

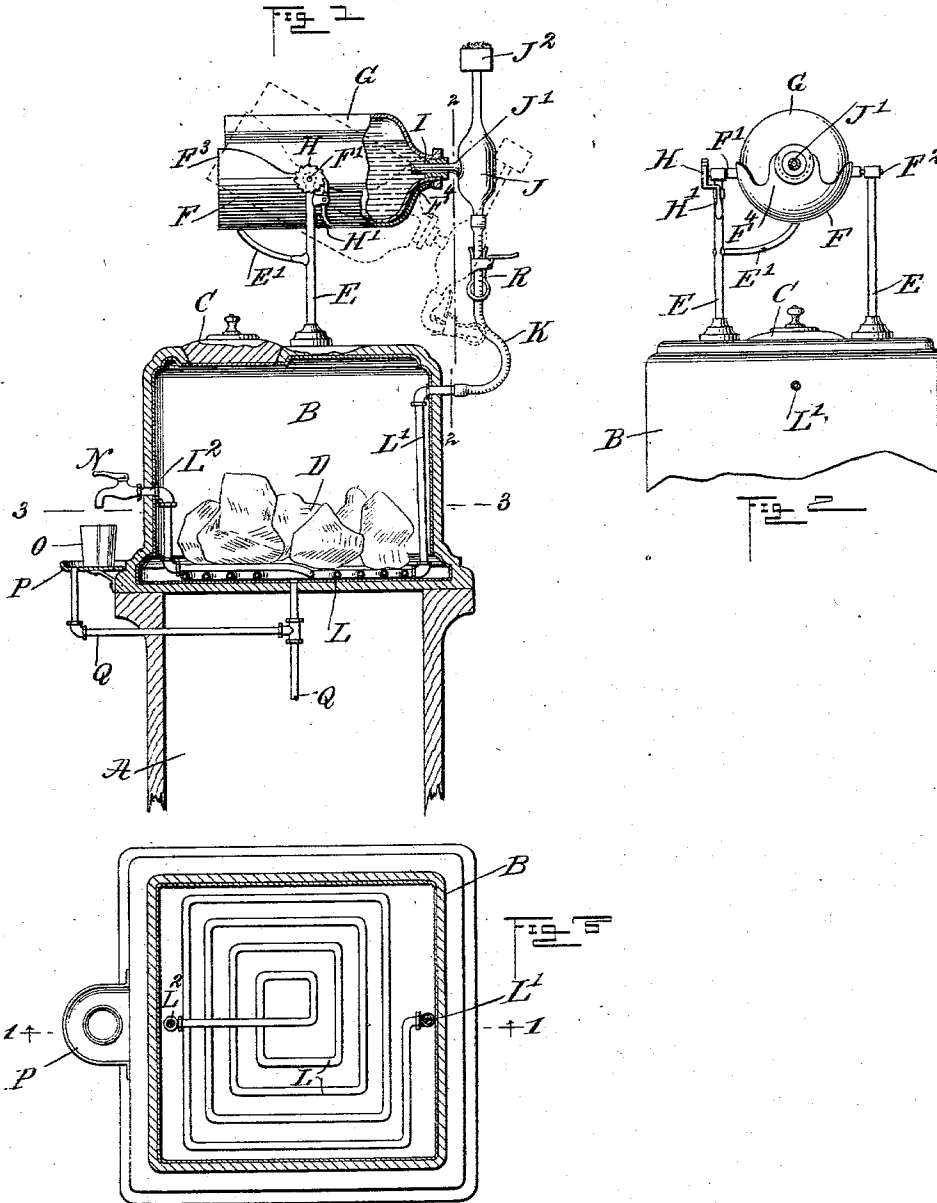
No. 730,612.

PATENTED JUNE 9, 1903.

C. F. CONOVER.
COOLER.

APPLICATION FILED JUNE 9, 1902.

NO MODEL.



WITNESSES:

W. C. Cheney
Geo. W. Wood

INVENTOR

Charles F. Conover

BY

Mumford

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES F. CONOVER, OF NEW YORK, N. Y.

COOLER.

SPECIFICATION forming part of Letters Patent No. 730,612, dated June 9, 1903.

