

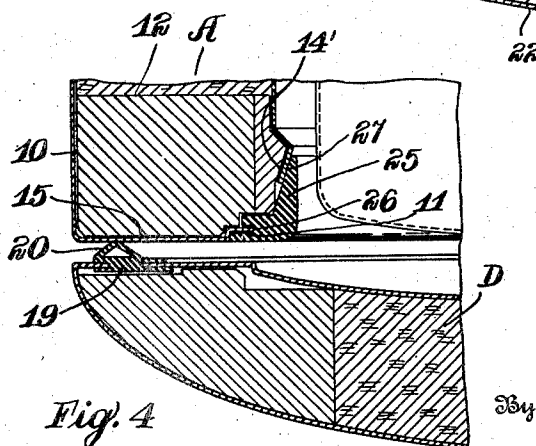
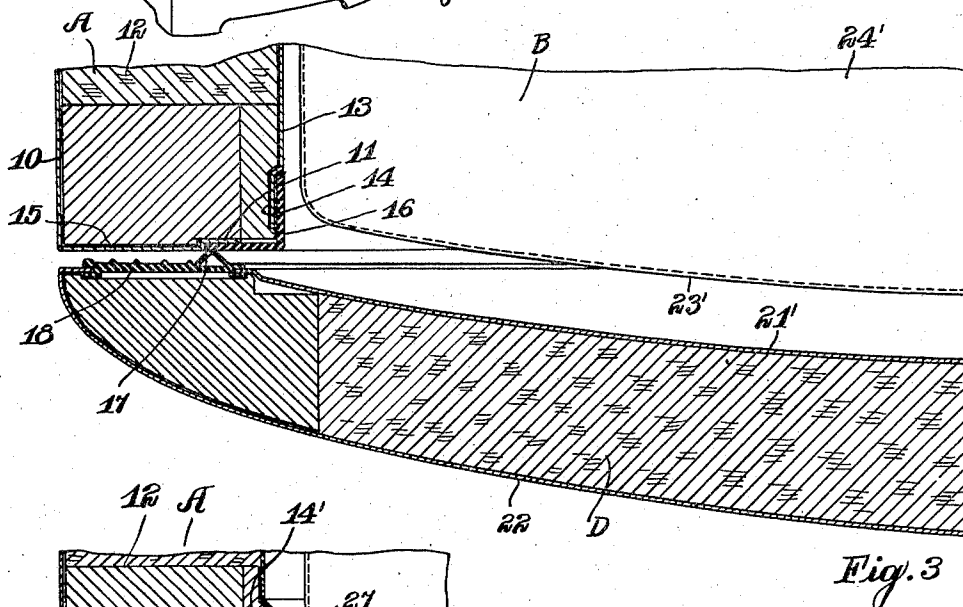
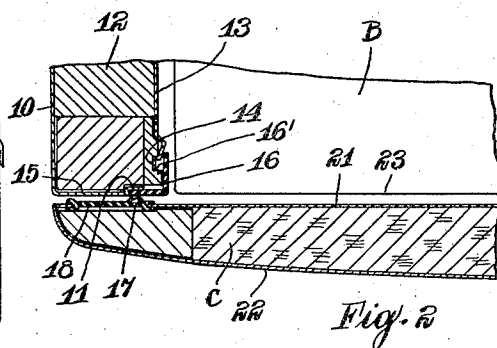
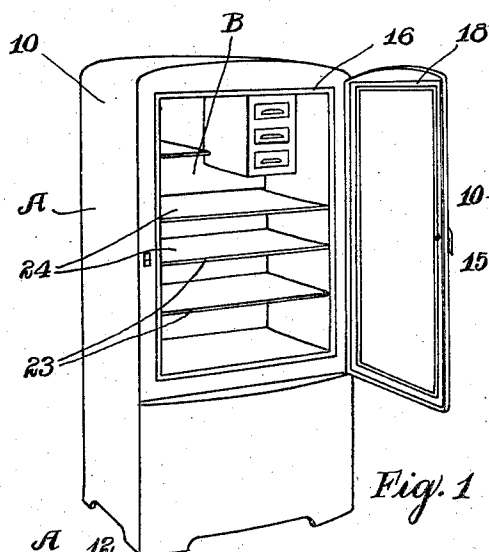
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FLUSH TYPE REFRIGERATOR DOOR AND CORNER MOLDING CONSTRUCTION

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FLUSH TYPE REFRIGERATOR DOOR AND
CORNER MOLDING CONSTRUCTION

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1 Claim. (Cl. 220—9)

This invention relates to refrigerator construction wherein the cold zone of the refrigerator is formed with the shelf projecting flush with the outer edge of the refrigerator and where the door for closing the cold zone chamber extends flush with the outer surface of the body of the refrigerator.

Further, the invention includes a construction of refrigerator wherein the door is of a flush type extending with its sealing edges parallel to the outer surface of the body of the refrigerator around the door opening and with the inner door pan or surface of the door concaved, and with the shelf in the cold zone projecting slightly into the concaved formation of the door closure. This provides a refrigerator construction with a greater capacity in the cold zone and differs from the old forms of refrigerators where the door or closure for the cold zone had a body portion which projected into the cold zone and where the door was rabbeted for sealing the cold zone chamber.

