(No Model.)

J. HARTMEYER & B. L. GRAY.

Water Cooler.

No. 231,717. **Patented Aug. 31, 1880.**

Fig. 2.

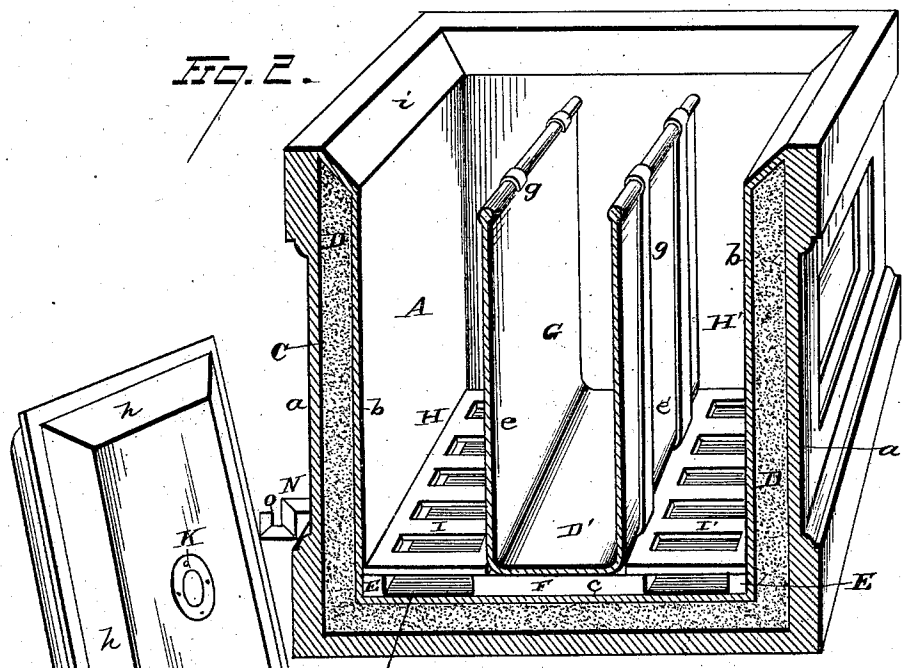
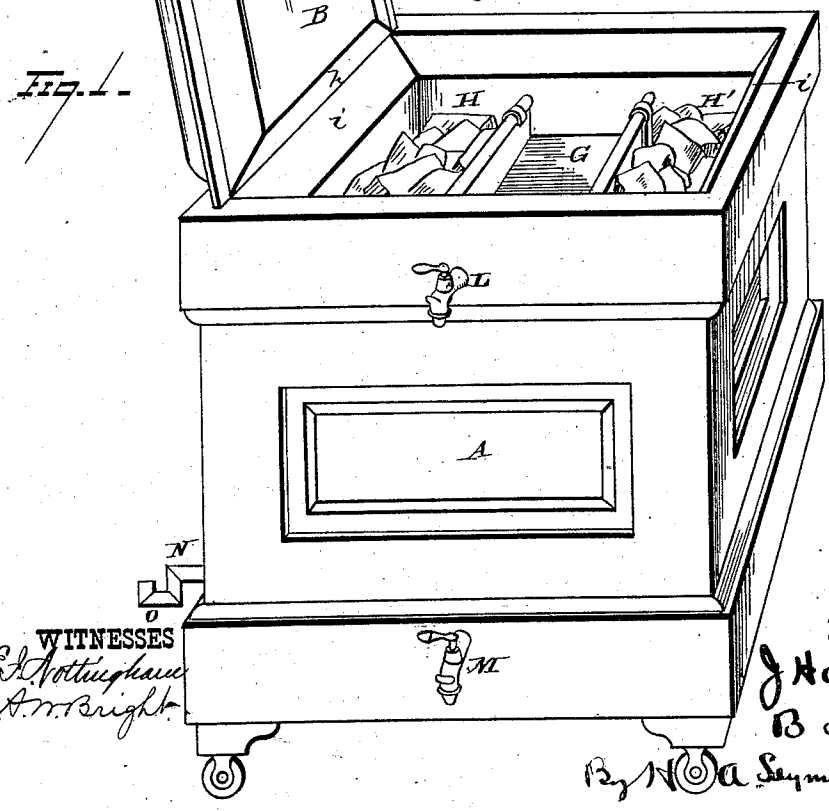


Fig. 1.



WITNESSES

E. L. Nottingham

A. M. Bright

INVENTORS

J. Hartmeyer.

B. L. Gray.

By Wm. A. Seymour ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN HARTMEYER AND BENSON L. GRAY, OF ZANESVILLE, OHIO.

WATER-COOLER.

SPECIFICATION forming part of Letters Patent No. 231,717, dated August 31, 1880.

Application filed July 1, 1880. (No model.)

To all whom it may concern:

Be it known that we, JOHN HARTMEYER and BENSON L. GRAY, of Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Water-Coolers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in water-coolers, the object being to provide a water-cooler of such construction that the ice and water may be retained in separate and independent receptacles, in order to prevent the too rapid waste of ice, and also to prevent the water from becoming impregnated with any impurities in the ice.

