No. 615,942.

Patented Dec. 13, 1898.

G. L. WYMAN. REFRIGERATOR.

(Application filed Nov. 6, 1897.)

(No Model.)

Fig. 2

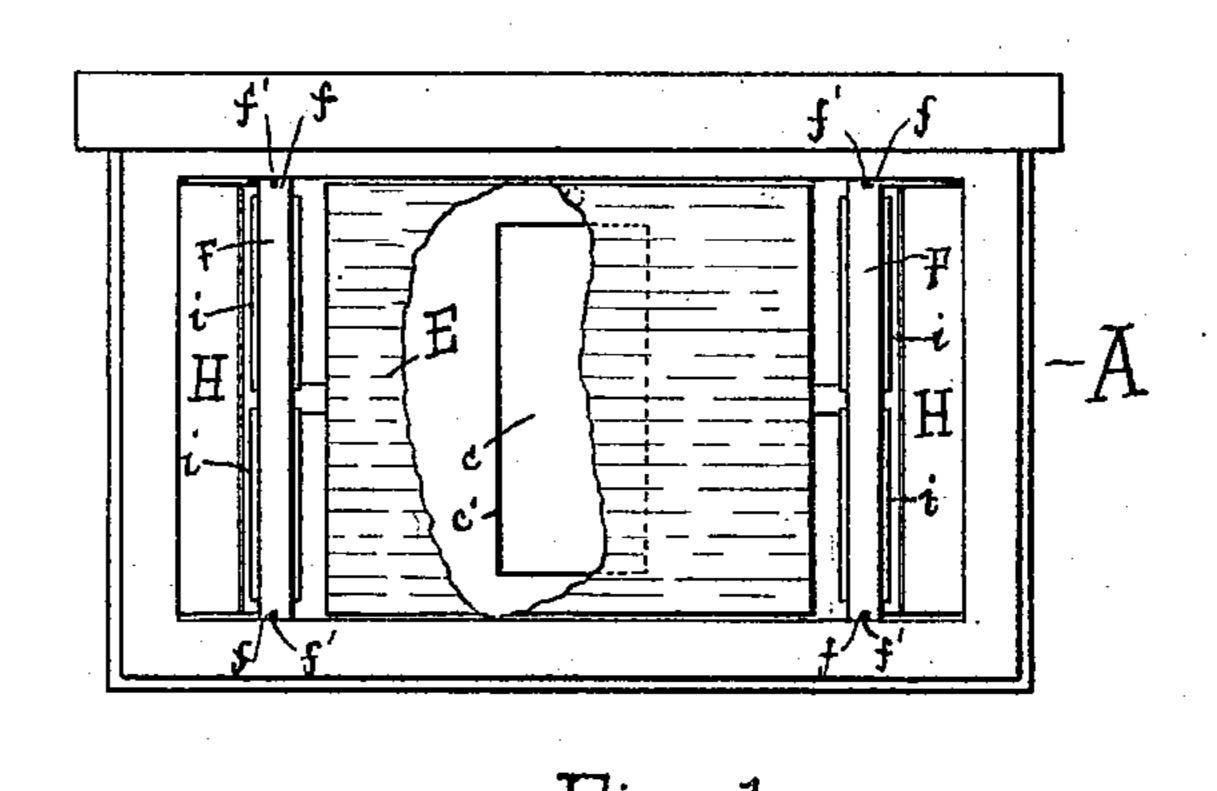
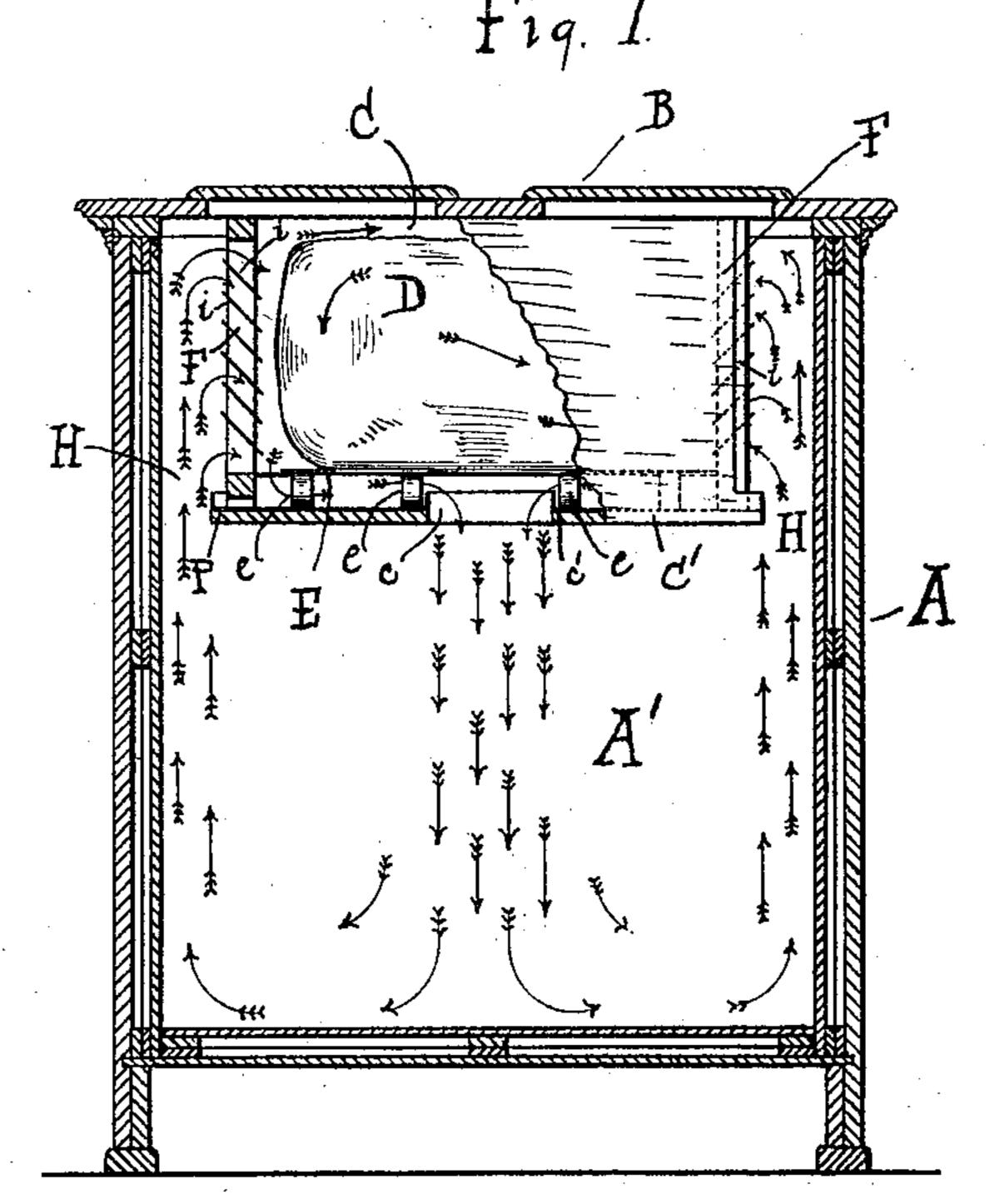


