P. J. KROMER.

REFRIGERATOR.

No. 181,950. Patented Sept. 5, 1876.

Fig. 1.

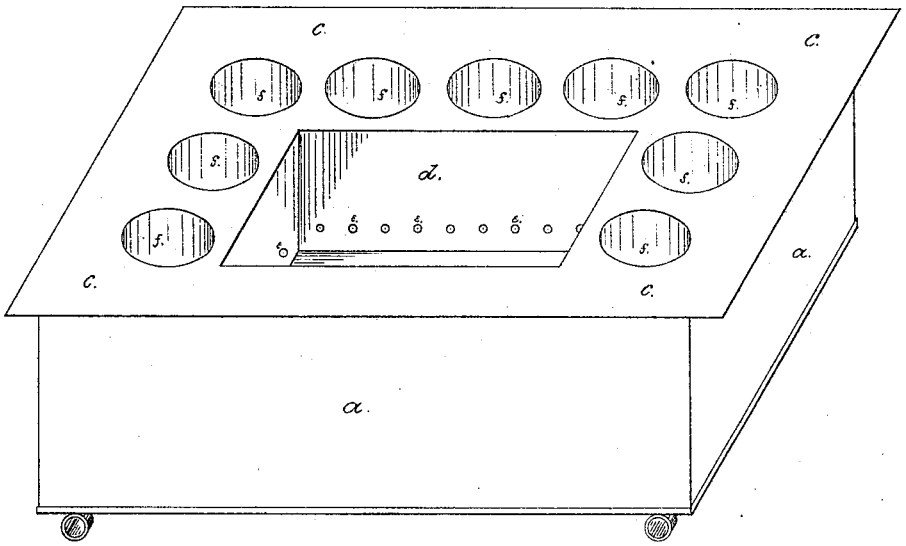
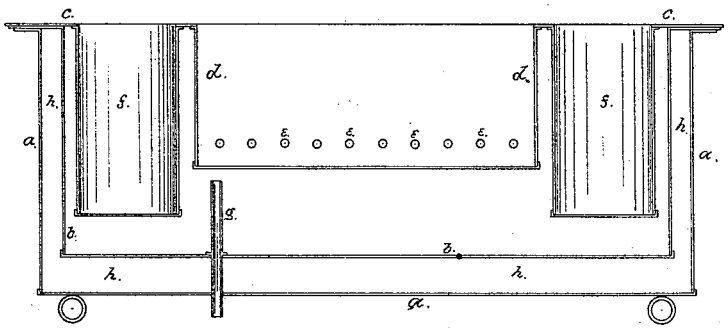


Fig. 2.



Witnesses.

Geo. J. Harriott

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UNITED STATES PATENT OFFICE.

PHILIPP J. KROMER, OF COLUMBUS, OHIO.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **181,950**, dated September 5, 1876; application filed June 22, 1875.

To all whom it may concern:

Be it known that I, P. J. KROMER, of Columbus, State of Ohio, have invented an Ice-Box for Cooling Liquids, of which the following is a specification:

The object of my invention is to keep liquids in bottles, such as are usually sold at restaurants, at a low temperature, and to protect the ice used for that purpose against the influence of the atmosphere by surrounding it with a non-conductor, as shown in the accompanying drawing.

This invention consists in the construction and novel arrangement of the removable or detachable flanged cases, being, respectively, the outer case, a middle case, between which and the outer case a non-conducting material may be placed, and an interior case, having a centrally-arranged ice-pocket and surrounding the same cylindrical pockets for the reception of bottles, said pockets extending downward into the cavity of the middle or drip-case, which is supported by its flange on the outer case, and, in turn, supports the inner case, substantially as hereinafter shown and described.

In the drawing, Figure 1 represents a perspective view of said ice-box; and Fig. 2 a cross-section.

a is a box made of copper, tin, or any suitable sheet metal; this box is open at the top. *b* is another box of the same material, but smaller in size, leaving, when inserted into box *a*, a space, *h*, of several inches between the sides and bottoms of the two boxes, for the reception of charcoal or some other non-conducting substance. Box *b*, when inserted into box *a*, is resting on the top edge or flange of the latter by means of a flange on top part of box *b*. *c* is a plate of the same material, resting on the top flange of box *b*. To this plate are secured a convenient number of tubes, *f*, of the same material, open on top, but closed on bottom. These tubes are the receptacles for the bottles containing the liquids. Plate *c* also carries a box, *d*, for the reception of ice, wherein ice in lumps may be used; or, in places where broken ice or shaved ice is needed, this may be deposited therein, and act as cooler. Box *d* is, near its bottom, provided with small holes *e e*, through which the water from the molten ice may find its way into box *b*. All tubes *f* and box *d* are inside of box *b* when the apparatus is put together. *g* is a small tube secured to the bottom of box *b*; it runs up in box *b* to a height extending several inches above the bottom of *f*, the receptacles for the bottles. The other end of tube *g* extends through the bottom of box *b*, space *h*, and also through the bottom of box *a*; it will carry away the water, which is collected in box *b*, from the molten ice when it reaches that height, leaving the cooler portion of said ice-water in box *b*.

It will be evident that the ice-water, which runs through holes *e e* out of box *d* into box *b* and surrounds tubes *f*, in which the bottles are deposited, will be kept at a low temperature on account of the non-conducting substance deposited in space *h* surrounding it, which will have a great saving of ice as result; and that also the bottles during this cooling-off process will remain perfectly clean and dry on the outside, because the ice-water will have no access into said receptacles for bottles. It will also be evident that the whole apparatus, being easily taken apart, can be cleaned with the greatest comfort.

I claim as my invention—

1. The bottle-refrigerator herein described, consisting of the outer flanged case *a*, the middle or drip-case *b*, having a marginal flange resting on the flange of the outer case, and the central depending inner case *c*, having the central depending perforated pocket *d*, and the surrounding cylindrical pockets *f*, said inner and middle cases being detachable from each other, substantially as specified.

2. In combination with the outer casing *a*, a spaced inner casing, *b*, and a removable lid, *g*, provided with a perforated ice-box, *d*, and depending pockets *f*, the drain-pipe *g* extending upward through casings *a b* above the bottoms of the pockets, substantially as specified.

3. The lid or cover *c*, provided with a central ice-box, *d*, and surrounding pockets *f*, in combination with the non-conducting casing *a*, having drip-pipe *g* extending upward beyond the base of the said pockets, substantially as specified.

PHIL. J. KROMER.

Witnesses:
G. J. MARRIOTT,
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