

E. Perkins.
Refrigerator.

N^o 106,401.

Patented Aug. 16, 1870.

Fig. 1.

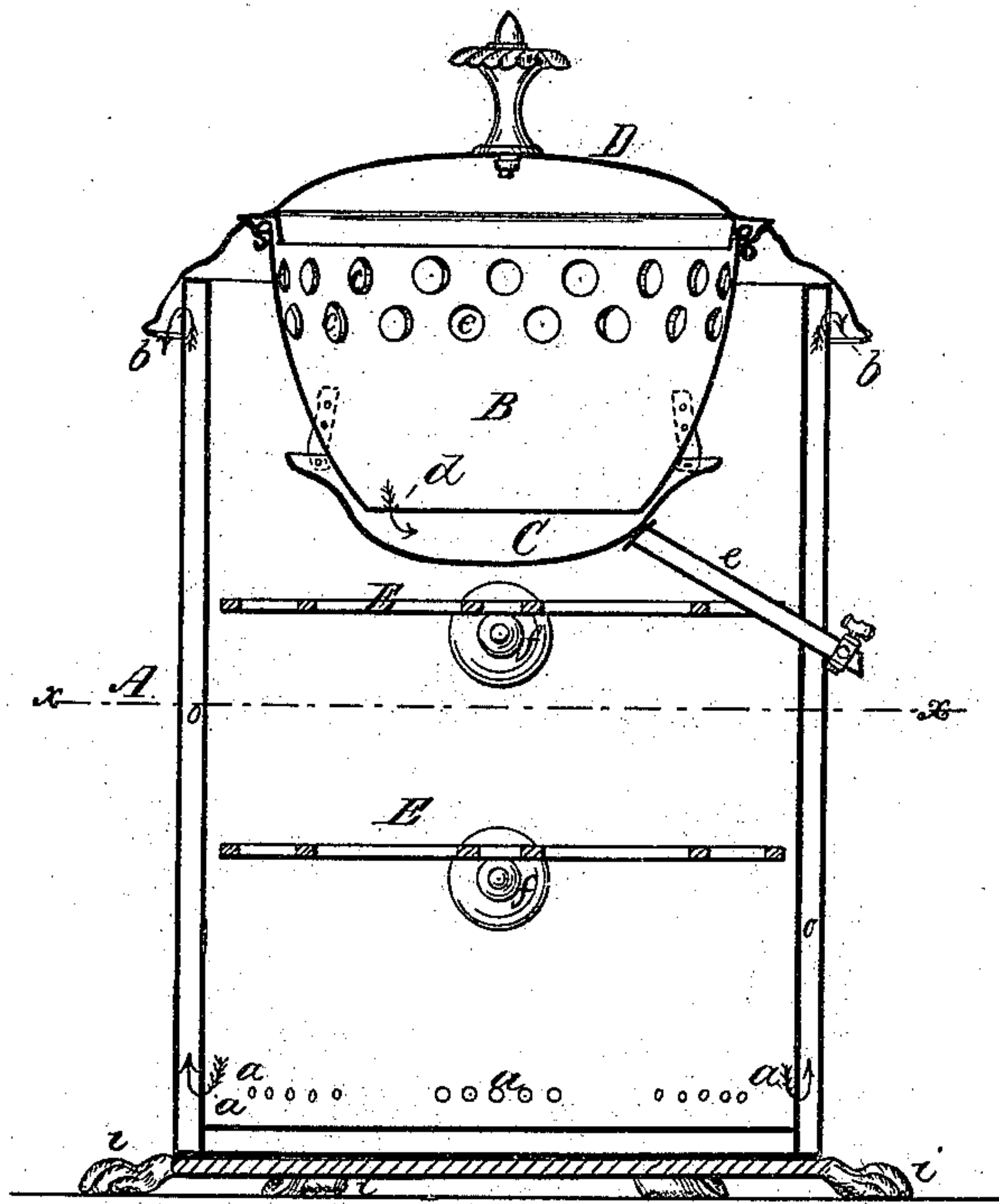
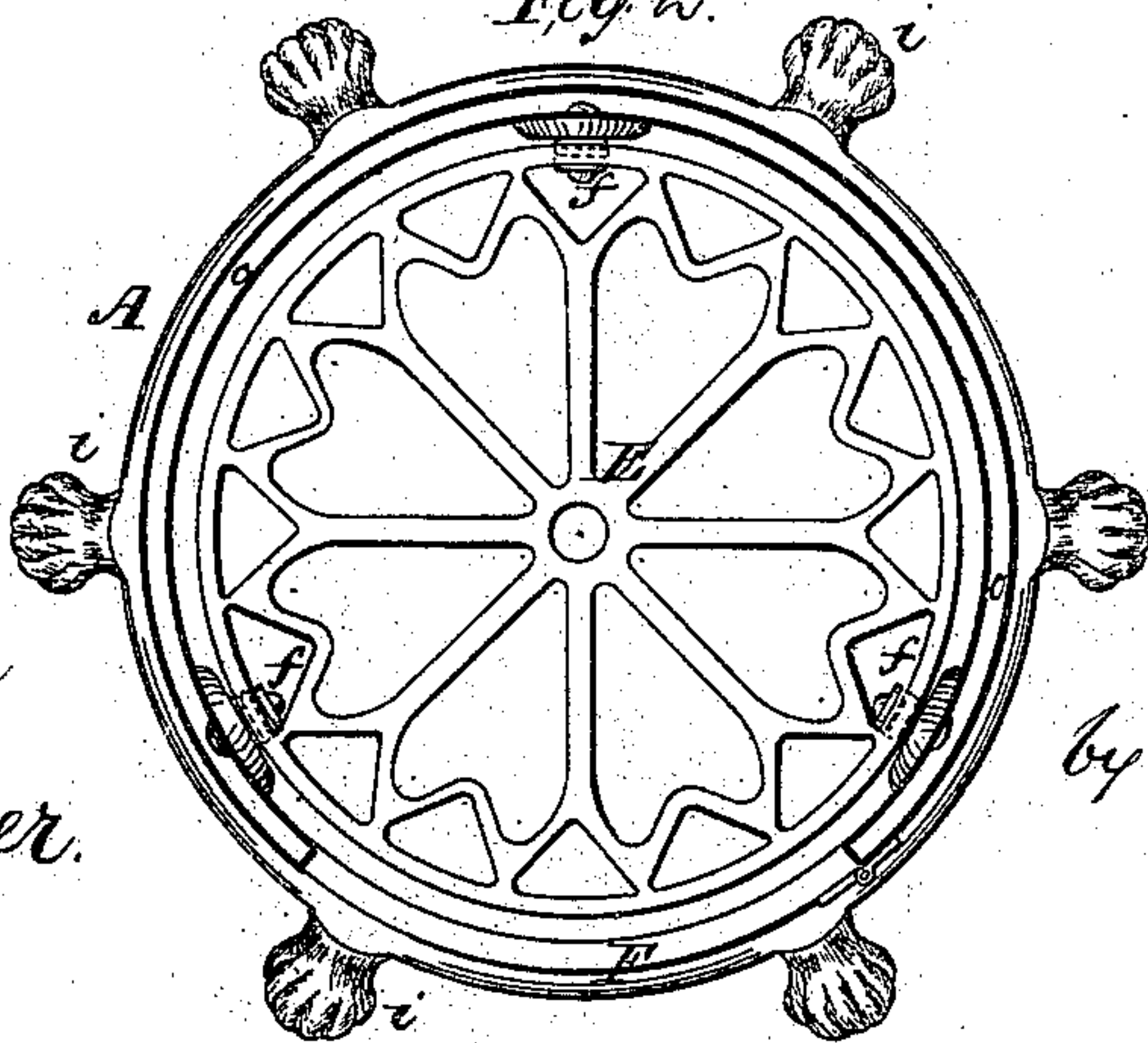


Fig. 2.



