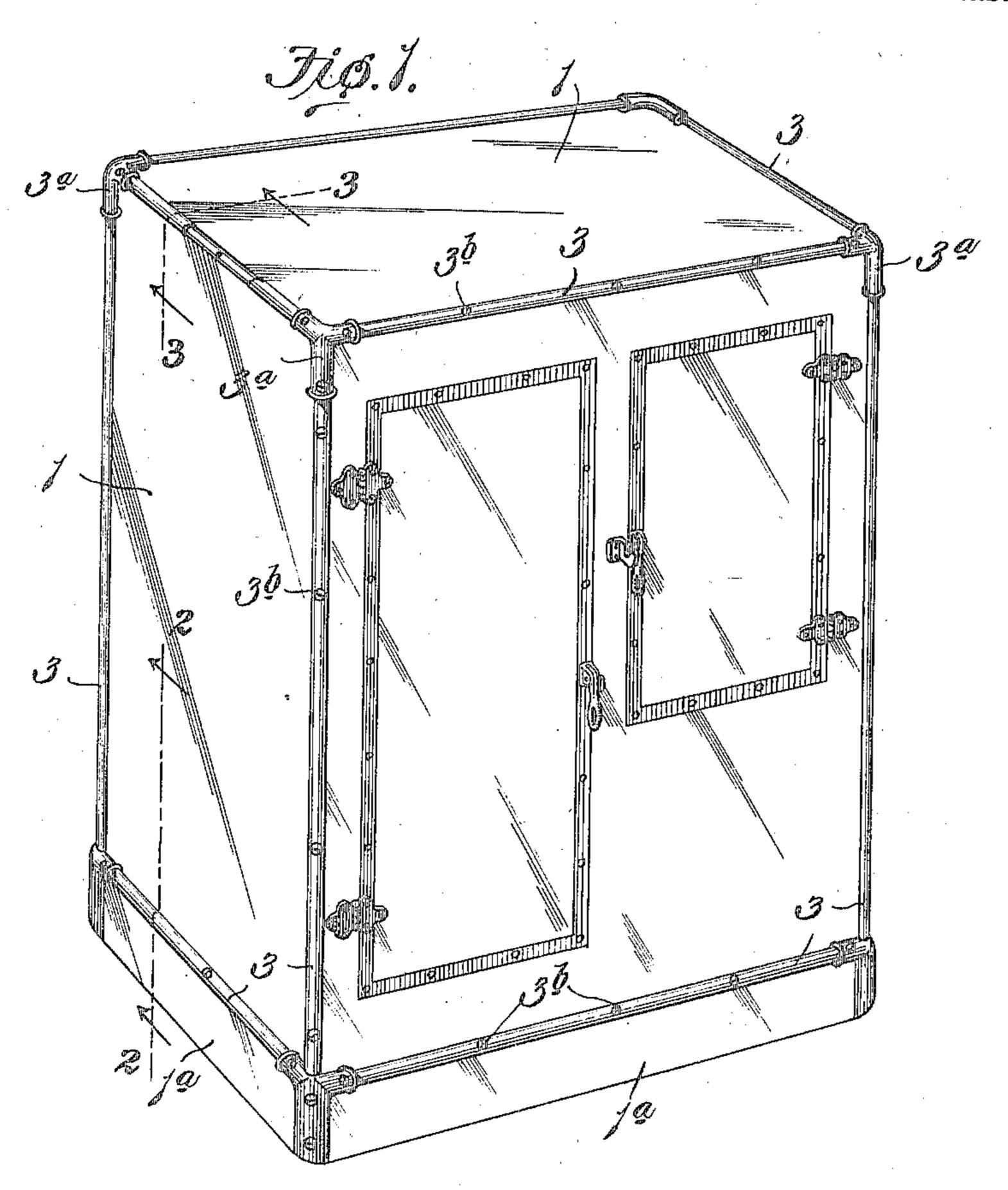
G. C. BOHN.

