

(No Model.)

F. E. RANNEY.
ICE RACK FOR REFRIGERATORS.

No. 497,458.

Patented May 16, 1893.

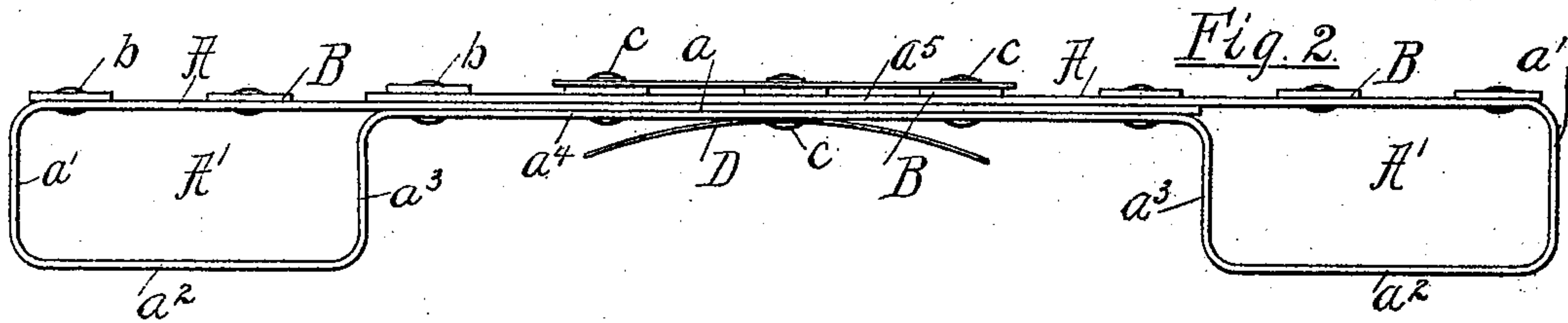


Fig. 1.

