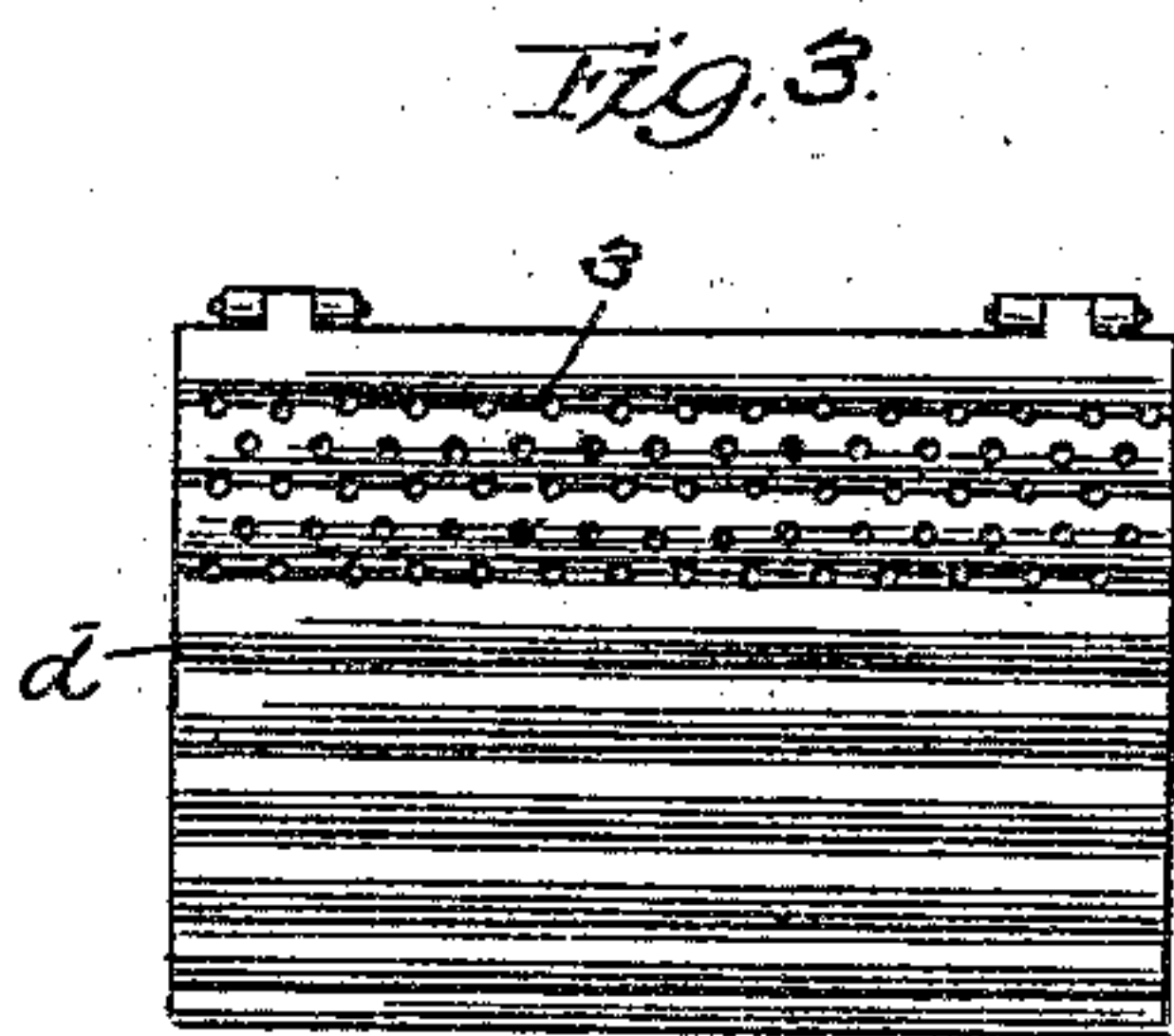
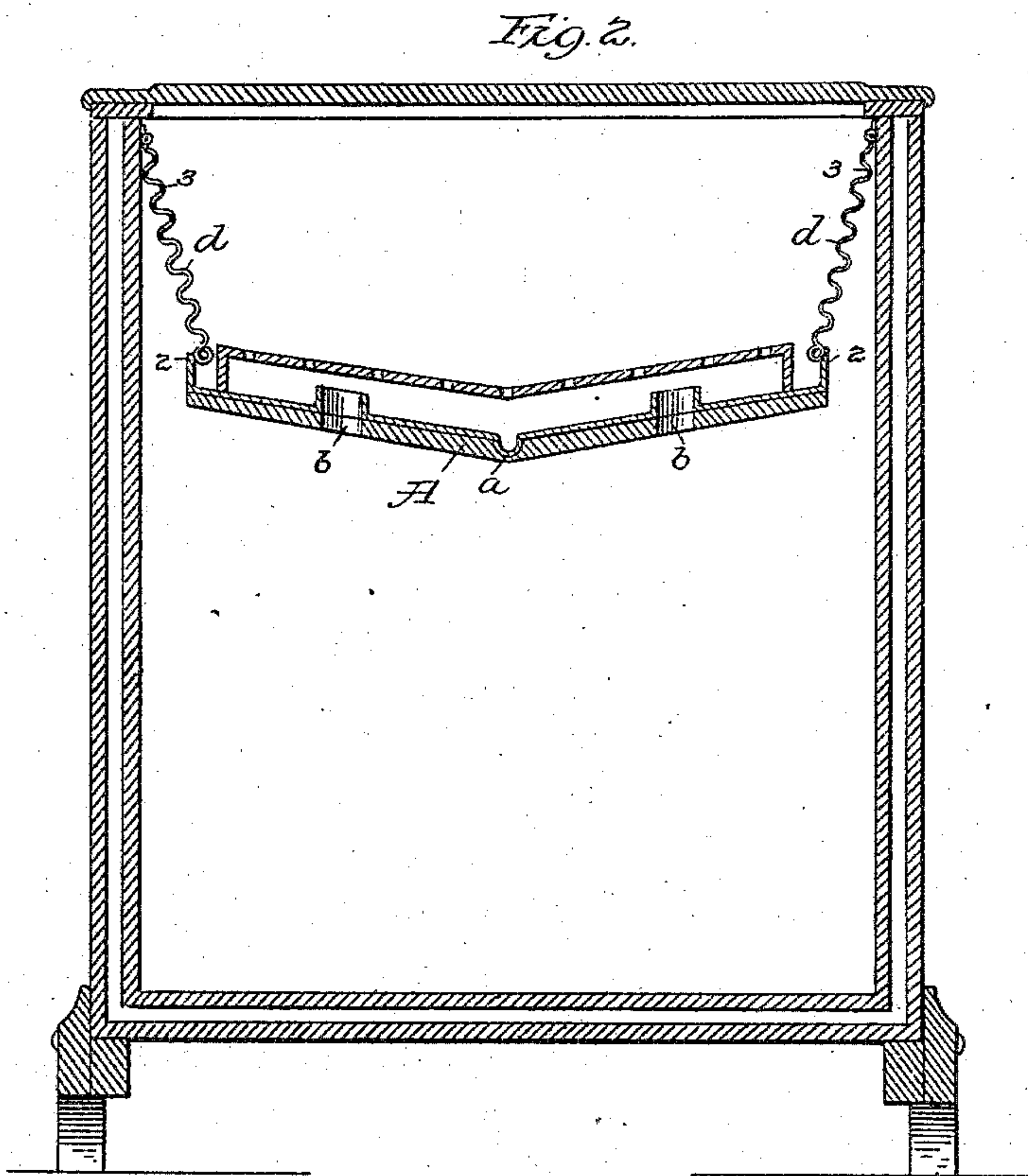
