

No. 676,071.

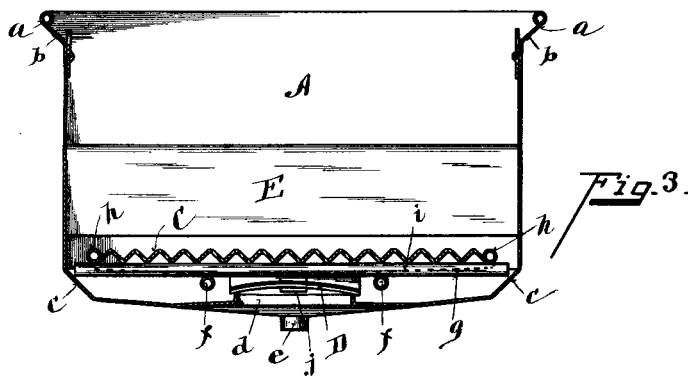
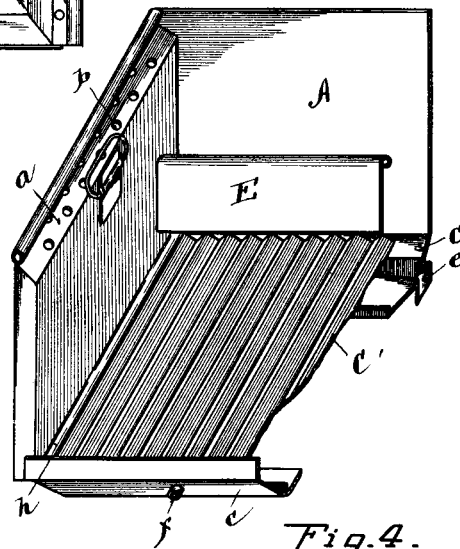
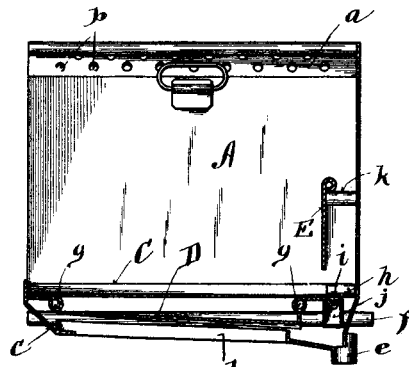
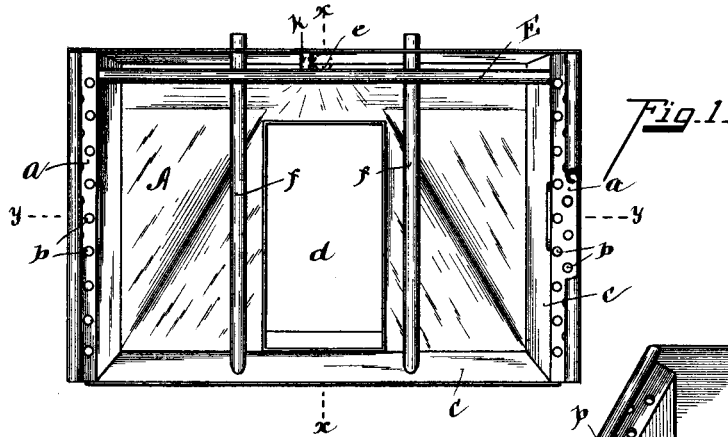
Patented June 11, 1901.

J. M. MARTIN.

ICE PAN AND RACK FOR REFRIGERATORS.

(Application filed Feb. 25, 1901.)

(No Model.)



Witnesses

Oliver B. Kaiser  
Pearl M. Michael

Inventor

James Monroe Martin  
By Wood & Wood.  
Attorneys

# UNITED STATES PATENT OFFICE.

JAMES MONROE MARTIN, OF ANDERSON, INDIANA, ASSIGNOR TO THE  
WILKE MANUFACTURING COMPANY, OF SAME PLACE.

## ICE PAN AND RACK FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 676,071, dated June 11, 1901.

Application filed February 25, 1901. Serial No. 48,756. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES MONROE MARTIN, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Ice Pans and Racks for Refrigerators, of which the following is a specification.

My invention relates to an improved ice pan and rack for the ice-boxes of refrigerators, having for its object the forming of air passages and chambers upon all sides of the ice supported on the rack, with means for providing a most efficient air circulation through and between the said several air-compartments.