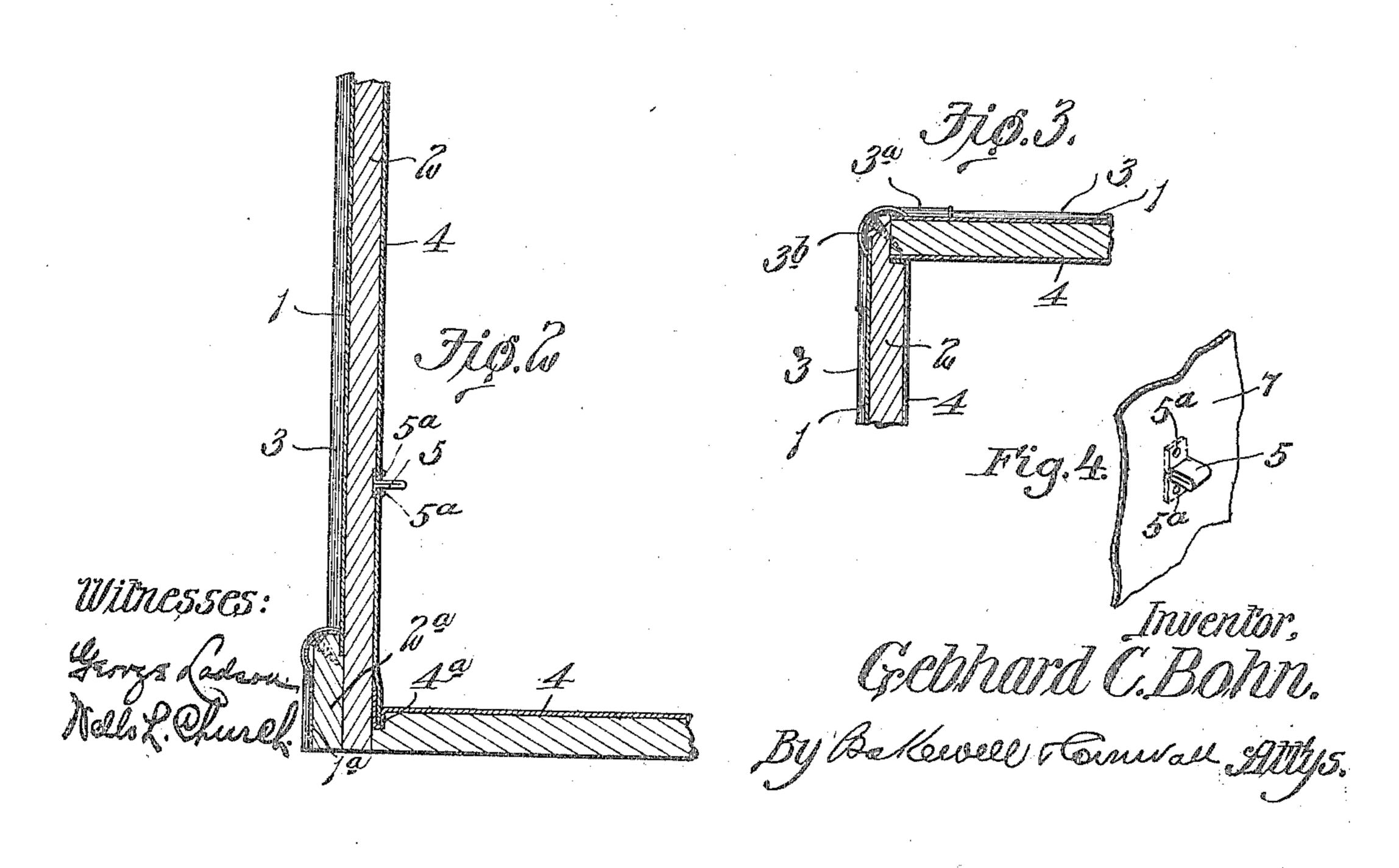
REFRIGERATOR.

