No. 836,106. PATENTED NOV. 20, 1906.

L. J. FELDKIRCHER.

REFRIGERATOR.

APPLICATION FILED MAY 9, 1903.

Fig. 1.

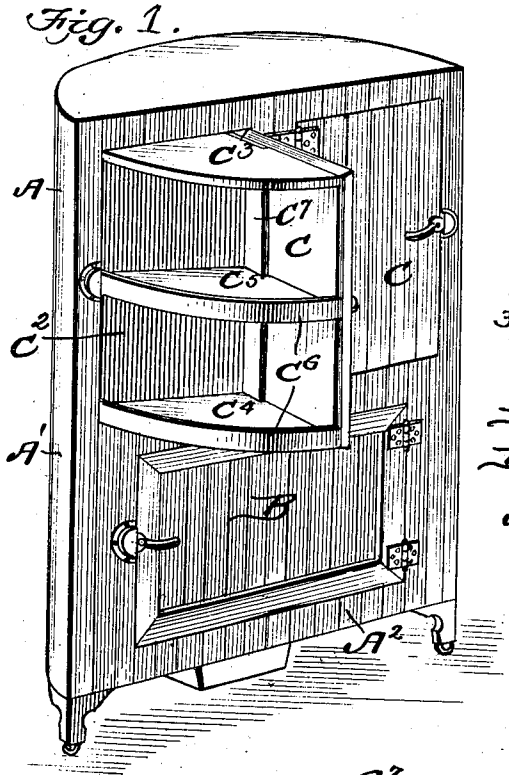

Fig. 2.

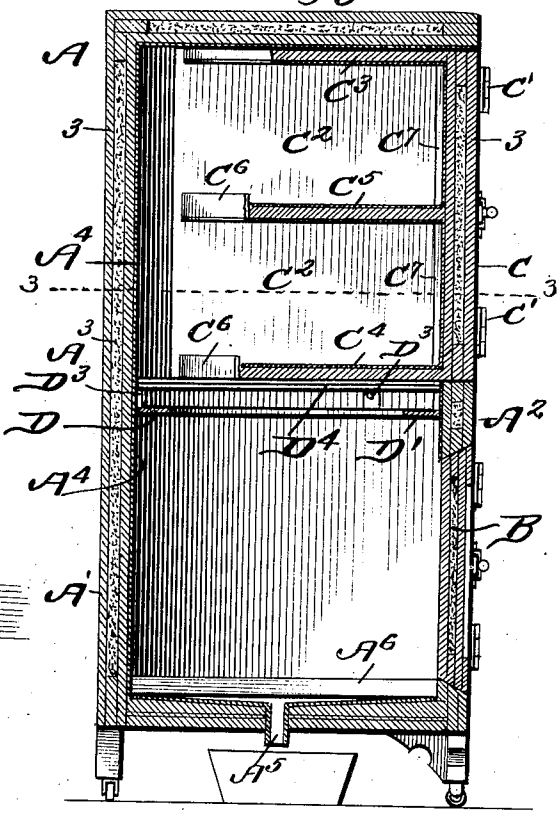

Fig. 3.

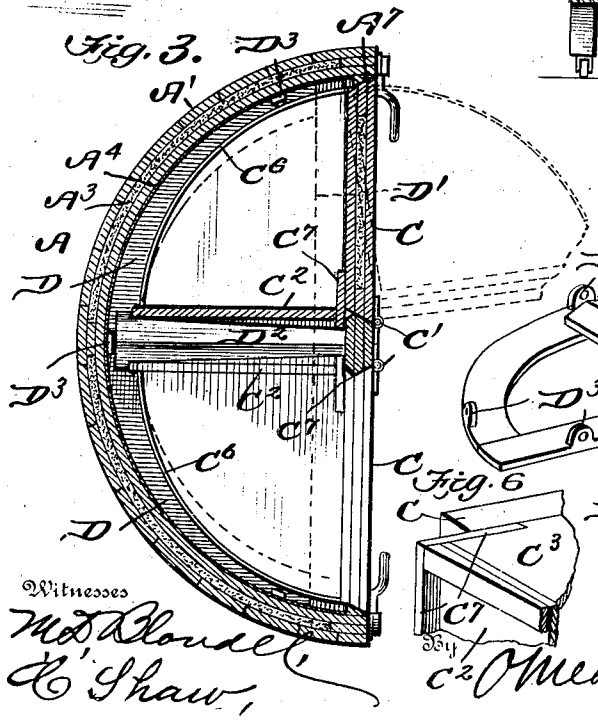

Fig. 4.

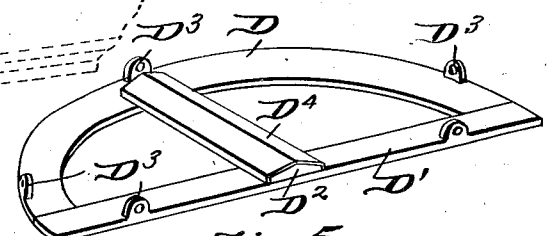

Fig. 6.

Fig. 5.