The features of my invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a top plan view of the ice-pan with rack removed. Fig. 2 is a section on line *xx*, Fig. 1, showing the rack and its parts. Fig. 3 is a section on line *yy*, Fig. 1, showing the rack in position. Fig. 4 is a perspective view of a section of the ice pan and rack.

*A* represents the ice-pan, the upper ends of the sides of which, *aa*, are bent outwardly, so as to form an air-compartment between the sides of the pan and the interior sides of the ice-box. These bent side faces *aa* are provided with air-holes *bb*, which allow a circulation of air around the outsides of this pan. The front and sides of the bottom of the pan are inclined inwardly, forming a marginal air-jacket around the bottom of the pan, as shown at *c*, Figs. 2 and 3. The bottom of the pan is provided with the central air-opening *d*, as shown in Fig. 1; also, the rear side of the ice-pan bottom is formed into a drain *e*. (See Fig. 1.) Passing through the pan from front to rear, just above the bottom, are the tubes *ff*, projecting beyond the rear wall of the pan an inch, possibly, as shown in Figs. 1 and 2. This prevents the pan from being set squarely against the back of the ice-box and forms an air-cushion between the rear walls of the pan and the ice-box. These tubes are open at each end, and so provide for air circulation from the air-jacket in rear of the pan to the air-jacket in

front of the pan. These tubes convey currents of air directly under the ice, so as to circulate the cooled air. These tubes *ff* form a support for the ice-supporting rack or tray *C*. This tray has the supporting-tubes *gg* transverse to the tubes *ff* of the ice-pan and resting thereon, as shown in Figs. 2 and 3. Downwardly projected from these tubes *gg* is a trap-door *D*, fitting over the air-opening in the bottom of the pan, as shown in Figs. 2 and 3. The tray consists of a corrugated sheet of metal secured upon the tubes *gg*. Preferably these tubes *gg* are formed of short sheets of metal formed into tubes at their lower ends, their upper ends being straightened out to form shelves, forming the front and rear supports for the corrugated sheet of metal forming the floor of the rack. The shelf portion of the metal of the front tube is projected upward at its extreme front end and closes the ends of the channels formed in the tray by the corrugations. The tray is set slightly inclined toward the rear, so as to drain off the water. The shelf portion of the sheet metal forming the rear tube *g* is formed into a depending trough extending across the rack from side to side just under the draining rear edges of the channels formed by the corrugations. This construction will be seen from Fig. 2. The extreme sides of the rack are formed by the tubes *hh*, which project rearwardly beyond the rack, possibly an inch, and abut the rear wall of the ice-pan. This prevents the rack from being set squarely against the rear wall of the ice-pan and forms an air-space at this point. The trough *i*, formed under the rear ends of the channels of the rack, is provided with a drain-pipe *j*, engaging over the drain-pipe *e* in the bottom of the pan.

*E*, Figs. 2 and 4, represents a bumper secured to the opposite sides of the pan about midway of its height and set out possibly an inch from the rear wall of the pan, and preferably further supported by a prop *k*, projected from the middle of the rear wall of the ice-pan. This bumper not only prevents the insertion of the ice from injuring the rear wall either of the ice-pan or of the refrigerator, but forms an air-space between the cake of ice and the rear of the pan.

It will thus be seen that the ice-pan is provided with air-compartments upon each side and in the rear and that the cake of ice supported on the rack is also provided with air-encompassing spaces. The pan is detached from the box and the rack from the pan, and access is afforded for most perfect sanitation at all times. The parts are all formed of sheet metal, which is cheap and durable.

10 The results in cleanliness, preservation of the ice, the assurance of circulation of cold dry air within the refrigerator, and the increased duration of the ice-box when thus equipped are greater than would seem possible from the simple nature of the construction involved.

Having described my invention, I claim—

15 An ice-pan for the ice-box of a refrigerator, a concave bottom, metallic tubes traversing

said concave portion and terminating in rear 20 of the pan, forming a space between the pan and the ice-box, an air-opening in said bottom, a rack adapted to be supported on said tubes out of contact with the rear wall of the pan, a trap-door depended from said rack 25 adapted to cover said air-opening in the pan-bottom, and a bumper in the ice-pan whereby air-spaces are formed between the pan and the box, and pan and ice cake, and the rack and pan, for a perfect air insulation and circulation, substantially as specified. 30

In testimony whereof I have hereunto set my hand.

JAMES MONROE MARTIN.

Witnesses:

OLIVER B. KAISER,  
PEARL McMICHAEL.