

No. 808,692.

PATENTED JAN. 2, 1906.

G. E. SAVAGE.  
WATER COOLER.

APPLICATION FILED SEPT. 10, 1904.

Fig. 1.

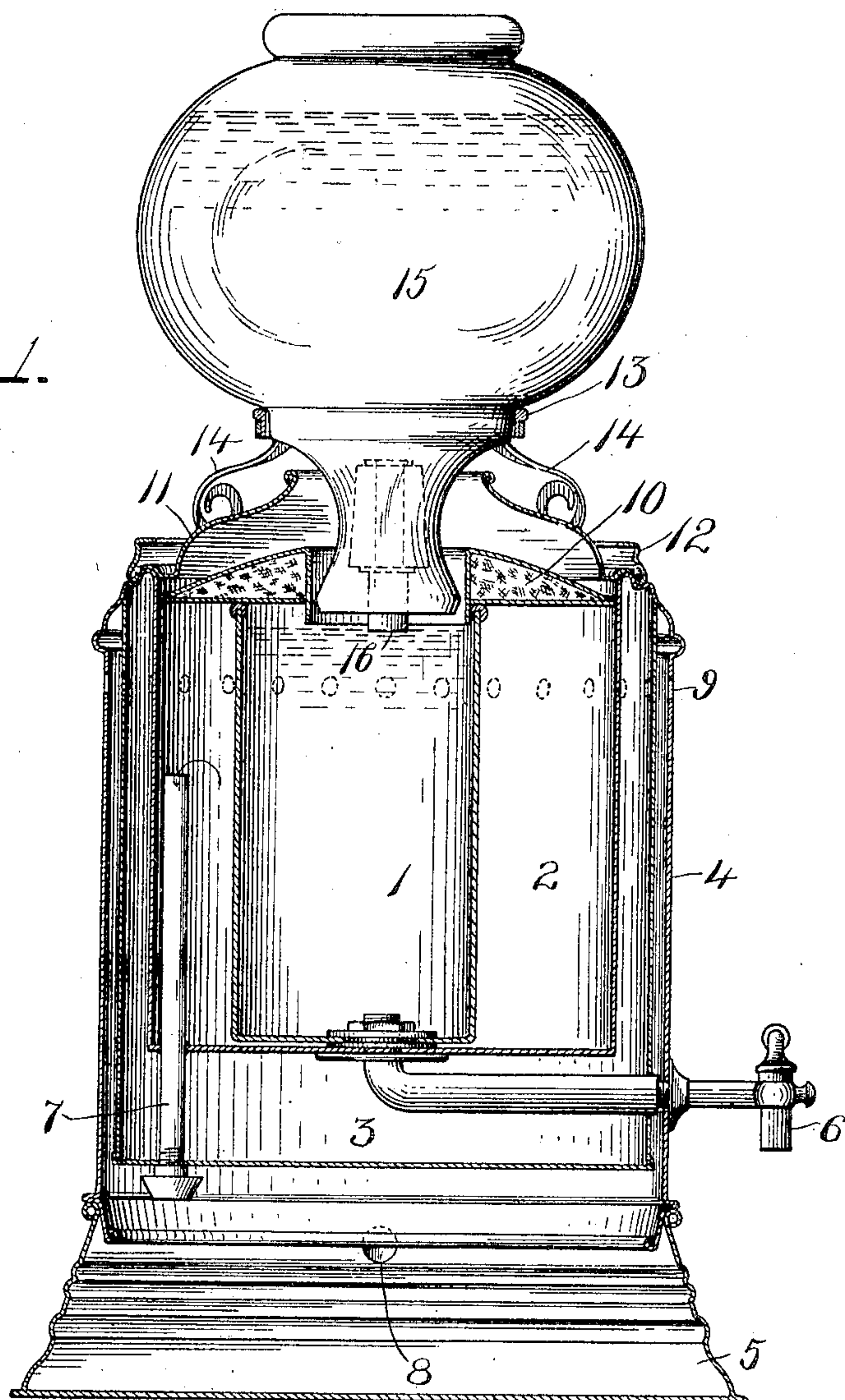
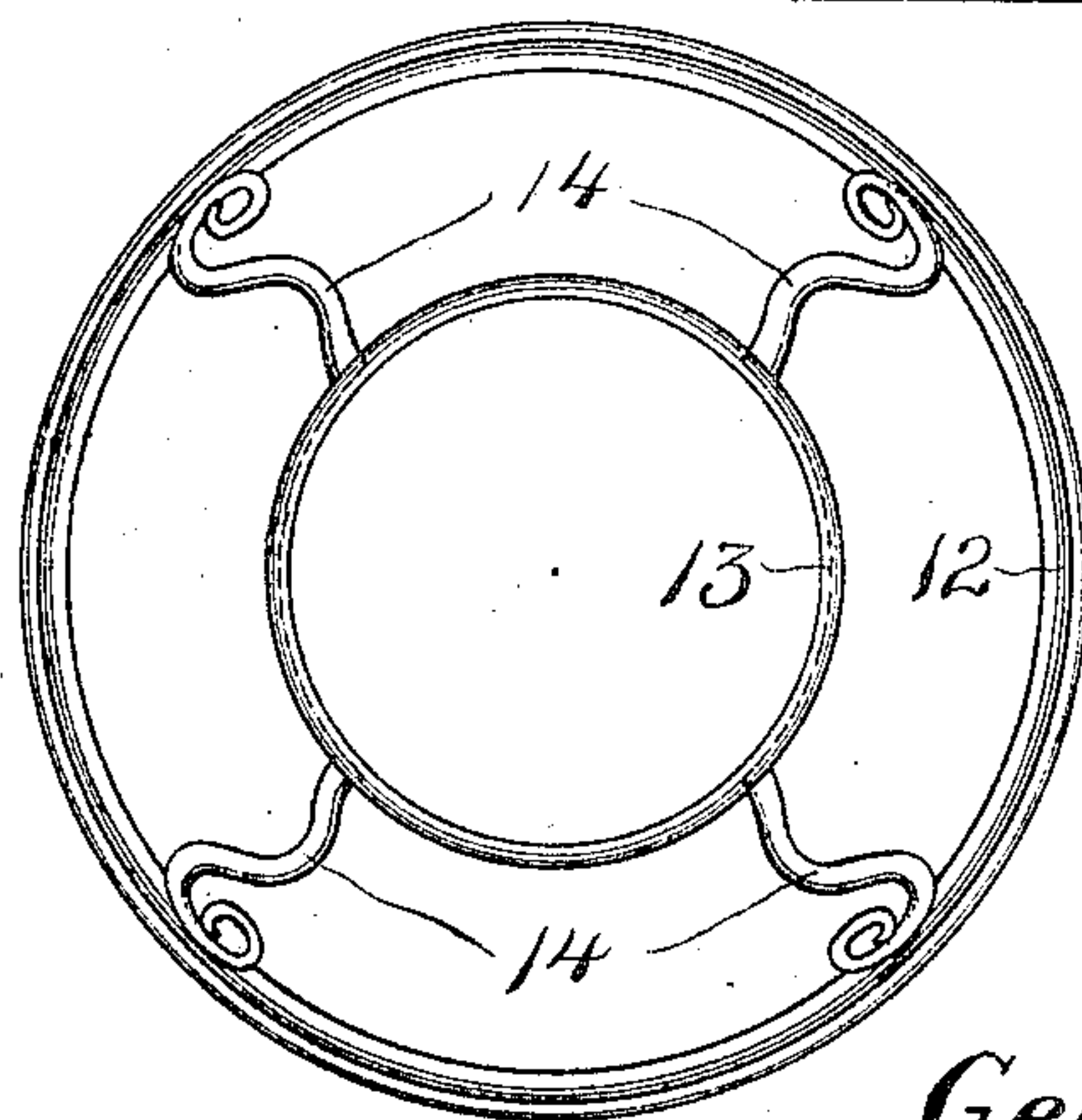