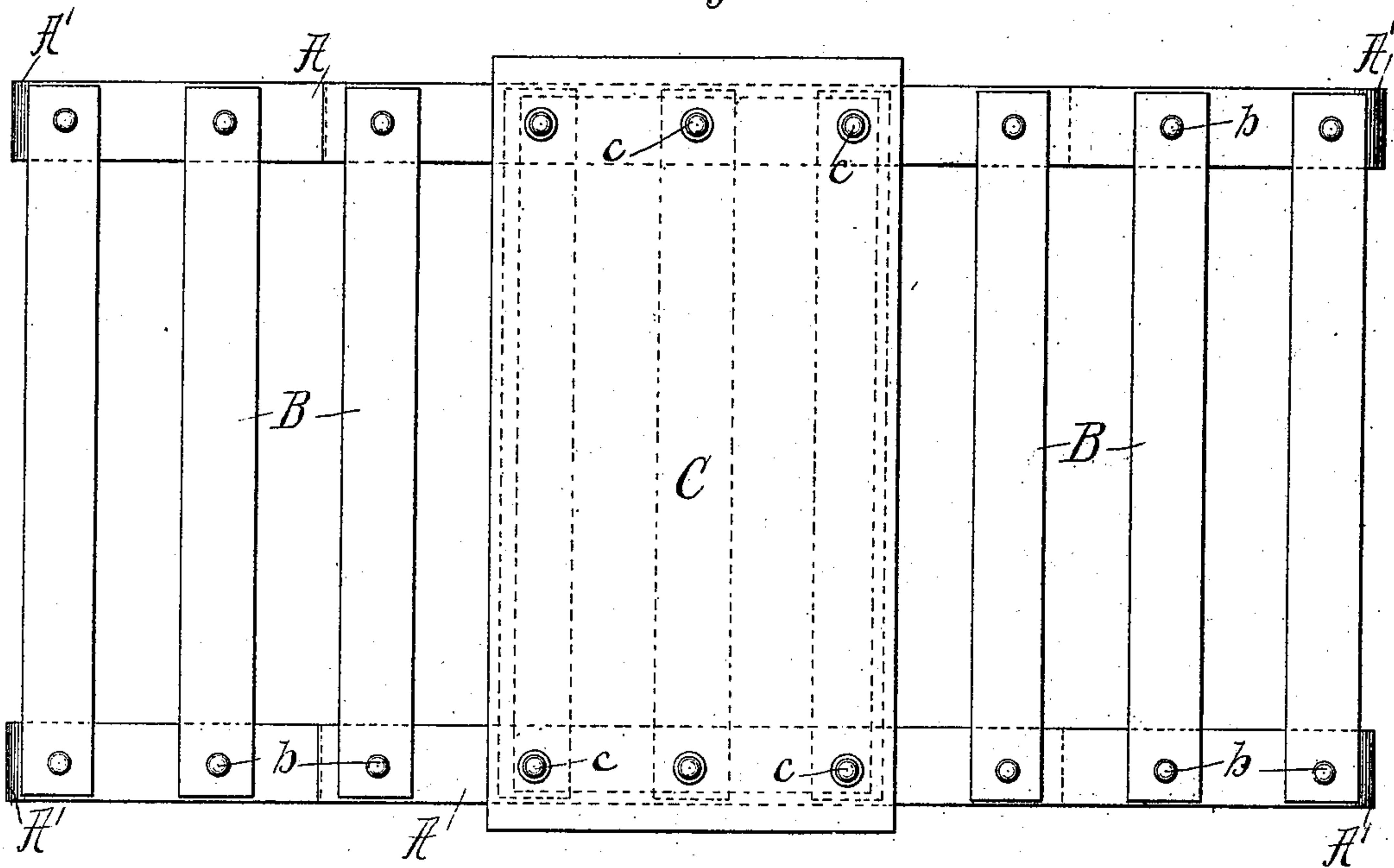


Fig. 3.

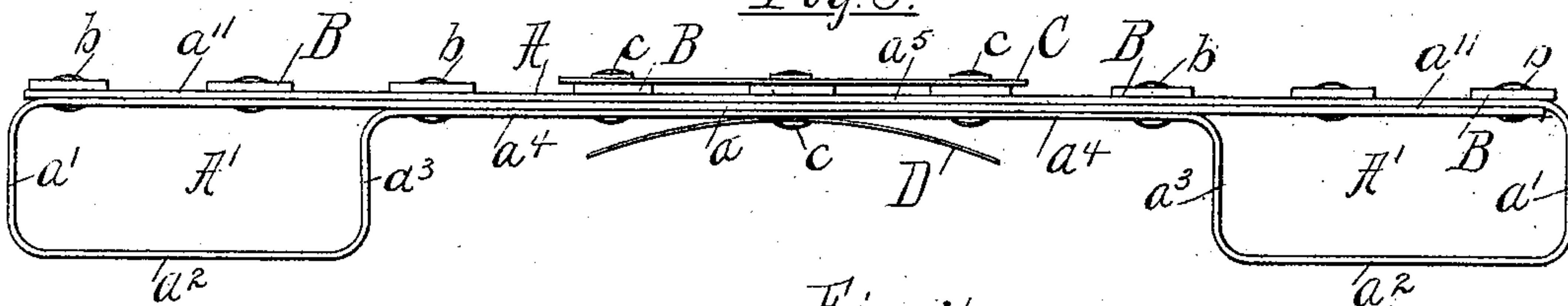
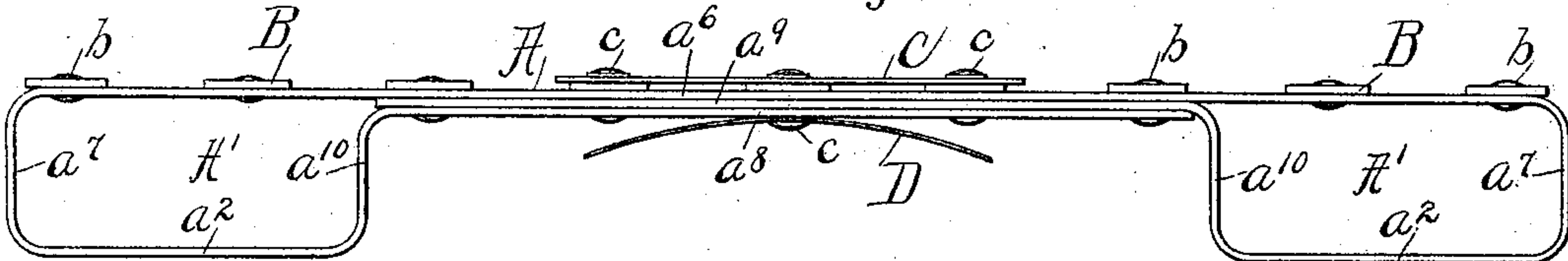


