No. 621,645. Patented Mar. 21, 1899.

L. W. FISH.

REFRIGERATOR.

(Application filed Sept. 6, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

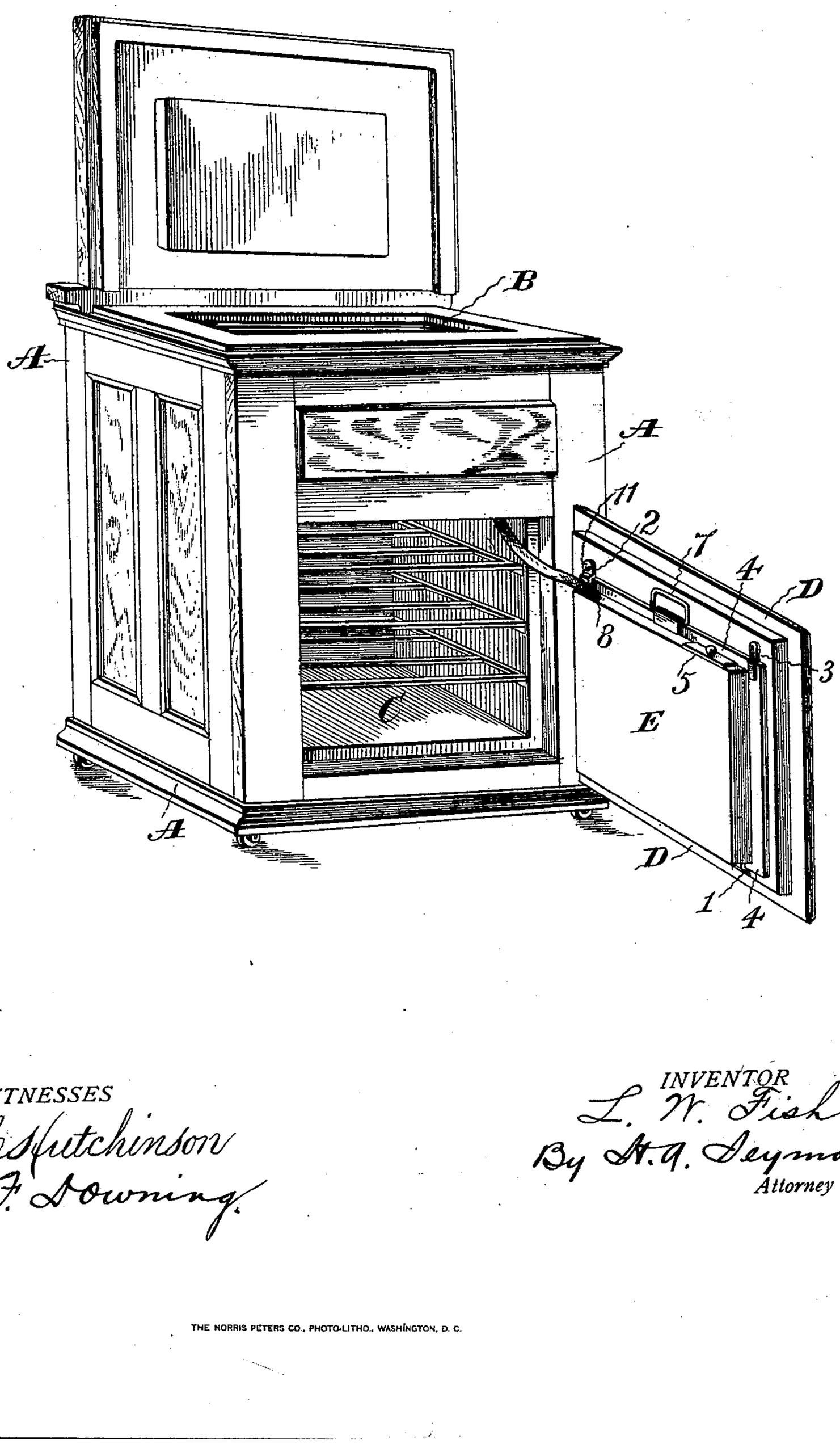

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Fig. 2.