Witnesses

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REFRIGERATOR.

No. 836,106. Specification of Letters Patent. Patented Nov. 20, 1906.

Application filed May 9, 1903. Serial No. 156,463.

To all whom it may concern:

Be it known that I, LOUIS J. FELDKIRCHER, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented a new and useful Refrigerator, of which the following is a specification.

This invention relates to an improvement in refrigerators, and more particularly to certain improvements upon a patent granted to me September 18, 1900, No. 657,930, and an application filed by me November 30, 1901.

The object of my present invention is to provide the door of the casing with extensions or flanges that are designed to engage the door-jamb when the door is either open or closed, and form a perfect joint to prevent the escape of cold air when the door is open to obtain access to the contents of the box.

With the above object in view my invention consists in certain details of construction and novelties of combination and arrangement, as will be described in the following specification and pointed out in the claim, reference being had to the drawings, in which—

Figure 1 is a perspective view of my improved refrigerator, one of the doors being open. Fig. 2 is a vertical section taken centrally through the refrigerator. Fig. 3 is a section about on the line 3 3 of Fig. 2, the position of one of the doors when open being shown in dotted lines. Fig. 4 is a perspective view of a frame employed in my refrigerator. Fig. 5 is an elevation of a cross-piece in said frame. Fig. 6 is a perspective detail view.

In the construction of this refrigerator I employ a casing A, having in cross-section the shape of a segment, the curved wall A′ presenting a solid and unbroken side and the straight wall being pierced and provided with doors B and C, the former opening into the lower and the latter into the upper portion of the casing. The casing is formed with the usual double walls having a packing material A^3 between them. The inside of the casing has a lining of zinc, galvanized iron, or porcelain, as may be desired, and indicated at A^4. The bottom slopes slightly from the sides to the center and from this central depression leads a drainage-tube A^5, below which a drip-pan may be placed.

Transverse strips A^6 extend across the bottom for the ice to rest upon, the water formed by the melting of the ice flowing down between the strips and out through the tube A^5.

The doors C are hinged to the front wall of the casing, as shown at C′, and have secured to their hinged edge a vertical partition C^2, arranged at a right angle to the door and of the same height, but of slightly greater width. A top and bottom piece C^3 C^4 in the shape of a sector are secured along their straight edges to the door and partitions, respectively, and an intermediate shelf C^5 of the same size and shape is arranged intermediate the pieces C^3 C^4. A flange C^6 runs along the curved edge of the bottom and intermediate shelves C^4 C^5. The curvatures of these shelves and the rear wall A′ of the casing is struck from a different center, the distance between the flange C^6 and the inner lining of the wall A′ being greater when the door is closed at the rear end and center than at the front and side. It will be further noticed that the edge of the partitions C^2 extends beyond the shelves. This partition and the inner face of the door C are lined also with zinc, galvanized iron, or other suitable lining.

An open frame separates the ice-chamber from the upper portion of the casing, said frame comprising the curved strip D, the straight strip D′, connecting the ends of the strip D, and the cross-strip D^2. Perforated ears D^3 are formed on the strips D D′, by which they are connected to the sides of the casing. The strip D^2 is oppositely beveled on its upper face. The strips D D′ may be galvanized iron and the strip D^2 of the same material, or, as shown, be of wood covered with zinc or galvanized iron D^4. The moisture contained in the damp air arising from the lower portion of the casing will be arrested and condensed on the lining of the strip D^2 and its upper face being beveled will run off and finally escape through the drainage-tube A^5. This frame is connected to the straight and curved walls, and the lower edge of the partition C^2 is supported by the part D^4.

As the shelves and partitions are secured to the upper doors, when one of these doors is swung outward the shelves will swing outward with it, as clearly shown in Fig. 1 and indicated in dotted lines in Fig. 2. The partition C^2 will also swing forward and when the door is fully open will contact with the inner side of the door-jamb A^7, thus forming a second supplemental door and preventing the cold air within the refrigerator from escaping

when the door C is open. The flanges C^6 serve to prevent dishes from falling from or projecting beyond the shelves. The partition C^2 is preferably connected to the door C by a vertical strip C^7, connected to the inner face of the door C adjacent its hinged edge and projecting beyond same, the partition C^2 being fastened direct to the strip C^7 and at right angles thereto. This strip C^7 is so arranged that it will lie flat against the inner face of the casing when the door is closed and forms a tight joint at the hinged edge of the door. This construction is shown in detail in Fig. 6.

In the drawings the refrigerator is shown as having two doors each carrying two shelves. It is obvious, however, that the number of doors and shelves is immaterial and may be less or more than two.

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

A refrigerator comprising a semicircular casing, having rectangular openings in its straight side, of doors hinged to the front wall of the casing having vertical strips connected to their inner faces adjacent their hinged edges, projecting out beyond the same, vertical partitions secured to said strips at right angles to the doors of a greater width than said doors, shelves carried by said doors and partitions, a semicircular frame arranged in said refrigerator, and cross-strips arranged in the refrigerator provided with beveled faces, adapted to support said partitions, for the purpose described.

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Witnesses:

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