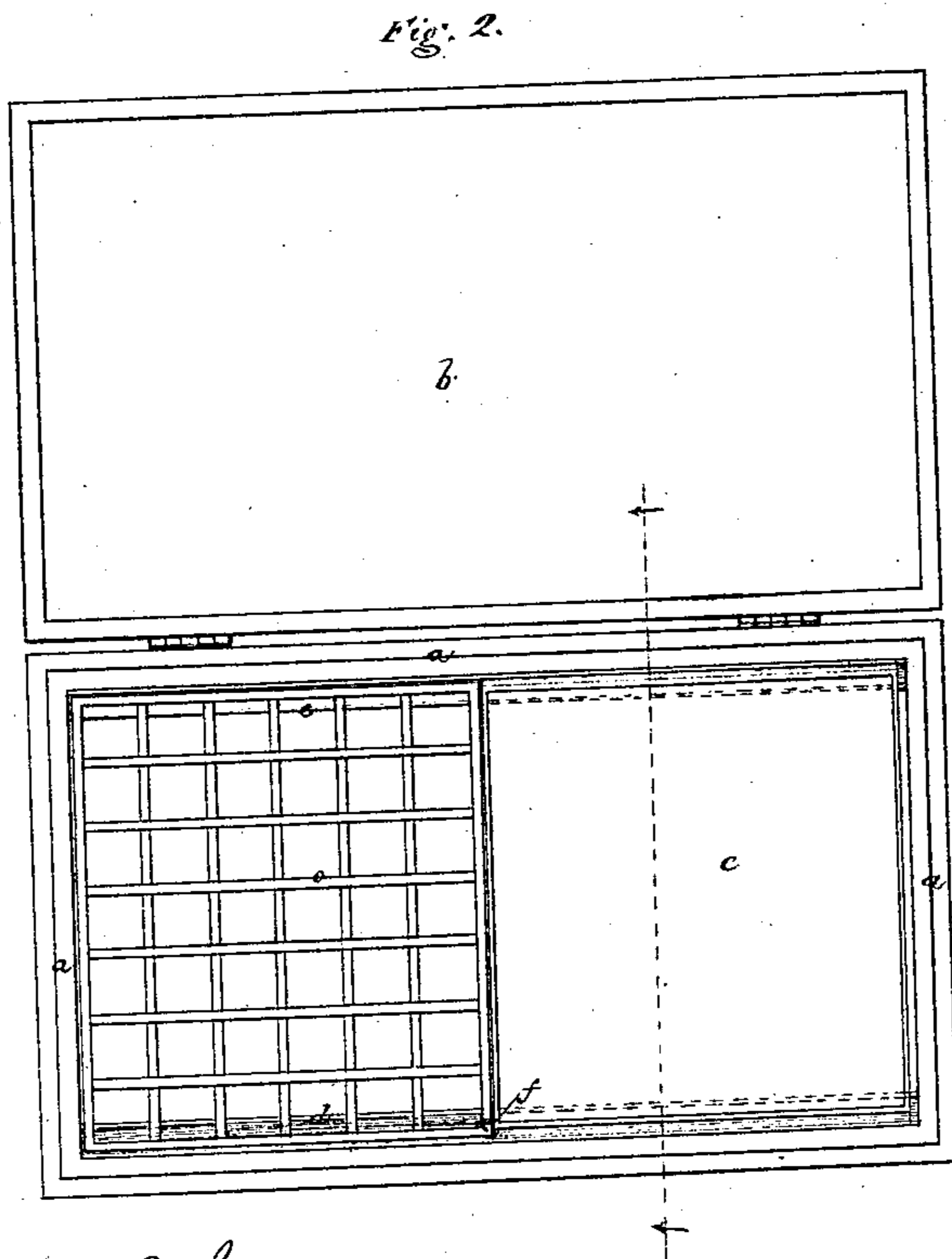
