

No. 885,660.

PATENTED APR. 21, 1908.

L. A. BANTA.
REFRIGERATOR.

APPLICATION FILED APR. 24, 1906.

Fig. 1.

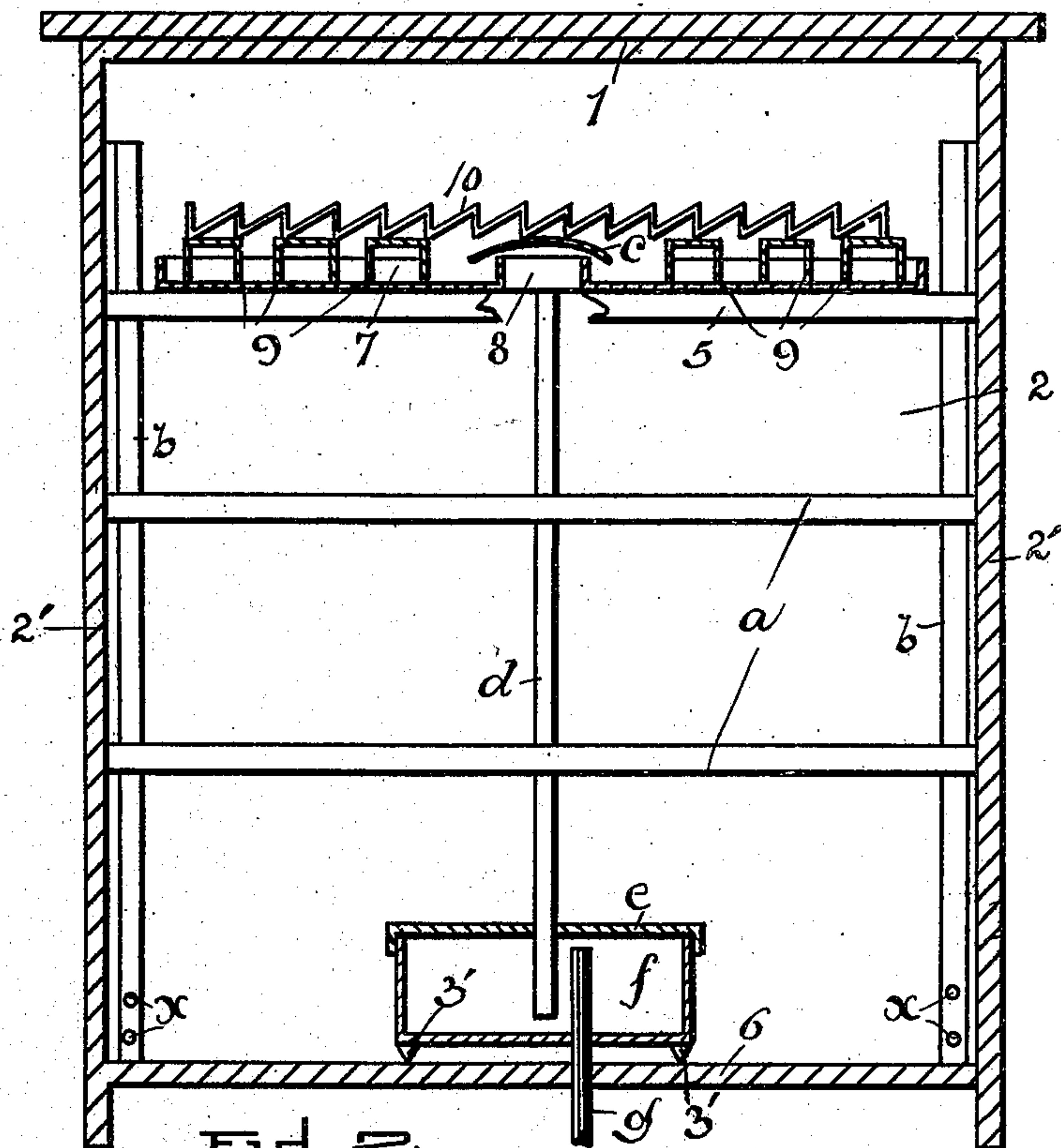
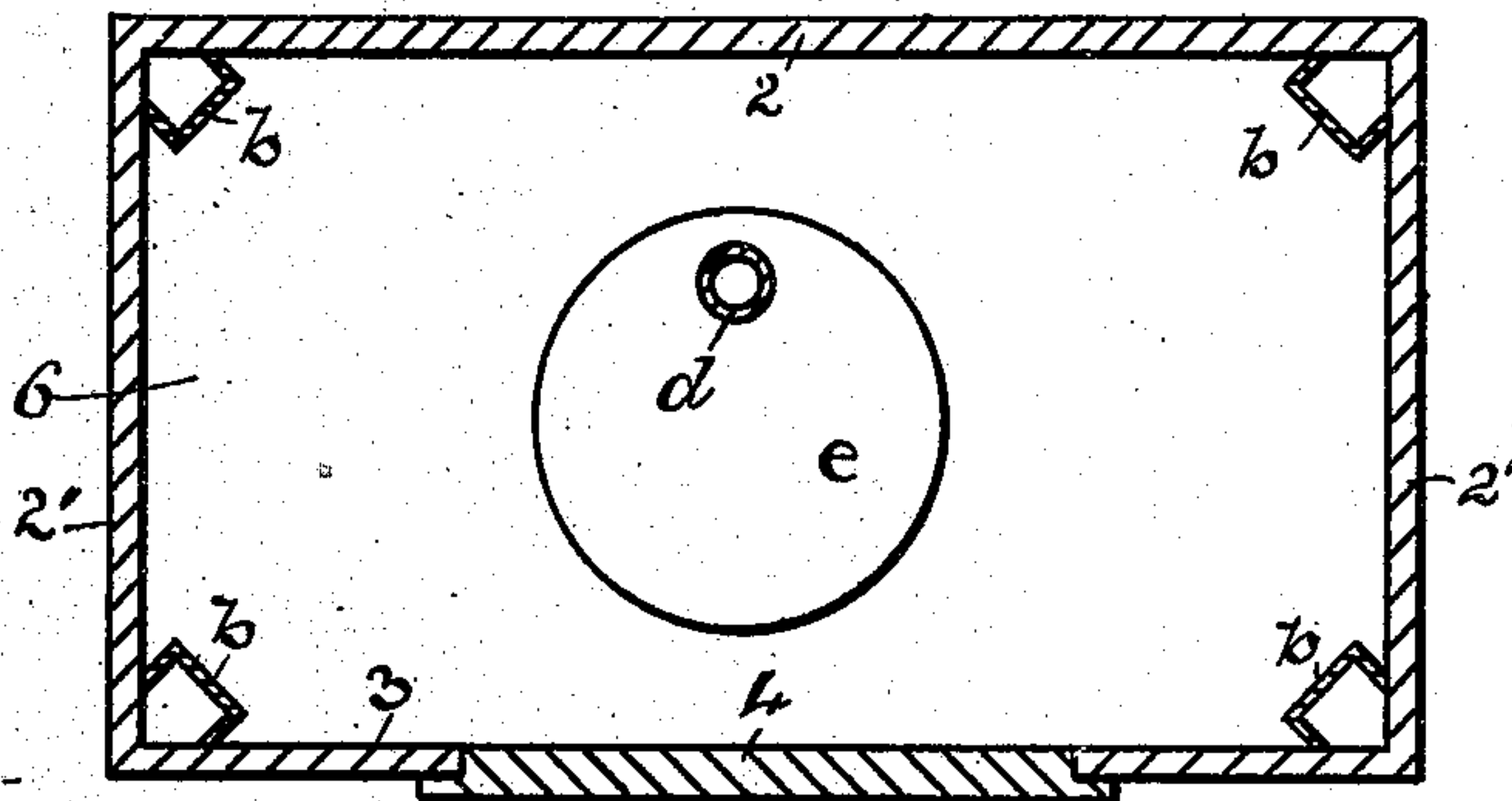


Fig. 2.