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

FRED. E. RANNEY, OF GREENVILLE, MICHIGAN, ASSIGNOR TO THE RANNEY REFRIGERATOR COMPANY, OF SAME PLACE.

ICE-RACK FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 497,458, dated May 16, 1893.

Application filed February 7, 1893. Serial No. 461,363. (No model.)

To all whom it may concern:

Be it known that I, FRED. E. RANNEY, of Greenville, in the county of Montcalm and State of Michigan, have invented certain new and useful Improvements in Ice-Holders for Refrigerators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to contrivances for supporting pieces or cakes of ice in refrigerators, ice-boxes, and similar structures, and the primary objects of my invention are to produce an ice-holder which shall be materially less expensive than analogous devices for similar purposes and which shall be so constructed as to possess peculiar strength at the precise points which must bear the greater portion of the weight of the ice; and also, furthermore, to prevent all clogging of the drain-pipes of the refrigerators by solid substances, such as saw-dust, which are carried off from the ice-holder by the drip-water.

To the above purposes, my invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

The more precise nature of my invention will be better understood when described with reference to the accompanying drawings, in which—

Figure 1 is a plan view of an ice-holder embodying my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a side elevation of a modified form of the ice-holder, having prolonged terminal portions of its side-pieces. Fig. 4 is a side elevation of a still further modification of the ice-holder.

In the said drawings, A A designate the two side-pieces of the ice-holder, these side-pieces being each formed of a single strip or bar of metal and being of any length conformable to the longitudinal measurement of the holder. At each end, each of these side-pieces is formed with a downwardly extending skeleton-portion A' which portions constitute supports or legs for the ice-holder.

As shown in Fig. 2, the bar or strip of metal of which each side-piece A is formed is bent

so as to leave an intermediate straight horizontal body-portion a which extends equally distant, in opposite directions, from the middle of the ice-holder. At a point opposite from its extremity, each portion a is bent vertically downward, as at a' , then inward in a horizontal plane, as at a^2 , toward the middle of the holder, then vertically upward, as at a^3 , and finally horizontally inward or longitudinally, as at a^4 , to its point of integral union with the inner vertical portion a^5 of the companion support or leg A'. A straight horizontal and longitudinal portion a^5 extends above the portion a and is bent vertically downward, then horizontally backward toward the middle of the holder and then upward to a point of integral union with the straight portion a^4 , before referred to; these bends forming the parts a' , a^2 , and a^3 of the companion leg, precisely corresponding to the similarly designated parts of the support or leg first described.

As shown, each support or leg A' is of oblong rectangular form, but it is obvious that this precise contour of the supporting legs may be varied, if desired. But in any event, it is to be particularly noted that, at its middle portion, each side piece is of trebled thickness; such middle portion being composed of the intermediate portion a , the underlying portion a^4 , and the overlapping portion a^5 . The middle portion of each side piece is thus greatly strengthened at the very point at which the greatest strain, from the weight of ice, is borne, and all possibility of collapsing or crushing down the middle of the holder is obviated. These three thicknesses of metal are suitably riveted, as at c , or otherwise strongly secured together, and I desire to call attention to the fact that while the lower portion a^4 is shown as the continuous portion, and the two upper portions a and a^5 as the terminal portions, this relative arrangement may be reversed as shown in Fig. 4. That is to say, a continuous upper bar or portion a^6 may extend entirely from one end of the holder to the other and it may be bent downward at each end, to form the outer vertical parts a^7 corresponding with the parts a' of the vertical supports A'. In this instance, the lowest and intermediate parts a^8 and a^9 of the middle of the side-piece