Witnesses:
Phil. T. Dodge
H. J. Sommer.

Inventor:
E. Perkins
by Dodge & Munn
his attys.

United States Patent Office.

ELIAB PERKINS, OF FOND DU LAC, WISCONSIN.

Letters Patent No. 106,401, dated August 16, 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, ELIAB PERKINS, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Refrigerators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to a refrigerator for household use; and

It consists in a novel manner of constructing and arranging the same, as hereinafter described.

In the drawing—

Figure 1 is a vertical section through the center of my refrigerator, and

Figure 2 is a horizontal cross-section of the same, taken on the line *x x* of fig. 1.

In constructing my refrigerator, I first provide a cylindrical case or body, A, made of sheet metal with double concentric walls, leaving an air-space of about an inch between the two walls, as shown in figs. 1 and 2.

The lower end of the body I provide with a hollow double bottom, and mount it upon short feet or legs, *i*, to insulate it from the floor, as shown in fig. 1.

In the upper end of the body I suspend an ice-basket, B, of nearly equal diameter with the body, and having in its bottom a small hole, *d*, and near its upper edge a series of openings, *c*, communicating with the surrounding chamber.

Under the ice-basket B, I suspend a water-pan, C, to receive the water resultant from the melting of the ice in the basket.

To the water-pan I connect a small pipe, *e*, passing through the walls of the body and discharging on the outside, as shown in fig. 1.

The ice-basket I also provide with a cover, D, which is removed to allow the introduction of ice, but which, when in position, completely closes the upper end of the body A, as shown in fig. 1.

Through the inner wall, near the bottom of the chamber, I make a small opening, *a*, and through the outer wall, near the top, I make openings, *b*, as clearly shown in fig. 1.

Inside of the chamber I place circular skeleton shelves, F, supported at their outer edges by rollers, *f*, which are secured to the wall, as shown in figs. 1 and 2.

Through one side of the body A, I make an opening and provide it with a hinged door, F, through which

access is had to the chamber, this door being clearly shown in fig. 2.

The articles to be refrigerated are introduced through the door F, and are placed either upon the shelves E or upon the bottom of the chamber.

The shelves E may be turned around freely on the rollers *f*, so as to bring any point opposite the door F, thus enabling articles to be removed from the back of the shelves without disturbing or removing those in front.

The air in the upper part of the chamber becoming cooled by the ice, descends to the lower portion and passes out through the openings *a* into the air-space *o* between the walls, and, as it becomes heated, ascends, and passes out through the openings *b*, as shown by the arrows on the drawing. In this manner a constant circulation of fresh air is maintained throughout the refrigerator, serving to keep the contents cool and sweet.

The shelves E may be made of cast metal, as shown, or of wire or wood, always making them open, to permit the free circulation of air.

The water from pipe *e* may be allowed to run off as waste, or a cock may be applied to the outer end of the pipe, and the water retained for drinking purposes. When the water is to be used for drinking, a filter may be introduced in any suitable manner between the ice-basket and the water-pan.

By supporting the shelves upon rollers in the manner described, dishes or articles of their full size can be placed on them, which cannot be done where the shelves are mounted on a central shaft.

The top and bottom I make of cast-iron, enameled, to prevent rusting.

The inside walls, when made of zinc, I coat with a preparation of shellac, which prevents the oxidation of the zinc, or the accumulation thereon of any sediment, which would otherwise tend to render the air foul and taint the articles contained in the refrigerator.

If preferred, the body may be made of sheet-iron, enameled all over, which prevents rust.

Having thus described my invention,

What I claim is—

1. A refrigerator, consisting of the circular body with the hollow walls, and the openings *a* and *b*, with the ice-basket B and cover D, all constructed and arranged to operate substantially as described.

2. The circular shelves, mounted on rollers *f*, attached to the inside wall of the refrigerator, so that each shelf can be turned independent of the others.

E. PERKINS.

Witnesses:

JOHN WALKER,
J. R. SMITH.