Application filed June 9, 1902. Serial No. 110,806. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. CONOVER, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Cooler, of which the following is a full, clear, and exact description.

The invention relates to coolers such as shown and described in the application for Letters Patent of the United States, Serial No. 107,399, filed by me May 15, 1902.

The object of the present invention is to provide a new and improved cooler designed for cooling distilled aerated mineral waters and other liquids usually contained in large receptacles or demijohns adapted to be conveniently supported on the cooler and tilted to allow emptying of all its contents and to permit a quick connection between the receptacle and the cooler proper to insure a constant steady flow of the liquid from the demijohn through the cooler whenever a discharge-faucet is opened.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional side elevation of the improvement on the line 1 1 of Fig. 3. Fig. 2 is a cross-section of the same on the line 2 2 of Fig. 1, and Fig. 3 is a sectional plan view of the same on the line 3 3 of Fig. 1.

On a stand or other suitable support A is set a box B, provided in its top with a charge door or cover C for filling the box with ice D or other cooling medium. On the top of the box B are erected standards E, provided at their upper ends with bearings for trunnions F' F², projecting from the sides of a cradle F, adapted to removably support a receptacle G, containing the liquid to be cooled, and preferably in the form of a glass demijohn placed horizontally on the cradle. The latter is approximately semicircular in cross-section to conform to the peripheral portion of the receptacle G, and the said cradle is

provided with a back end F³ for the bottom of the receptacle to abut against and with a fork F⁴, adapted to engage the neck of the receptacle G to securely hold the latter against lengthwise movement in the cradle, the top of which is open to allow of placing the receptacle G conveniently in position in the cradle or removing it therefrom.

On one of the standards E is secured a rest E' for the cradle-body to rest on when the filled demijohn or receptacle G is first placed in position on the cradle, as indicated in full lines in Fig. 1. On the trunnions F' is secured a ratchet-wheel H, engaged by a pawl H', fulcrumed on one of the standards E to hold the cradle in position, as hereinafter more fully explained. The trunnions F' and F² are so arranged on the cradle that when the receptacle is in position the cradle tends to tilt with the fork F⁴ downward, as indicated in dotted lines in Fig. 1; but by the pawl H' engaging the ratchet-wheel H the said tilting tendency is prevented until it is desired to tilt the cradle and the receptacle for the purpose hereinafter more fully described.

The neck of the receptacle G is engaged by a stopper I, containing an outlet-pipe J', projecting from one side of a chamber J, having on its top an air-vent J², preferably in the form of a cup filled with sponge or other filtering material to filter the air passing into the chamber J and to prevent dust and other impurities from passing into the chamber J and fouling the liquid therein. The lower end of the chamber J is connected with one end of a flexible tube K, connected at its other end to the end L' of a coil L, arranged in the bottom of the box B and having its other end L² provided with a faucet N, extending outside of the box B under the control of the operator to draw the cooled liquid into a glass O, set on a rest P, attached to the base of the box B. Drain-pipes Q lead from the bottom of the box B and the said rest P, as illustrated in Fig. 1.

On the flexible tube K is arranged a closing device R to close the said tube whenever the latter is disconnected from the end of the chamber J at the time an empty receptacle G is replaced by a full one.

The operation is as follows: The stopper I

with the outlet J' is placed in position in the neck of the receptacle G, and then the latter is placed horizontally into the cradle F, held in a locked position by the pawl H' engaging the ratchet-wheel H, the bottom of the cradle abutting against the rest E'. The tube K is now connected with the end L' of the coil L, and then the closing device R is opened, so that the liquid contained in the receptacle G can flow through the outlet J' into the chamber J and from the latter through the tube K into the coil L. Now the refrigerating or cooling medium in the box B cools the coil L and the liquid contained therein, so that when the operator opens the faucet N then the liquid in a cooled condition flows into the glass O or other receptacle held below the said faucet. When the level of the liquid in the receptacle G has fallen below the outlet J', then the operator disengages the pawl H' from the ratchet-wheel H and then tilts the cradle F with the receptacle G, as indicated in dotted lines in Fig. 1, so that the liquid can flow through the outlet J' into the chamber J, it being understood that the flexible tube K permits said tilting movement without disconnecting the chamber J from the end L' of the coil L. Thus by the arrangement described the cradle F and its receptacle G can be tilted to discharge all the contents of the receptacle G, it being understood that the receptacle is at all times a sufficient distance above the coil L and faucet N to insure a steady flow of the liquid through the coil and the faucet N.