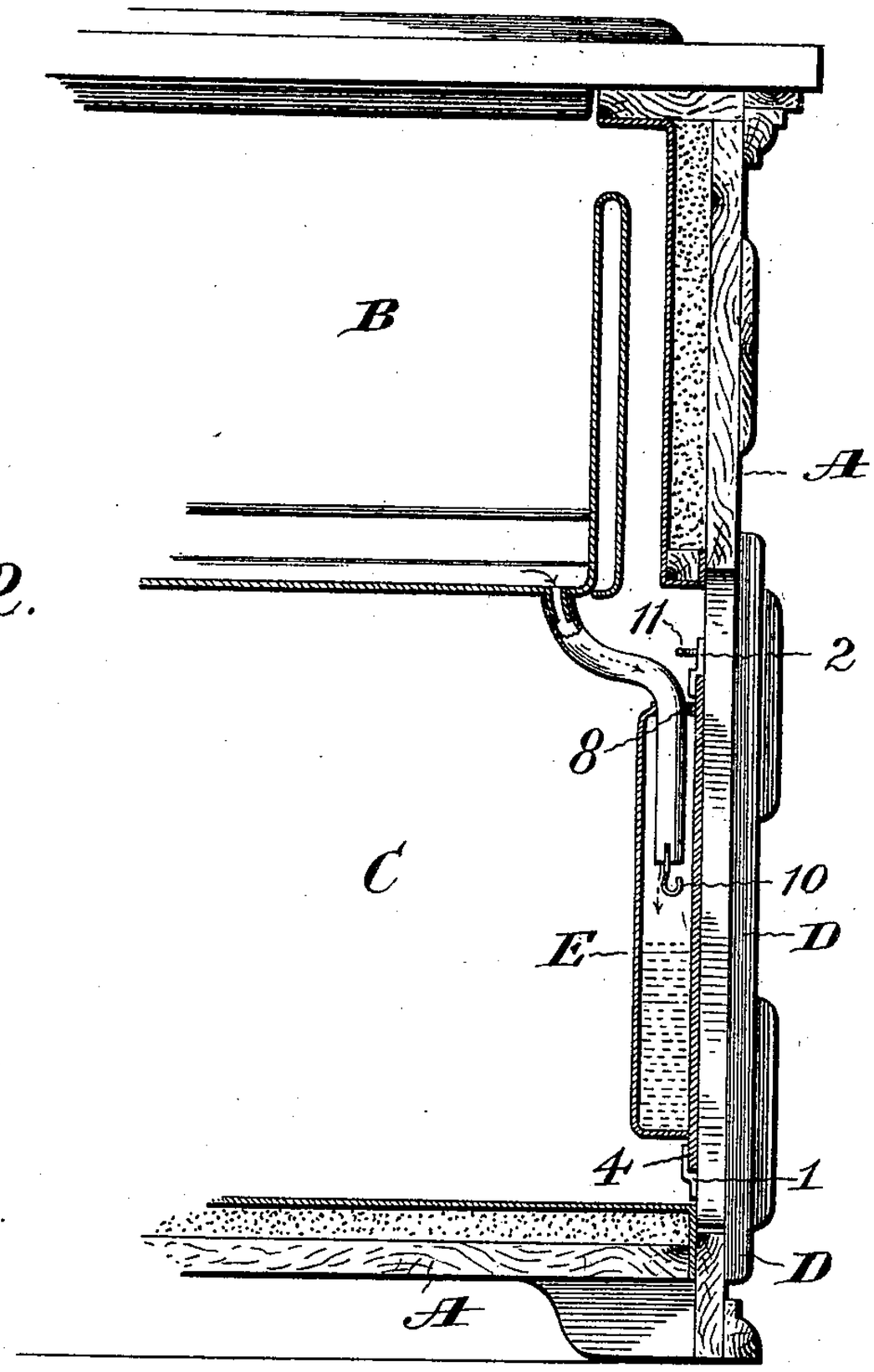
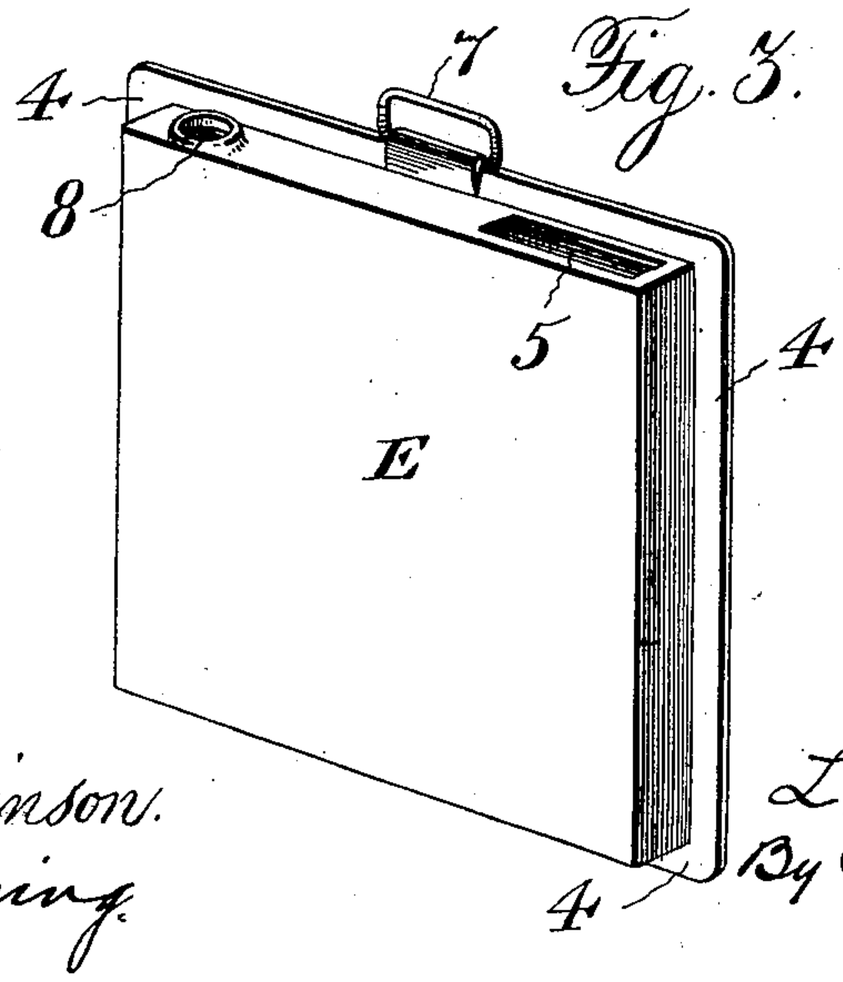