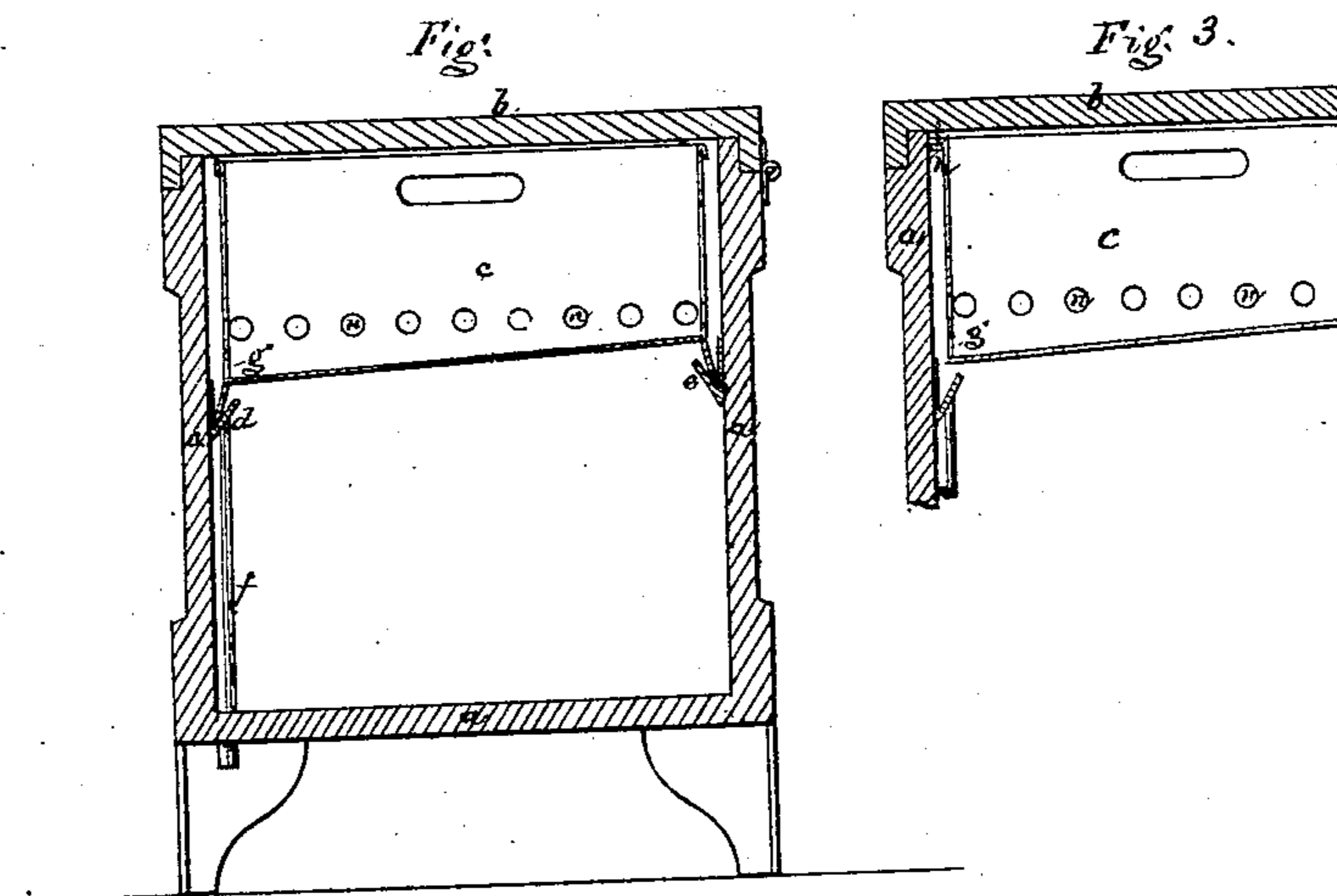