would be the terminal portions; such portions overlapping each other as described relative to the parts a and a^5 , but extending inward from the inner vertical parts a^{10} corresponding with the parts a^3 of the skeleton supports or legs. When, however, the uppermost and intermediate portions a , a^5 , are the terminal portions, as shown in Figs. 1 and 2, their extremities may either terminate about coincidently with the inner portions a^3 of the legs A' , as shown in said figures, or such portions may be prolonged longitudinally so that their extremities shall terminate coincidently with the outer ends of the side-pieces, as shown in Fig. 3. This arrangement is peculiarly advantageous in the larger or longer sizes of holders, inasmuch as it farther extends the longitudinal area of the reinforcement of the side-pieces. Obviously, however, such prolongation of the terminal parts of the side-pieces is equally applicable to the smaller or shorter lengths of holders.

The two side-pieces A , when constructed in either of the above described forms, extend parallel with each other and are connected together throughout their lengths by parallel cross-bars B , of metal; the ends of said bars resting upon the upper parts of the side-pieces and being strongly secured thereto by rivets b and c , or by other suitable means.

Midway of the length of the holder is located the closed flat deflecting-plate C of a width greater than that of the usual or lower deflecting plate D . The plate C rests upon the middle cross-bars B and the ends of said plate are riveted, as at c , to the middle portions of the side-pieces A . This plate is imperforate or closed throughout its length and breadth. The second or lower deflecting-plate, which is customarily made wider than the width of the air opening in the floor of the ice-chamber of the refrigerator D is bent transversely into segmental form with its convex surface uppermost. The ends of the plate D contact with the under sides of the side-pieces A , at the middle thereof; certain of the rivets c serving to retain the plate D , in its upper position as illustrated.

The materials of which the several parts above described are formed, are bar-iron for the side-pieces A and cross-bars B , and sheet-iron for the deflecting-plates C and D ; such parts being preferably galvanized to prevent rust. In the largest and longest sizes of holders, there may be more than one of the skeleton legs or supports A' at each end of each side-piece if desired.

It is obvious that the ice holder illustrated and described possesses superior advantages as to the strength, compactness, cheapness and durability, each of which is essential in devices of this character.

Having thus described my invention, what I claim as new therein is—

1. In a metal ice-holder for refrigerators, a supporting member composed of a single integral piece and having at its ends open or skeleton formed supports integral with the body portion of the member, and reinforced intermediately of the legs or supports by superposed integral portions of the member, substantially as set forth.

2. An ice-holder for refrigerators, comprising a pair of integral side-pieces each having at its ends open or skeleton-formed supports or legs integral with the body portion of the side piece, each side piece being reinforced intermediately of the legs or supports by superposed integral portions of the side piece, substantially as set forth.

3. In an ice-holder for refrigerators, the combination with a plurality of integral side pieces each having at its ends open or skeleton-formed supports or legs integral with the body portion of the side piece, and each reinforced, intermediately of the legs or supports, by superposed integral portions of the side piece, of cross-bars connecting the upper parts of the side pieces together, and upper and lower deflecting plates secured respectively above and below said reinforced portion of the side pieces and midway of the length of the holder, substantially as set forth.

4. The ice-holder described, comprising two supporting, flat metal side pieces, a plurality of flat metal bars arranged upon and riveted at their ends to said side pieces at intervals, a curved deflecting plate secured centrally of the holder beneath the said flat metal bars, and a flat and relatively wider deflecting plate similarly secured above said bars, each of said side pieces being formed of a single piece of flat metal bended to form legs at either end of the holder and having its ends superposed upon one another to reinforce that portion of said side pieces intermediate of the legs, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

FRED. E. RANNEY.

Witnesses:

JNO. LEWIS,
C. T. RANNEY.