Fig. 3.



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UNITED STATES PATENT OFFICE.

LIVINGSTONE W. FISH, OF EASTPORT, MAINE.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 621,645, dated March 21, 1899.

Application filed September 6, 1898. Serial No. 690,281. (No model.)

To all whom it may concern:

Be it known that I, LIVINGSTONE W. FISH, of Eastport, in the county of Washington and State of Maine, have invented certain new and useful Improvements 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.

My invention relates to an improvement in refrigerators, and more particularly to an improved drip appliance therefor.

The inconvenience and annoyance of drip-pans under refrigerators is a matter of common knowledge among housekeepers, and it is apparent that it is disagreeable and at times dangerous for a woman to get down on her knees and bend over sufficiently to enable her to remove the drip-pan from under the refrigerator, which must be done twice a day to prevent running over, owing to the limited space under the bottom of the refrigerator admitting only a small pan. The ice in refrigerators melts very slowly and the water escapes from the ice-box only one drop at a time. The waste-pipe in ordinary refrigerators is about three-fourths of an inch in diameter and allows all the space that is not taken up by the single drop of water to admit warm air into the ice-chamber, or if the pipe has a cap on top (which is sometimes the case) the warm air rises the whole length of the food-chamber, and as the ice-water is continuously dropping down the drops of ice-water coming into contact with the warm air causes the pipe to sweat or become moist on the outside, which moisture runs down on the bottom of the food-chamber, making it wet and unclean in appearance. Then, again, while in the act of emptying the drip-pan the water is continuously dropping down on the floor, necessitating the reaching under the refrigerator to mop the puddle of water before the pan can be replaced.

Now it is the object of my invention to obviate the various defects and inconveniences heretofore encountered with drip appliances for refrigerators and to provide drip appliances which shall be readily accessible for the purpose of emptying the same.

A further object is to so locate the drip-receptacle that it shall not be subjected to a high temperature, such as that of the atmosphere in the summer season, and thus avoid the "sweating" of said drip-receptacle.

A further object is to provide a refrigerator with a removable drip-receptacle which shall be normally disposed within the body of the refrigerator, so that it shall be readily accessible and so that the temperature of the ice-water in said receptacle can be utilized in assisting in the refrigeration of the food-chamber of the refrigerator.