WITNESSES:

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REFRIGERATOR.

No. 885,660.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LEN A. BANTA, a citizen of the United States, and resident of Ligonier, in the county of Noble and State of Indiana, have invented certain new and useful Improvements in Refrigerators, of which the following is a full, clear, and exact description.

The aim of my invention is to provide a refrigerator simple of construction and so arranged as to insure a moving air current within the refrigerator so that the temperature within the refrigerator may be preserved more uniform, the construction further permitting the greatest amount of efficiency and my refrigerator comprises a certain specific construction hereinafter more fully described, and finally pointed out in the claims.

In the accompanying drawings Figure 1 shows a vertical sectional view of a refrigerator embodying my invention while Fig. 2 discloses a horizontal sectional view below the ice tray 7.

My refrigerator comprises a suitable housing including the back 2, the front 3 provided with a suitable door 4, the bottom 6, the two similar sides 2' and the top 1.

Positioned within the corner within the ice box are four similar draft flues marked *b*, each comprising a three sided bent member preferably of sheet metal, each draft flue below being provided with a plurality of openings *x* and above terminating a suitable distance below the top 1 of the refrigerator so that a current of air may be permitted a ready passage to each of these four corner draft flues.

At a suitable point near the upper end within the refrigerator I provide a plurality of supporting bars 5 which receive a tray 7 this tray catching the dripping water from the ice. Centrally this tray is provided with an escape opening 8 which is protected above by means of the shield *c* as clearly shown in Fig. 1. Held within this tray 3 are a plurality of hollow supporting members 9, each made of a piece of sheet metal bent to provide three hollow supporting members forming draft flues which are horizontally disposed and transversely positioned within the refrigerator. It will be noticed that these hollow supporting members extend beyond the upper edge of the drip tray 7 so that cur-

rents of air will readily pass over the edge of the tray and through these hollow supporting members. Held by these hollow supporting members 9 is an ice shelf 10 preferably of sheet metal and bent in the form of V-shaped ridges as clearly shown in Fig. 1 to provide a serrated surface so that the ice rests upon the point of each ridge, the water readily being conducted along these ridges to drip into the tray. This ice shelf being of a less diameter than the drip tray insuring all the water dripping from the ice held upon the ice shelf in being collected within the tray.

It will be noticed that the V-shaped sheet metal ice shelf again comprises a number of horizontally disposed draft flues which come partly above the hollow supporting members 9 and above the tray as shown. The shields *c* being secured to the ice itself.

At a suitable point there extends from the tray 8 a drip pipe *d* which extends downward and empties in an ice-water tank *f* the pipe *d* terminating near the bottom of the ice water tank *f* as shown in Fig. 1. This ice water tank *f* is preferably circular and provided with the supporting legs 3' which raises the ice-water tank a suitable distance above the floor again providing a flue space so that a current of air may pass between the ice-water tank *f* and the bottom of the refrigerator. This ice-water tank *f* is covered by means of a suitable lid *e* and extending from this tank is a drain pipe *g* beginning near the top of the tank so that the cold water enters the ice-water tank near the bottom, the warmer water being drained off near the top.

Within the refrigerator are positioned one or four shelves *a* of any approved construction.

The ice water tank, is made air tight and the drip automatically permits the water to escape. By this means it will be noticed that the articles placed within the refrigerator are positioned between two cooling mediums, the ice above and the ice-water tank below. This construction insures the economic use of ice while a preferred ventilation is provided within the refrigerator and

Having thus described my said invention what I claim as new and desire to secure by U. S. Letters Patent is.

In a refrigerator, the combination with

suitable supporting bars, of a tray having a central flanged drip opening, a shield above said opening, a plurality of hollow sheet-metal draft flues supported by said tray and
5 horizontally disposed and transversely positioned within the tray, said flues being of a height extending beyond the upper edge of said tray, and a sheet-metal ice shelf having

a serrated surface, and supported by said flues, substantially as set forth. 10

Signed in the presence of two witnesses.

LEN A. BANTA.

Witnesses:

FRANK P. BOTHWELL,
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