When the receptacle G is empty, then the tube K is closed by the closing device R and the stopper I with the outlet J' is removed from the neck of the receptacle G, and then the latter is removed from the cradle and a new filled one is engaged by the stopper and then placed in the cradle. The above-described operation is then repeated.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A cooler comprising a box for containing a cooling medium, a holder on the said box for removably supporting the receptacle containing the liquid to be cooled, a chamber for connection with the receptacle, provided with an air-vent, a coil in the said box having a discharge-faucet at one end, and a flexible connection for connecting the other end of the coil with the said chamber, as set forth.

2. A cooler comprising a box for containing a cooling medium, standards on the said box, provided with bearings, a cradle having trunnions journaled in the said bearings, the cradle being adapted to removably support the receptacle containing the liquid to be cooled, a chamber for connection with the receptacle, provided with an air-vent, a coil in the said box, having a discharge-faucet at one end, and a flexible connection for connecting the other end of the coil with the said chamber, as set forth.

3. A cooler comprising a box for containing a cooling medium, standards on the said box, provided with bearings, a cradle having trunnions journaled in the said bearings, the cradle being adapted to removably support the receptacle containing the liquid to be cooled, a chamber for connection with the receptacle, a coil in the said box having a discharge-faucet at one end, a flexible connection for connecting the other end of the coil with the said chamber, and an air-vent on the said chamber carrying a filtering medium, as set forth.

4. A cooler comprising a box for containing a cooling medium, standards on the said box, provided with bearings, a cradle having trunnions journaled in the said bearings, the cradle being adapted to removably support the receptacle containing the liquid to be cooled, a chamber for connection with the receptacle, provided with an air-vent, a coil in the said box, having a discharge-faucet at one end, a flexible connection for connecting the other end of the coil with the said chamber, and means for holding and locking the cradle in position, as set forth.

5. A cooler, comprising a box for containing the cooling medium, standards mounted on said box, a holder holding the receptacle containing the liquid to be cooled, said holder being pivotally mounted on said standards rearwardly of its center whereby to impart to it a tendency to tilt forward, means for holding the holder in an adjusted position against said tendency to tilt forwardly, and a flexible connection between said receptacle and box, as specified and for the purpose set forth.

6. A cooler, comprising a box for a cooling medium, standards mounted on said box and having bearings, a holder adapted to normally tilt forward and holding the receptacle containing the liquid to be cooled, said holder having trunnions mounted in said bearings of the standards, a ratchet-wheel on one of said trunnions, a pawl fulcrumed on one of the standards and engaging said ratchet-wheel, and a connection between the receptacle and the box, said connection having a flexible section, as specified and for the purpose set forth.

7. A cooler, comprising a box for a cooling medium, a receptacle for the fluid to be cooled, supports on said box, a pivoted holder on said supports mounted to normally tilt forward on said pivots and adapted to fit the receptacle containing the liquid to be cooled, and a flexible connection between said receptacle and the box containing the cooling medium, as specified and shown.

8. A cooler, comprising a box for a cooling medium, supports on said box, a receptacle for the fluid to be cooled, a pivoted holder on said supports adapted to fit the receptacle containing the liquid to be cooled, a connection between said receptacle and the box containing the cooling medium, said connection having a flexible section, and said flexible sec-

tion having means for closing the same, as specified and for the purpose set forth.

9. A cooler comprising a box for a cooling medium, a receptacle for the fluid to be cooled,
5 a pivoted holder on said box adapted to fit the receptacle, containing the liquid to be cooled, a chamber rigidly connected with the receptacle at its outlet and communicating therewith, a flexible connection between said
10 chamber and the box containing the cooling

medium, and means for holding the holder in an adjusted position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. CONOVER.

Witnesses:

CHAS. A. HOLMES,
GOTTLIEB KNODLER.