APPLICATION FILED JULY 29, 1908.

950,834.

Patented Mar. 1, 1910.





UNITED STATES PATENT OFFICE.

GEBHARD C. BOHN, OF ST. PAUL, MINNESOTA.

REFRIGERATOR.

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Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed July 29, 1908. Serial No. 445,980.

To all whom it may concern:

Be it known that I, Gebhard C. Bohn, a citizen of the United States, residing at St. Paul, Minnesota, have invented a certain new and useful Improvement in Refrigerators, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to refrigerators, and particularly to refrigerators of that type which have an outer sheathing or casing of enameled sheet metal arranged over a body portion of heat insulating material.

One object of my present invention is to provide a refrigerator of the type referred to in which the enameled sheets of metal that form the outer sheathing are retained in position by devices that impart a neat and ornamental appearance to the refrigerator and also securely hold said sheets in position without the necessity of drilling holes in the outer sheathing, thereby overcoming the liability of cracking the enamel on the outer sheathing.

Another object of my invention is to provide a refrigerator having an inner lining composed of enameled sheets of metal that have their edge portions locked together after the sheets have been enameled, the insulated body portion of the refrigerator being provided with grooves for receiving the interlocking portions of said sheets. And still another object of my invention is to provide a refrigerator in which the shelf brackets are of novel construction and are retained in position in a novel manner.

Other objects and desirable features of my invention will be hereinafter pointed out.

Figure 1 of the drawings is a perspective view of a refrigerator constructed in accordance with my invention; Fig. 2 is a vertical sectional view taken on approximately the line 2—2 of Fig. 1; Fig. 3 is a vertical sectional view taken on approximately the line 3—3 of Fig. 1; and Fig. 4 is a perspective view illustrating the construction of one of the shelf-supporting brackets.

Referring to the drawings which illustrate the preferred form of my invention, 1 designates sheets of metal that form the outer casing or sheathing for the body portion 2 of the refrigerator which is formed of heat insulating material, the outer sur-55 faces of said sheets being covered with vitreous enamel. The side, top, front and

rear walls of the insulated body portion 2 are covered by separate sheets 1 that conform to the outline of said walls and terminate adjacent the edges of same, said sheets 60 being clamped in position by means of metal moldings 3 which bear firmly on said sheets but have no direct connection with same. These moldings 3 are connected to the body portion 2 of the refrigerator by means of 65 fastening devices 3b, preferably oval-headed screws, and the moldings 3 are countersunk to receive the heads of said screws. I prefer to use moldings 3 of semi-tubular-shape in cross section so that each molding will clamp 70 two of the sheathing plates 1 in position, and also cover the sharp edge or corner of the body portion 2 over which it is arranged.

Corner moldings 3^a are arranged at the four corners of the refrigerator and also at 75 the four corners of the base hereinafter described, said corner moldings being so constructed that they cooperate with the moldings 3 to form practically a continuous protecting member that covers all of the edges 80 or corners of the refrigerator. These corner moldings 3^a are preferably formed of cast metal, and each one is provided with a vertical leg that embraces one of the vertical edges of the body portion 2 of the refriger- 85 ator, and two horizontally disposed legs arranged at approximately right angles to each other so as to embrace two of the horizontal edges of the body portion 2. A base 2ª that is connected to the body portion 2, is 90 covered by enameled sheets of metal 1^a that are clamped in position by means of moldings 3 arranged over the upper edges of said base so as to protect same and also clamp the sheets 1a in position. Grooves are pref- 95 erably formed in the base 2ª for receiving the lower edges of the sheets 1, this feature of my invention being clearly illustrated in Fig. 2 of the drawings.