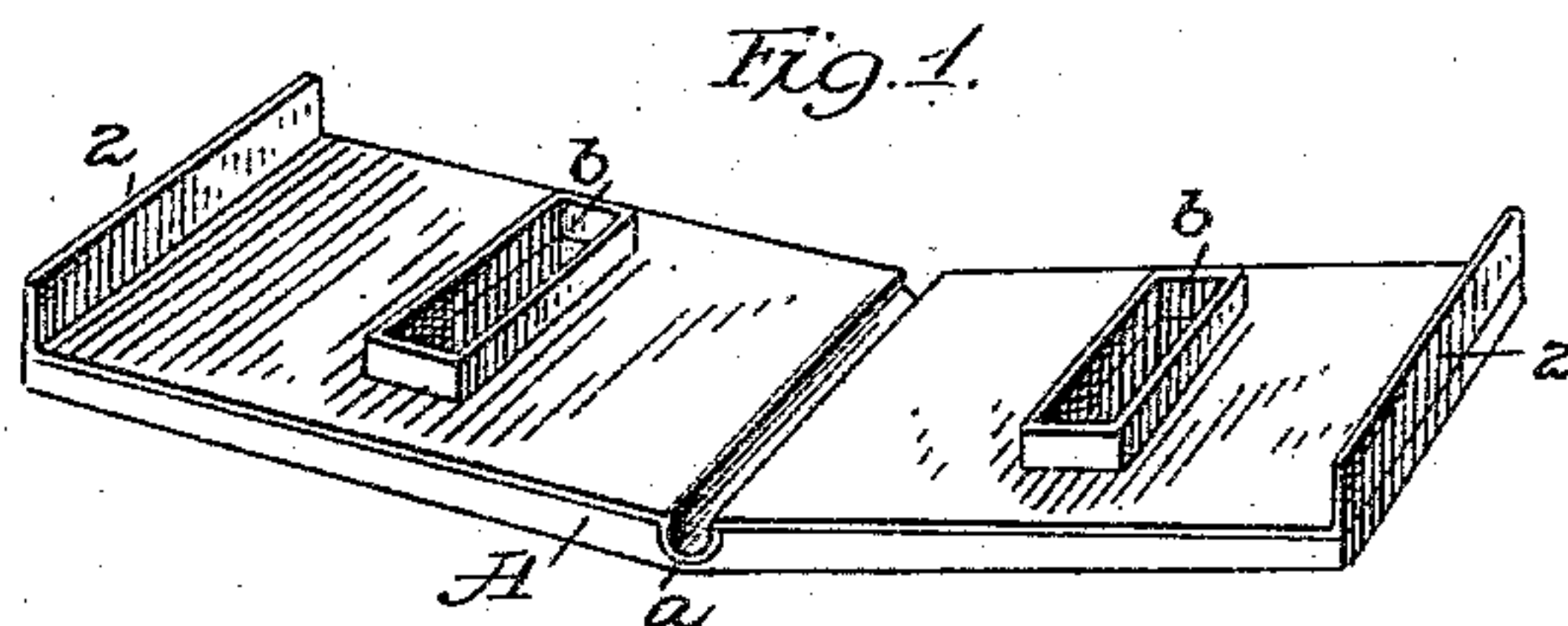