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE E. SAVAGE, OF MERIDEN, CONNECTICUT.

## WATER-COOLER.

No. 808,692.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed September 10, 1904. Serial No. 223,954.

*To all whom it may concern:*

Be it known that I, GEORGE E. SAVAGE, a citizen of the United States, residing at Meriden, in the county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Water-Coolers, of which the following is a full, clear, and exact description.

My invention relates to refrigerating apparatus, and particularly to a water-cooler.

The object of this invention is to construct a cooler for holding water and ice, so that the water may be reduced in temperature and so that the cooler will be free from what is termed "sweating."

The invention consists in improvements the principles of which are illustrated in the accompanying single sheet of drawings. A main casing forms a chamber for ice which surrounds a tank for the water. A cover is provided for the ice-chamber and the water-tank and an auxiliary casing with an auxiliary cover provided externally of these, provision being made for the circulation of air between the main and supplementary casings for preventing sweating. Above the cooler is supported an auxiliary reservoir in the form of a water-bottle. This is supported on a yielding framework.

Figure 1 is a vertical section of the water-cooler, showing the water-bottle or auxiliary reservoir in side elevation. Fig. 2 is a plan view of the framework for supporting the reservoir.

1 indicates the water-tank, which is preferably formed of sheet metal coated with enamel inside and out.

2 is the ice-chamber, formed of suitable material and having double walls which form the main casing.

3 is a space between the inner and outer walls of the casing, forming the ice-chamber, which space provides thermal insulation. It may be, if desired, packed with suitable insulating material.

4 is an auxiliary casing which surrounds the main casing and prevents the outside air from contacting with and consequently precipitating moisture upon the outer side of the main casing.

5 is a base member in the form of a pan, which in this particular form of my invention serves to support the structure.

6 is a faucet or outlet connected with the water-tank 1, through which the water may be drawn off.

7 is an overflow-pipe leading from the ice-chamber within the main casing for carrying off the surplus of water from the melting ice.

8 is an opening into the pan 5, which may serve as the air-inlet to the pan, as well as a drain-pipe for a suitable tumbler-receptacle. (Not shown.) This taps the air-space below the main casing.

9 indicates one of a series of holes in the auxiliary casing 4, located near the top for permitting circulation of air and preventing the casing 4 from reaching too low a temperature.

10 is a cover, preferably formed with double walls, between which is a suitable insulating material. This cover has a central opening and rests upon the water-tank 1 and covers the top of the ice-chamber. The upper surface of the cover is preferably sloped off toward the circumference, as shown.

11 is an auxiliary cover which is supported by the main casing 2 and preferably of the form shown. This has a central opening and has its sides curved, so that moisture condensing upon the inner surface will drip upon the upper sloping surface of the cover 10, and hence gradually drip into the ice-chamber.

The frame shown in Fig. 2 consists of a lower ring 12 and an upper ring 13, connected by the arms 14 14. The arms 14 serve to support the upper ring 13 in a yielding manner and are preferably scroll-shaped, as shown.

15 is an auxiliary reservoir in the form of a water-bottle inverted with its neck extending into the top of the water-tank 1 and preferably having a shoulder centered by the ring 13 of the frame.

16 is a small tube which is preferably employed and carried by a suitable cork which fits within the neck of the bottle. The water within the reservoir 15 can hence flow down into the tank 1 until it reaches the level of the lower end of the tube 16 or the neck of the bottle in case the neck reaches into the tank. As water is drawn off from the tank 1 through the outlet 6 the upper level descends and permits the outside air to pass downward through the central openings in the auxiliary and main covers to take the place of the water which at the same time flows from the reservoir 15. The reservoir when filled, and particularly the larger sizes of reservoirs, is of considerable weight, and hence likely to be more readily damaged. The spring-like support afforded by the



frame, however, gives a cushion effect which avoids considerable difficulty.

In other forms of coolers previously made great difficulty has been encountered in the  
5 condensation of moisture on the outside. This is likely to oxidize even the finest nickel-plate unless the greatest care is taken to keep the outer surface dry. By my construction,  
10 however, the auxiliary casing 4 forms the outer visible portion of the cooler, while the moisture is condensed upon the outer surface of the main casing 2, and hence drips down into the pan 5.

The advantages of this construction will be  
15 apparent to those who are skilled in the art.

What I claim is—

1. In a water-cooler, the combination of a main casing forming an ice-chamber 2, a wa-  
20 ter-tank 1 mounted therein, a double-walled cover 10 for said ice-chamber and said water-tank, supported by said water-tank and hav-  
ing a central opening, an auxiliary cover 11 supported by the main casing and having a passage for free communication of the air be-

tween said covers with the outer air, and 25 means for supporting an inverted water-bot-  
tle with its neck within the opening in cover 10.

2. In a water-cooler, the combination of a main casing forming an ice-chamber 2, a wa- 30  
ter-tank 1 mounted therein, a cover extend-  
ing over said ice-chamber and said water-tank but having a central opening, a frame supported by the casing and formed of rings 12 and 13, with arms 14 14, connecting the 35  
same, and an inverted water-bottle having a shoulder resting upon and vertically support-  
ed by said ring 13 and having its neck extend-  
ing freely into the opening in said cover, but leaving a free communication with the outer 40  
air.

Signed at New York, N. Y., this 8th day of September, 1904.

GEORGE E. SAVAGE.

Witnesses:

L. VREELAND,  
ROBT. S. ALLYN.