One very desirable feature of a refrigerator of the construction above described is that no fastening devices pass through the sheathing plates so that there is not as great liability of the enameling cracking as there is in a construction in which the sheets are retained in position by means of fastening devices which pass through openings in the sheet and bear directly on the enamel thereon. Another advantage in constructing a refrigerator in the manner above described 11 is that I do not have to fit the sheets accurately to the walls over which they extend

because the moldings 3 and corner moldings 3a cover the edges of the plates and hide them from view. Another very desirable feature of my improved construction is that 5 any of the outside sheathing plates can be removed easily by taking off the molding that extends over one edge of the sheet and then drawing the sheet out of the moldings that extend over the other edges of same.

10 The moldings are preferably nickel so that they impart a neat and ornamental appearance to the refrigerator, and as they are of semi-tubular shape in cross section the refrigerator is free from sharp corners or

15 edges.

The food compartment of the refrigerator or the inner lining of the insulated body portion 2 is made up of enameled sheets of metal that have their edge portions locked together 20 after the enamel has been baked on said sheets. Prior to my invention the food compartments of refrigerators were formed from sheets of metal that were brazed together so as to produce a rectangular-shaped 25 box which was thereafter enameled. One serious objection to a construction that is first brazed and then enameled is that defects in the sheet do not appear until after the enameling operation so that it is very 30 often necessary to discard the whole box if one of the sheets therein proves to be defective. Moreover, this method of constructing inner linings makes it impracticable to construct large inner linings or boxes for 35 they cannot be enameled conveniently.

In my improved construction the sheets of metal that form the inner lining of the food compartment are first enameled, and their edge portions are thereafter connected to-40 gether, preferably by locked seams or joints, as shown in Fig. 2. By building the inner lining in this manner I am able to match up the sheets after they have been enameled and discard any imperfect sheets, and I am 45 also able to produce a large inner lining at a low cost because it is a very simple matter to enamel the individual flat sheets before they have been connected together. The edge portions of the sheets 4 can be locked 50 together in numerous ways, such, for example, as providing one sheet with a channel-shaped portion 4ª that embraces the edge portion of an adjacent sheet. After the inner lining sheets 4 have been connected to-55 gether by inserting the edge of one sheet into a channel-shaped flange on an adjacent

sheet, said flanges are embedded in grooves formed in the insulating material 2 of the refrigerator and set in odorless rock cement. A one-piece lining is thus produced that is 60 superior to the brazed linings heretofore in use, and as the joints between the various pieces of lining are set in cement said joints are both water-proof and acid-proof.

The shelf brackets of the refrigerator each 65 consist of a flat strip of metal that is doubled and then bent laterally to form an approximately T-shaped device 5 whose shank projects horizontally through a slot in the inner lining sheets 4 of the food com- 70 partment and whose head is interposed between said inner lining sheets and the body. portion 2 of the refrigerator, as shown clearly in Figs. 2 and 4, the heads of said T-shaped devices being preferably con- 75 nected to the inner lining sheets 4 by means of rivets 5a. A shelf bracket of this construction can be produced at a low cost, it is neat and takes up very little space, and is a decided improvement on the shelf brackets 80 heretofore in use which usually consisted of cast members that were retained in position by fastening devices that passed through holes in the inner lining.

Having thus described my invention, what 85 I claim as new and desire to secure by Let-

ters Patent is:

1. A refrigerator having a rectangular-shaped body portion, metal moldings secured to the corners of said body portion, 90 and an outer covering or sheathing for said body portion consisting of separate enameled metal sheets, each of which is slidingly mounted between two of the corner moldings on the body portion.

2. A refrigerator having a body portion provided with a plurality of moldings arranged parallel to each other, enameled sheets of metal slidingly mounted between said moldings and coöperating with same to 100 form an outer sheathing for said body portion, and separate moldings detachably connected to said body portion for covering the other edges of said sheets.

In testimony whereof I hereunto affix my 105 signature in the presence of two witnesses, this 22nd day of July 1908.

GEBHARD C. BOHN.

Witnesses:

A. G. THOMAS, H. C. BILL.