

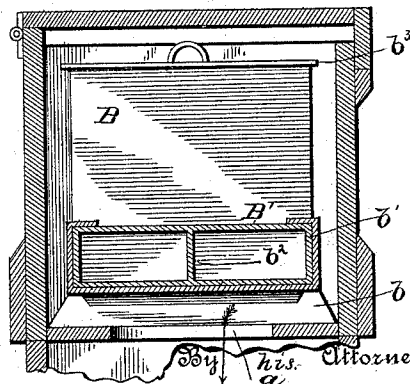
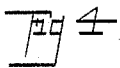
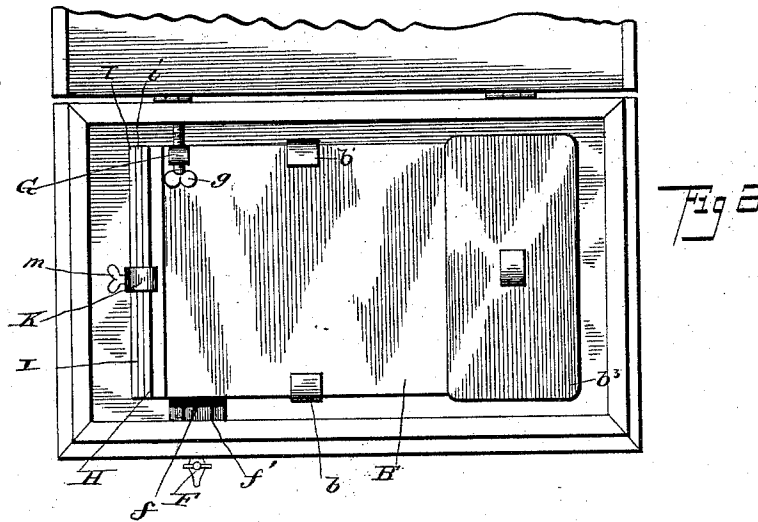
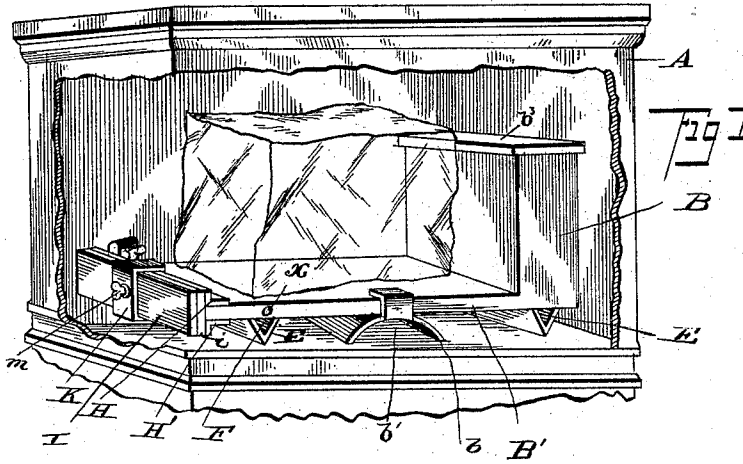
(No Model.)

E. W. RIDER.

WATER COOLER FOR USE IN REFRIGERATORS.

No. 476,314.

Patented June 7, 1892.



Witnesses

John Shaw
H. Bradford

Inventor

E. W. Rider

By *his* Attorney

L. Deane

UNITED STATES PATENT OFFICE.

EBENEZER W. RIDER, OF RACINE, WISCONSIN.

WATER-COOLER FOR USE IN REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 476,314, dated June 7, 1892.

Application filed July 17, 1891. Serial No. 399,843. (No model.)

To all whom it may concern:

Be it known that I, EBENEZER W. RIDER, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Water-Coolers, more especially for use in Refrigerators; and I 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 appertains to make and use the same.

Figure 1 is a perspective view showing this invention as in use in a refrigerator, the outer wall of the refrigerator being broken away for this purpose. Fig. 2 is a top plan view of the cooler in the refrigerator. Fig. 3 is a central cross-section of my cooler. Fig. 4 is a detail view showing the way in which the faucet is secured in position.

This invention is designed more especially for use in refrigerators for the purpose of cooling water to be used for drinking purposes, yet it may be used simply as a water-cooler in connection with heavy-walled box or outside covering; and its novelty consists in its shape, in connection with means by which it can be easily gotten into to cleanse, and also means or appliances by which it can be easily and quickly placed in the refrigerator and attached for use, all as will be more fully set out and explained, as well as pointed out in the claims, reference being had to the accompanying drawings.