A further object is to produce a drip appliance for refrigerators which shall be simple in construction, which shall be readily accessible for emptying, which can be easily and quickly removed and replaced, and which shall be effectual in all respects in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of a refrigerator, showing the application of my invention thereto. Fig. 2 is a sectional view. Fig. 3 is a detail perspective view of the drip-receptacle.

A represents a refrigerator; B, the ice-box thereof; C, the food-chamber, and D the door for the food-chamber. With this door my improvements are connected, for which purpose the inner face of the door is provided with ears or clamps 1 1 near its lower edge and with clamps 2 3, adapted to removably support a flat drip pan or receptacle E against the inner face of said door. The pan E is made with flanges 4 at its edges, which rest against the inner face of the door and adapted to be engaged by the clamps 1 1 2 3. The clamp 3 is made movable or adjustable, whereby to permit the removal of the drip-receptacle for the purpose of emptying the same.

The drip-receptacle E is provided with an elongated opening 5 in its inner end to facilitate the emptying of the same and by removing the cover of said opening the position of the water in the receptacle can be ascertained. To further facilitate the removal and emptying of the drip-receptacle, it is provided at its upper edge with a loop or handle 7. The

upper end of the drip-receptacle is also provided at or near the inner edge thereof with a hole 8, into which one end of a rubber tube normally projects loosely (slipping up or down in the drip-receptacle at the opening or closing of the door) and which is readily removable when the drip-receptacle is to be emptied. The rubber tube is preferably made of comparatively heavy rubber, and its other end is attached to the outlet of the ice-box, so that the water resulting from the melting of the ice will flow through said tube and into the drip-receptacle on the door of the food-chamber, from which it can be readily removed, as above explained, without inconvenience or discomfort to the user. When the drip-receptacle is to be removed from the door D, the rubber tube will first be withdrawn from the receptacle and bent up to prevent the flow of water through it. It will be supported in this position by means of a hook 10, attached thereto and adapted to engage an eye or keeper 11, attached to the clamp 2. The clamp 3 may be turned, when the drip-receptacle E can be removed and emptied. By a reversal of these operations the drip-receptacle can be easily and quickly replaced.

By means of my improvements the inconvenience and annoyance incident to the employment of drip-pans under refrigerators are effectually obviated. The drip-pan is disposed in such manner as to be readily accessible. My improvements can be applied to the door of any refrigerator now in use, and they are effectual in all respects in the performance of their functions.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a refrigerator, of a drip-receptacle removably supported on the inner face of the door of the food-compartment of the refrigerator and a flexible pipe permanently connected with the ice-chamber of the refrigerator and removably connected with the removable drip-receptacle, substantially as set forth.

2. The combination with a refrigerator, of an ice-chamber, a removable drip-receptacle supported on the inner face of the door of the food-compartment of the refrigerator and normally constituting an exposed part of the inner vertical wall of the food-chamber, and a pipe connecting the ice-chamber and drip-receptacle when the door is closed or open, substantially as set forth.

3. The combination with a refrigerator, of clamps attached to the inner face of the door of the food-compartment, a drip-receptacle held removably by said clamps, a flexible tube attached to the outlet of the ice-chamber and removably connected with the removable drip-receptacle so as to normally communicate therewith, substantially as set forth.

4. In a refrigerator, the combination with the ice-chamber and the door of the food-compartment, of a drip-receptacle on said door, and a tube communicating at one end with the ice-chamber and projecting at its other end through an opening in said drip-receptacle, whereby while in engagement said drip-receptacle and tube can have a movement relatively to each other when the door is opened and closed.

5. In a refrigerator, the combination with the ice-chamber and door, of a drip-receptacle attached to the door, and a flexible tube communicating at one end with the ice-chamber and in constant communication with the interior of the drip-receptacle at all times when said receptacle is on the door and when the door is opened or closed.

6. The combination with a refrigerator, of a drip-receptacle removably attached to the inner face of the door thereof, a rubber tube connected at one end with the outlet of the ice-chamber and adapted to be removably connected at its other end with the drip-receptacle so as to normally communicate therewith, a hook attached to said tube and an eye or keeper to receive said hook and support the end of the tube in an upright position when the drip-receptacle is removed, whereby to prevent the passage of water through said tube during the time the drip-receptacle is detached from the door, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LIVINGSTONE W. FISH.

Witnesses:
B. C. MATTHEWS,
F. W. BLAIR.