G. W. WALKER.

Refrigerator.

No. 102,735.

Patented May 3, 1870.



Witnesses *W. B. Crosby*
C. Warren Brown Inventor,
Geo. W. Walker.

United States Patent Office.

GEORGE W. WALKER, OF MALDEN, MASSACHUSETTS.

Letters Patent No. 102,735, dated May 3, 1870.

IMPROVED REFRIGERATOR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE W. WALKER, of Malden, in the county of Middlesex and State of Massachusetts, have invented Improvements in Refrigerators; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention relates to improvement of the plain simple box or chest refrigerator, which is opened and closed at its top, and receives the ice and food in the same chamber.

In such refrigerators the ice is commonly placed at the bottom, and food, &c., is either placed directly upon the ice, or is supported on shelves located over the ice, so that, to get at a piece of ice for use on the table or elsewhere, a good portion of the matter placed over the ice has to be disturbed, and even then it is difficult to separate a fragment from a large piece of ice as it rests on the bottom of the chest. Moreover, as the ice and water which proceeds from it are in direct contact with the bottom and sides of the chest, it has to be lined with a water-tight metallic casing, which adds to the cost of the refrigerator very materially.

My invention consists in the removable arrangement within a chest refrigerator, opening at the top, of an ice-tray in the upper part, upon ways, on which, preferably, it can slide from one toward the other end of the chest, when combined with a drip-trough and a conductor, arranged to catch and carry off the water proceeding from the ice.

The drawings show, in Figure 1, in sectional elevation, a refrigerator embodying my invention, the section being taken on the line *z z*, seen in Figure 2, which is a plan of said refrigerator with the cover opened to exhibit the interior arrangement.

The body *a* and cover *b* may be made in any well-known way, and of any approved material best adapted for non-conduction and radiation.

Within the body *a*, and near its top, is a tray, *c*, preferably of metal, which is mounted on ways *d* and *e*, formed as troughs, so that the position of the tray can be shifted in the chest by sliding it along from one to the other end.

These ways may be made as troughs, as seen in fig. 1, in which case they, or one of them, will serve to receive and conduct the water which results from the melting of the ice placed in the tray, which water flows off through a tube, *f*, into a drain-pipe or any suitable receptacle beneath the refrigerator.

If the bottom of the tray is inclined, as shown, then but one such tube is needed, for the water will all flow in one direction over the bottom of the tray, and will escape from it through the holes at *s*. If the bottom of the tray is level, or is inclined downward from a centre line toward both the front and rear of the chest, then two conducting-tubes, *f*, will be required. The single tube and inclination, as shown, is, however, sufficient.

Instead of having the front and back lower edges of the tray project downward into the troughs *d* and *e*, slides *h* may be placed, as seen in Figure 3, near the top of the chest, on which flanges *i* from the tray rest, in which case the trough *d* needs to extend only little more than half the length of the chest.

The tray is best made with handles, or with handle-holes, as seen in fig. 1, by which it may be lifted out of and into the chest, and with holes, as seen at *n n*, through which air, cooled by contact with the ice in the tray, can pass down to the bottom of the chest, taking the place of warmer air there located.

It will be seen how, in the arrangement of the tray upon ways, and at the top of the chest, and occupying but part of its length, it may be moved so as to get easily at the contents in the lower part of the chest, at either end. It will also appear how easily the ice is got at for use outside of the chest, and how the chest and its contents will remain dry.

Another tray or basket, *o*, may rest on the same ways that support the ice-tray, which basket *o* must be removed to get at the space below, and to permit movement of the ice-tray from end to end of the chest.

When the drip-trough does not extend the full length of the chest, and when it is arranged to slide on ways above the short drip-trough, then the hole in the tray must be made at or near one corner of the tray, so that in any position of the ice-tray the water-escape hole therein will be over some part of the drip-trough.

I claim an ice-chest made to open and close at the top, when provided with an ice-tray adapted to be slidden on ways from end to end of the chest, and removably arranged within the chest, and furnished with a drip-trough or troughs, and a conducting-pipe or pipes, substantially as and for the purpose specified.

GEO. W. WALKER.

Witnesses:

J. B. CROSBY,
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