(No Model.)

H. H. & H. T. LOVELL.
REFRIGERATOR.

No. 295,259.

Patented Mar. 18, 1884.



Attest:

Walter Baldwin
F. L. Middleton

Inventor
Henry H. Lovell
by Homer T. Lovell
Joyce & Spear
Attys.

UNITED STATES PATENT OFFICE.

HENRY H. LOVELL AND HOMER T. LOVELL, OF IONIA, MICHIGAN.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 295,259, dated March 18, 1884.

Application filed January 23, 1884. (No model.)

To all whom it may concern:

Be it known that we, HENRY H. LOVELL and HOMER T. LOVELL, of Ionia, in the county of Ionia and State of Michigan, have invented a new and useful Improvement in Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the same.

Our invention relates to refrigerators of that class in which the ice-box is located above the provision-chamber, and is provided with air-passages at the sides for the ascent of the warmer air, and with passages at or near the center for the descent of the colder air after its passage over the ice within the ice-box.

The invention has for its object convenience and economy in construction and improvement in the operation of the refrigerator.

It consists in the improved details of construction hereinafter fully described, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the bottom of the ice-box detached. Fig. 2 represents a vertical section of the refrigerator, taken longitudinally through the bottom of the ice-box. Fig. 3 is a side elevation of the sheet-metal end of the ice-box.

The bottom A of the ice-box is made of wood, inclining from the ends to the center, with a groove, *a*, across it at its lowest part, which is formed in order to spring the bottom to the desired pitch, and at the same time serves as the drip-trough. The inclined construction gives sufficient pitch for the flow of the drip from both ends to the groove or drip-trough *a*. The bottom is covered with sheet metal of any suitable kind, which metal is turned up at the end to form flanges 2 2. It is also turned up around the holes *b b*. These holes are for the downflow of the cold air, and the flange about them serves to prevent the water escaping through them. The bottom thus described is made of a width exactly equal to the width of the interior of the refrigerator, and is secured thereto tightly at the sides. It is, however, shorter than the interior length of the refrigerator, and is so placed as to leave a space between each end and the end wall. This is shown clearly in Fig. 2. The flanges 2 2 prevent the escape of

drip over the ends, and the tight joints at the sides prevent the escape of drip in that direction. The ice-box is completed at the ends by end plates, *d*, of sheet metal, preferably corrugated, and hinged at the top to the end walls of the refrigerator. The lower edge is shown as formed with a bead, made by bending over the edge, which beaded edge rests loosely against the inner face of the flange 2, so that as the ice bears against it the flange 2 holds it against any outward movement. These end plates extend from side to side and complete the box. The end plates are perforated, as shown at 3, to allow the air passing up between the ends of the bottom and the end wall to flow into the ice-box. The circulation of air is the same as that shown in Letters Patent of the United States granted November 13, 1883, and numbered 288,583.

Although preferring the material and the precise form shown for the bottom and the end plates, we do not limit ourselves strictly thereto.

Any suitable form of openings may be provided for the inclined end plates, and the drip-trough may be connected with an escape-pipe in any well-known way.

We claim—

1. In a refrigerator, and in combination, an ice-box bottom fitted tightly to the sides of the refrigerator, with a space at the ends for the passage of air, and with air-passages in the bottom, and hinged end pieces perforated and connected loosely with the bottom, substantially as described.

2. The wooden bottom A, made in one piece with the groove *a*, wherein it is bent or sprung, whereby it is inclined from the ends to the grooved center, said groove also serving as a drip-trough, the whole being provided with a sheet-metal covering and combined in a refrigerator, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HENRY H. LOVELL.
HOMER T. LOVELL.

Witnesses:

CHARLEY D. PARKS,
LEWIS V. DEAN.