is employed in moving the slide. A curved notch 26 is provided in one edge of the slide 10 and is adapted to coöperate with the curved edge of the opening 8 in encircling the portion 16 of the vent tube, when the slide is moved to close the opening 8. The curvature of the notch 26 is substantially the same as that of the portion 16 of the vent tube, and little or no air can enter the chamber 13 past the vent tube, when the slide is closed.

After the cooler is in place on the keg, the cover 11 is raised and the chamber 14 is filled with cracked ice, which is supported on the partition 12, and the cover is then closed. When beer is drawn from the keg, air entering the keg through the vent tube 9, is drawn downwardly through the chamber 14, through the cracked ice, and then is delivered through the chamber 13 and the vent tube 9 into the barrel. The air passing through the cracked ice is cooled by coming in contact with the ice and is also washed or purified by coming in contact with the wetted surfaces of the particles of ice and with the water, in passing through the apertures provided in the partition 12. The glass sides of the cooler readily disclose the amount of ice in the cooler. The water resulting from the melting of the ice runs down through the apertures in the partition into the chamber 13, and will flow out of the cooler between the edges of the opening 8 and the slide 10, and in this manner forms in effect a water seal around the edges of the opening, and aids in maintaining a tight joint between the slide and the bottom of the collar.

One of the advantages of this invention is that the air is cooled and purified, and that the cooler may be easily mounted on the barrel over the vent tube.

What I claim is:—

1. A beer cooler comprising a receptacle provided with a cooling chamber through which air is adapted to pass and a chamber communicating with the cooling chamber and adapted to receive the end of a vent tube of the receptacle containing the beer to be cooled, and a slide for engaging said vent tube and for closing the opening through which it is introduced into the chamber.

2. A beer cooler including an inclined bottom adapted to rest on the receptacle containing the beer to be cooled and having an opening through which a vent tube of said receptacle is adapted to project, a slide mounted on the bottom and adapted to close said aperture and secure the vent tube in place, and means located in the cooler for supporting ice.

3. A beer cooler adapted to rest on the receptacle containing the beer to be cooled and comprising a receptacle having vertical walls and a bottom inclined to the walls and provided with an opening, a slide pivotally mounted on the bottom for closing said opening, a perforated partition located in the cooler, and a cover mounted on the cooler.

4. A beer cooler comprising a receptacle, a perforated partition mounted in the receptacle and dividing it in two chambers, a cover for the upper of said chambers, and a slide mounted on the bottom of the receptacle for closing an opening in the bottom of the receptacle.

5. A beer cooler adapted to rest on the beer keg and comprising communicating chambers provided with glass walls, a perforated partition separating said chambers, a perforated cover to close the upper of said chambers, and a slide pivotally mounted on the bottom of said cooler to close the opening in the bottom of the lower of said chambers.

JOHN J. MURPHY.

Witnesses:
WALTER F. MURRAY,
W. THORNTON BOGERT.