Fig.3

Fig.5.



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GEORGE L. WYMAN, OF OSHKOSH, WISCONSIN, ASSIGNOR TO THE MORGAN COMPANY, OF SAME PLACE.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 615,942, dated December 13, 1898.

Application filed November 6, 1897. Serial No. 657,674. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. WYMAN, a citizen of the United States, residing at Oshkosh, in the county of Winnebago and State of Wisconsin, have invented certain new and useful Improvements in Refrigerators; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 My invention relates to improvements in refrigerators; and the objects of my invention are, first, to provide a simpler and more adequate means of circulation of air within the refrigerator; second, to more effectually collect the drip and prevent sweating, and, third, to provide a means of readily cleaning the parts.

In the accompanying drawings, Figure 1 is a vertical section of my refrigerator with a portion of the ice-chamber cut away. Fig. 2 is a top view with the cover removed and a portion of the ice-grate cut away. Fig. 3 is a side view, Fig. 4 an end view, and Fig. 5 a top view, of the removable slatted ends of the ice-chamber.

Similar letters refer to similar parts in each view.

A represents the box; A', the provisionchamber; B, the top door or cover; C, the 35 ice-chamber, and D the ice. The bottom of the ice-chamber C' is provided with a large central opening c for the downward passage of the cold air from the ice-chamber C to the provision-chamber A'. An upwardly-extend-40 ing flange c' is provided around the edge of this opening to prevent the drip from the ice from passing through the opening. The drip is collected in the pan P and passes off in any suitable and approved manner the same as 45 has been heretofore known and used. The ice tray or grate E is removable and is supported above the bottom of the ice-chamber by the supports e e e, &c. The air circulates in the directions indicated by the arrows in 50 Fig. 1. The cold air from the ice-chamber descends through the central opening c and l

passes downwardly into the provision-chamber A', and then ascends through the warmair flues H H on each side and passes between the slats i i i i, &c., in the removable end 55 pieces F F into the ice-chamber.

I regard as an important feature of my invention the removable slatted ends of the icechamber F F at each end. These are composed of wooden frames provided with in- 60 clined grooves into which the slats i i i i, &c., slide, so as to be readily removable from the frame. The end pieces F F are provided with grooves ff upon each side which inclose corresponding strips f'f', attached to the box, 65 and slide thereon. These end pieces slide vertically where a box having a top lid or cover is employed, as shown in the drawings; but it is obvious that they would be arranged to slide horizontally where the cover or lid to 70 the ice-chamber is provided upon the side of the box.

It will be observed that the ends to the icechamber F F are readily removable and that the slats i i i i, &c., are also removable from 75 the end pieces, thus affording a ready means of cleaning where the greatest condensation occurs. The slats i i i i, &c., are preferably constructed of metal and inclined inwardly, so that the condensation or drip is carried 8c into the ice-chamber at each end and caught by the pan P. The downward inclination of the slats toward the center also serves to break and diverge the current of air and cause condensation upon the slats and precipitate 85 the moisture from the warm air, permitting it to drip down the sides within the ice-chamber into the pan P. I regard as an important feature of my invention this diverging of the air-current to precipitate the moisture at 90 the place desired, and I have found from actual use of my invention that the under side of each metallic slat i i i i, &c., is constantly covered with condensation, which runs down and drips from the lower edge into the inte- 95 rior of the ice-chamber.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is—

1. In a refrigerator, an ice-chamber provided with a pan for collecting the drip having a large central opening surrounded by an

upwardly-extending flange, removable slatted end pieces to the ice-chamber consisting of removable frames having grooves inclining downwardly toward the interior of the ice-chamber to receive the metallic slats and a series of metallic slats adapted to be inserted in and removed from the grooves substantially as shown.

2. In a refrigerator, the combination with the inclosing box, of a provision-apartment, an ice-chamber above the provision-apartment provided with removable slatted end pieces and a large central opening in the bottom for the downward passage of the cold air to the provision-apartment, warm-air flues leading from the provision-apartment contiguous to the end of the ice-chamber for the upward passage of warm air along the side and through the slatted ends of the ice-chamber, to the interior of the ice-chamber, sub-

3. In a refrigerator, the combination with the inclosing box, of a provision-apartment, an ice-chamber above the provision-apartment ment provided with removable slatted ends, a large central opening in the bottom for the downward passage of cold air to the provision-chamber, an upwardly-extending flange

stantially as shown.

around the side of the central opening, warmair flues leading from the provision-chamber 30 contiguous to each end of the ice-chamber for the upward passage of the warm air along the side and through the slatted ends to the interior of the ice-chamber, substantially as shown.

4. In a refrigerator, the combination of a suitable outer casing having a provision-chamber, an ice-chamber arranged above the provision-chamber, warm-air flues between the end walls of the ice-chamber and the outer 40 casing and communicating with the provision-chamber at their lower ends, end walls to the ice-chamber contiguous to the hot-air flues, each wall comprising a removable frame having spaced metallic slats which are inclined 45 downwardly toward the interior of the ice-chamber and are adapted to arrest the ascent of the warm air and direct the same and the condensation forming on the slats into the ice-box, substantially as described.

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

GEORGE L. WYMAN.

Witnesses:

H. L. FINCH, F. J. MCKENNEY.