Heretofore different devices of this kind have been made and used in which no plan for cleaning or device for attaching and detaching easily and quickly for cleaning both the cooler and refrigerator around and under the cooler has been constructed, so that the cooler and refrigerator could be easily kept clean and sweet.

In my device the end of the lower and thin portion of the tank is so arranged that it can be easily and quickly removed to clean the inside or thin portion of the tank, where without this it would be next to impossible for one to thrust in the hand or anything to clean out and keep sweet that portion of the water-cooler; also, the device for attaching it to the refrigerator is so arranged that in an instant

the cooler can be removed for cleaning and as readily replaced, a very important feature in a good and perfect cooler, as not only does any water-cooler need cleaning frequently, but under and around the cooler the refrigerator needs frequent cleansing to keep it clean and healthy, all of which is next to impossible for the common housewife or servant to do with all coolers I know of now in use.

In the accompanying drawings, A represents any refrigerator, and B the water-cooler, the same being L-shaped, the upwardly-extending portion being, say, four by ten inches, and say, ten inches high, and the lower horizontal portion B', extending from the bottom, being long and thin—say one and one-half inch thick, ten inches wide, and eighteen inches long, all according to the size of the bottom of the ice-chamber of refrigerator used and height of same. These measurements are of course merely given as illustrative, but not as limitations.

This cooler is placed in the ice-chamber of the refrigerator, the usual ice-rack having been removed, resting upon its short legs E on the bottom of the ice-chamber of the refrigerator, the thin or lower portion B' now being ready for use in place or capacity of ice-rack. The ice is laid upon this portion of the cooler, as shown in accompanying drawings. A faucet F is inserted through the side of the refrigerator and connects with the cooler at *x*, and is suitably fitted and fixed so that there will be no leakage. A gasket *f* is placed around the faucet next to the nut *f'*. About opposite the hole or point *x* where the faucet is placed a bar or lug G is attached to the cooler, projecting above sufficiently to receive a thumb-screw *g*, which passes through the lug just above the top side of the cooler and pointing outward. The outer end of said thumb-screw presses against the side of the refrigerator opposite the faucet and forces the cooler hard against the nut *f'* on the faucet, with the gasket *f* or packing on the face, thus making a perfect water-tight connection. This structure also insures a rigid or substantially rigid position of the cooler in the refrigerator. When desired, by turning the said screw backward, the cooler is loosened and

easily and quickly removed. The refrigerator has any usual drip-exit *a*. In this instance it is protected by the bent piece *b*, held in place by bent ends *b'*. The part *B'* of the cooler has an internal stiffening-strip *b*².

It will be observed that in use the portion *B'*, being sustained above the floor of the refrigerator on legs *F*, and also being held substantially rigid in position by means above described, constitutes in fact a sort of ice-rack, the water-drip readily falling upon the floor of the refrigerator and finding its way out through the aperture *a* in the bottom.

In order that the thin portion of the cooler can be gotten at or into to clean it, first the end is provided with a short flange *H*, projecting from the edge on the upper side, and one *H'* on the lower side, with the whole end of the cooler open. Over this end I place a covering-plate *I*, sufficient to cover the whole opening, and then I place a clamp *K* outside of said plate, its ends passing around over behind the flanges *H H'* on the end of the tank or cooler. The plate *I* is provided with a gasket *i* on the inside surface, that fits against the face or end of the cooler, or any packing may be used for this purpose. Now by means of a set-screw *m*, passing through the clamp

from outside and striking the face-plate, there is formed a perfect water-tight joint.

Water is introduced into the cooler by removing the cover *b*³ from the top of its larger end. Any suitable drip-pipes may be provided for the chamber of refrigerator.

I claim—

1. The above-described water-cooler, L-shaped, its larger portion provided with a cover, and the open end of its smaller part provided with packed cover clamped in place, substantially as described.

2. In combination with a refrigerator having a suitable water-faucet *F* and gasket *f* about the same, the above-described water-cooler, having a lug *G* and thumb-screw *g* located opposite the gasket, whereby the cooler may be forced against the gasket, so as to make a tight joint and hold the cooler in position, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

EBENEZER W. RIDER.

Witnesses:

ERASTUS C. PECK,
ALBERT L. ANDERSON.