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WATER COOLER

Filed Feb. 28, 1922

Fig. 1.

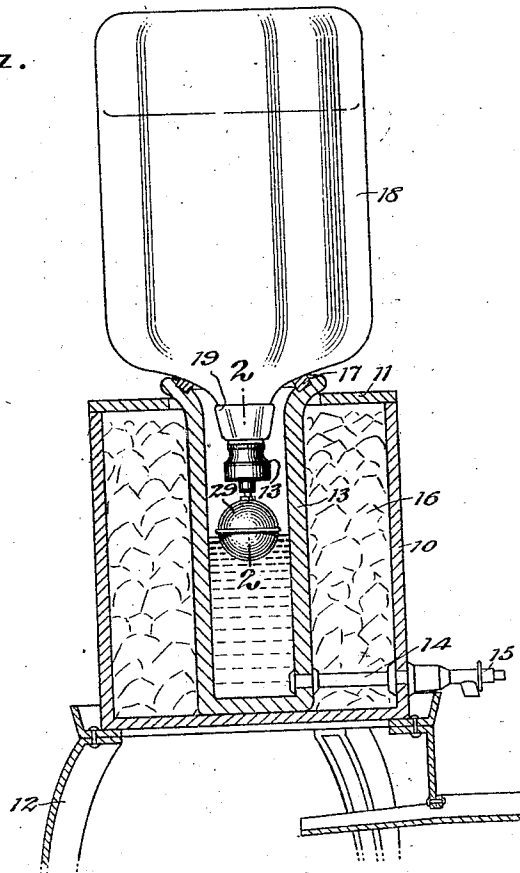
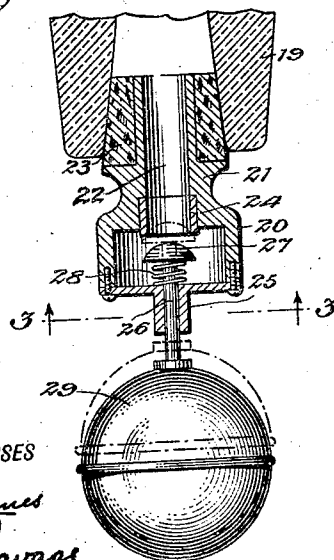


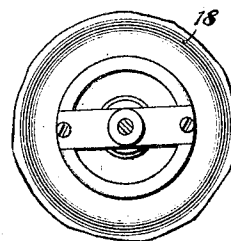
Fig. 2.



WITNESSES

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Fig. 3.



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UNITED STATES PATENT OFFICE.

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WATER COOLER.

Application filed February 28, 1922. Serial No. 539,890.

This invention relates to cooling devices and was primarily designed as a water cooler.

In some types of water coolers no positive closing device is used in conjunction with the water container but a demijohn having a neck which extends into the water cooling chamber is used, the neck becoming immersed in the water as it rises in the water cooling chamber, in this manner forming a water seal to prevent the water from the container flooding the water cooling chamber. In inverting this demijohn to position it over the water cooling chamber there is a danger of spilling the water and sometimes careless individuals will make use of a hand to prevent the flow of water from the demijohn while they are inverting the same, thus giving rise to the possibility of injecting disease germs into the water.

The general object of this invention is the provision of a water cooler including a cooling chamber and means for supporting a water container above the cooling chamber, and supplying means that may be transferred from one water container to another that serves to control the flow of water from the container, said means being operated only upon a certain rise of the water level in the water cooling chamber.

This object is accomplished by introducing a positive acting valve which may be associated with the water container and which is operated by a flow controlled by the rise and fall of water in the water cooling chamber.

This and other objects of the invention will be more clearly understood from the following detailed description and accompanying drawings.

Figure 1 is a side elevation showing a section of the cooling chamber;

Figure 2 is a cross section along the line 2-2, Figure 1;

Figure 3 is a section along the line 3-3, Figure 2.

Referring to the above-mentioned drawings, an ice box 10 provided with a removable top 11 and supported on legs 12 is shown. Located in the ice box 10 is a vessel 13 from which water may be drawn by means of the tube 14 and valve 15. Ice 16 may be introduced into the ice box 10 by the removal of the top 11. A pad 17 is mounted

on the upper end of the vessel 13 to engage the water container or demijohn 18 to prevent it coming in contact with the vessel 13, thus eliminating the danger of cracking the same should it slip from the hands of a careless individual and crash into position.

An assemblage 20, which may be associated with any demijohn 18, serves for controlling the flow of water therefrom. This assemblage consists of a connector 21 having a channel 22 extending therethrough and an annular cork 23 shaped to fit into the neck 19 of the demijohn mounted on its upper end, while fitted into the lower end is a valve seat 24. Attached to the lower end of the connector is a bearing 25 in which a valve stem 26 is slidably mounted, carrying a valve 27 in alinement with the valve seat 24 and so shaped that when seated therein it closes the channel 22. A spring 28 is mounted on the valve stem to limit its downward movement. Connected to the lower end of the valve stem is a float 29.

In using this water cooler the ice box 10 is first packed with ice and the cover 11 placed in position. The assemblage 20 is then projected into the neck of the demijohn 19 making tight engagement therewith. After the assemblage 20 has been placed in position the demijohn is inverted and placed in position on the pad 17 with the neck of the assemblage 20 extending into the water cooling chamber formed by the vessel 13. Water will flow from the demijohn until the level of the water in the water cooling chamber has raised to a point where it acts on the float 29, forcing it upward and positioning the valve 27 in the valve seat 24 thus stopping the flow of water from the container 18. When any water is drawn from the cooling chamber through the tube 14 and valve 15 the water in the water cooling chamber is lowered, allowing the float 29 and valve 27 to move downward by their own weight. This allows water to flow from the container 18 into the water cooling chamber, again raising the level of the water in the same and forcing the valve 27 upward into position in the valve seat 24.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated since manifestly the same can be

considerably varied without departing from the spirit of the invention as defined in the appended claim.

Claim:

- 5 A device of the character described adapted to be inserted in the neck of a water bottle, such as is designed for use on water coolers, said device including a cylindrical body portion no wider than the neck of
10 the bottle to which it is to be connected, a cylindrical central tubular member in

the body, material around the tube of a shape to fit the neck of the bottle and hold the device therein, a removable plate on one end of the body constituting a wall of a valve chamber, a stem movable through the plate, a valve on the stem adapted to close the passage through the chamber, a spring on the same exerting pressure on the valve, and a float carried by the stem outside of the valve chamber. 15 20

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