With these ends in view, our invention consists in a water-cooler embodying certain features of construction and combinations of parts, as will hereinafter be described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view, in perspective, of our improved water-cooler with the lid opened; and Fig. 2 is a view, in perspective, showing the lid and one side of the chest removed.

A represents a chest, and B the lid hinged thereto. The chest is constructed with double walls *a b*, which are separated to form an intervening space, C, which is filled with any suitable non-conducting material, D.

The inner wall, *b*, is made of galvanized iron or other suitable sheet metal, and upon its bottom *c* are placed the narrow cleats E, while at the central portion of the bottom are placed the short cleats F. A water-receptacle, G, is located in the center of the chest, and is constructed of a single piece of sheet metal bent into U-shaped form, the bottom D′ thereof being supported on the cleats F above the bottom *c* of the inner wall of the chest. The sides *e e′* are soldered at their edges to the sides of the inner sheet-metal walls of the chest. Thus the chest is subdivided into three separate compartments or receptacles by the single sheet-metal plate of which the ice-receptacle is formed, constituting the ice-receptacles H H′ and water-receptacle G. The sides of the sheet-metal water-receptacle are preferably provided with vertical strengthening-ribs *g*, to prevent them from bulging outward by the pressure of water exerted thereon.

Ribs *g* may be secured to the sides in any desired manner, or the sides of the water-receptacle may be corrugated to increase their strength and stiffness.

I I′ are grates, which are supported upon cleats E and F above the bottom *c* of the chest, thereby forming a water-chamber, J, which extends beneath the water-receptacle and over the whole surface of the bottom *c* of the chest.

The hinged cover B is provided with beveled outer edges, *h*, which fit correspondingly-beveled edges *i*, formed on the upper edge of the chest, and thus insure an air-tight joint when the cover is closed.

The cover is provided with a filling-aperture, K, through which water may be poured into the water-chamber without raising the cover.

A suitable plug or stopper is inserted in aperture, K to prevent warm outer air from entering the chest.

An overflow-cock, L, is attached to the upper portion of the chest, and connects with the upper portion of the water-receptacle.

By opening cock L the water-chamber may be filled through the cover without danger of causing the water to flow over into the ice-receptacles, as the water will escape through cock L when the water-receptacle is full, and thus indicate the quantity of water in the water-receptacle without necessitating the raising of the lid or cover. By closing the cock L the outer air is prevented from entering the water-receptacle.

A cock or faucet, M, connects with the lower portion of the water-receptacle, and is used for drawing the water therefrom.

N is a waste-pipe extending through the bottom of the chest and communicating with the drip-chamber J beneath the grates and water-receptacle, and serves to allow of the escape of the drip-water caused by the melting of the ice.

The outer end of waste-pipe N is U-shaped to form a trap, O, which is always filled with water, and prevents the admission of air to the chest.

It will be observed that the ice cannot come

in contact with the water, and therefore the water is not charged with any impurities in the ice. Again, the water is maintained at an even temperature, owing to the fact that the sides and bottom of the water-receptacle are subjected to the uniform and constant temperature of the ice. Further, a water-cooler constructed in accordance with our invention insures great economy in the use of ice, as the latter is kept insulated from the water, and will not melt away so rapidly as if it were immersed in the water; and owing to this fact it requires much less labor and attention in the care of the water-cooler, as it will remain cool and not require to be refilled for quite a long period of time.

The water-receptacle, instead of being placed in the center of the chest, may be located at one side of the chest or upon the top of the water-tank.

The water-receptacle, instead of being constructed of sheet metal, may be made of earthenware, and also the water-receptacle may be furnished with a cover having a filling-aperture which will register with the filling-aperture in the cover of the chest or tank, thereby enabling the water-receptacle to be filled without removing the cover.

Again, we preferably provide the cock M with a glass gage, which will serve to indicate the quantity of water in the water-receptacle without necessitating the lifting of the cover for such purpose.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a water-cooler, the combination, with a chest, of a water-receptacle located in the central portion of the chest and formed of a single piece of sheet metal having its side edges secured to the inner metal sides of the chest, substantially as set forth.

2. In a water-cooler, the combination, with a chest, of a water-receptacle located in the central portion of the chest, forming an ice-receptacle on opposite sides thereof, the side edges of the water-receptacle being secured to the inner metal sides of the chest, and grated bottoms located at the lower portions of the ice-receptacles, substantially as set forth.

3. In a water-cooler, the combination, with a metal-lined chest, of a water-receptacle and ice-receptacles having grated bottoms and located on opposite sides of the water-receptacle, said water-receptacle and grated bottoms being supported above the bottom of the chest to form an intervening drip-chamber, substantially as set forth.

4. In a water-cooler, the combination, with a metal-lined tank subdivided into a central water-receptacle and an ice-receptacle on opposite sides thereof and provided with an overflow-cock connecting with the upper portion of the water-receptacle, of a hinged chest-lid provided with a filling-aperture, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 24th day of June, 1880.

JOHN HARTMEYER. [L. S.]
BENSON L. GRAY. [L. S.]

Witnesses:
ORLANDO C. MARSH,
AUSTIN BERRY.