In this form of refrigerator, the inner and outer surfaces are covered with enamelled metal sheathing which is adapted to be connected around the door opening with a non-conductive molding, and the outer front surface of the refrigerator body is formed sufficiently true so that a flush type door may be provided with rubber gasket sealing means which contacts this outer surface of the body to seal the cold zone or chamber of the refrigerator by the gasket which overcomes the necessity of the old form of construction of body and doors for refrigerators.

A further feature resides in a sealing gasket on the door which acts as a nonconductor and breaker strip connecting the inner edge of the exterior door pan or sheathing with the interior door pan or sheathing and also forming a compressible gasket to hermetically seal the cold zone or chamber of the refrigerator.

A further feature of this invention resides in a refrigerator construction wherein it is desirable to provide means for connecting the inner and outer sheathings of the body by a nonmetallic breaker strip to provide a virtually right-angular corner about the door openings of a refrigerator where flush type doors are used which may be formed to cover the entire front surface of the body of the refrigerator at the door opening. The nonconducting molding when formed of a right-angular character is a very desirable means of forming the nonconducting strip which connects or covers the inner edge of the outer

sheathing, and the outer edge of the inner sheathing, and forms a finishing strip of a right-angular nature where flush type doors are used for refrigerator construction.

The drawing illustrates the refrigerator in perspective with the door of the same open and showing the door of the flush type and of approximately the same width as the body of the refrigerator, in Figure 1.

Figure 2 is a detail section of the body and door construction of the refrigerator.

Figure 3 illustrates an enlarged sectional detail, showing a concaved door and a protruding cold zone shelf.

Figure 4 is a detail section, showing the body construction and corner molding, and the door construction of the refrigerator.

The refrigerator A is formed with an outer enamelled sheathing 10 which covers the outside surface of the refrigerator and is adapted to project over the front portion of the frame and is provided with an inner edge 11. The body 12 of the refrigerator is made of any suitable non-metallic material to provide the frame and necessary insulation between the outer sheathing 10 and the inner enamelled sheathing 13. The inner sheathing is provided with an edge portion 14 which is spaced from the edge 11.

In a refrigerator of this character, where flush type doors are used with their outer marginal inner surface extending parallel to the front face 15 around the door opening, it is desirable to provide a right-angular nonconducting molding 16 as illustrated in Figures 2 and 3. This forms a square corner for the door opening and the molding is adapted to cover the edges 11 and 14 of the outer and inner enamelled sheathing to form the finishing strip which secures the sheathing in place on the body of the refrigerator.

With the square or right-angular molding 16, a flat bearing surface is provided against which the hollow rib 17 of the sealing gasket 18 is adapted to bear or press to seal the cold or refrigerated zone B of the refrigerator A. The gasket 18 is usually made of rubber or similar woven or pliable material and it is undesirable to have the rubber rib 17 press against the enamelled front surface 15 owing to the fact that it might mark the enamel where the rib of the gasket contacts the same. Therefore it is desirable to have the rib 17 of the gasket engage the molding 16 which usually is black in color or is of a different color than the outer sheathing which ordinarily is white or of a lighter color

than the gasket 18. A gasket 19 such as is illustrated in Figure 4, with the hollow bearing rib 20 may be used in place of the gasket 18 if it is desired, and in this case as shown, the rib 20 of the gasket bears against the enamelled surface 15 of the outer sheathing.

The door C of the refrigerator A as illustrated in Figures 1 and 2, is formed with a straight inner enamelled sheathing or pan 21, while the exterior door sheathing or pan 22 is bowed outwardly and has its edges turned in to extend in line with the inner edge of the sheathing 21. In this construction the rubber gasket 18 connects the edge of the inside sheathing 21 and the edge of the outside sheathing 22 as illustrated, thus forming the nonmetallic finishing strip or molding for the door C.

In the construction of the refrigerator illustrated in Figures 1 and 2, the outer edges 23 of the shelves 24 extend straight across and flush with the outer surface 15 on the front of the refrigerator around the door. It will be apparent that a refrigerator constructed with the shelves extending flush with the front face of the refrigerator has a greater capacity in the cold zone B than where a portion of the door extends into the cold zone as in old types of refrigerators.

The door D in the refrigerator construction illustrated in Figure 3 has the outer sheathing 22 of the same nature as that illustrated in Figure 2; however, in this refrigerator, the inner door sheathing or pan 21' is bowed inwardly to provide a door with a concaved inner surface. In this form of refrigerator illustrated in Figure 3, the outer edges 23' of the shelves 24' are curved to fit into the recess formed in the door instead of extending flush with the front face 15 of the body of the refrigerator. Slightly greater capacity is given by shelves of this character.

The right-angular corner molding 16 may be formed as illustrated in Figs. 2 and 3, with the sides of the same of a comparatively thin character, one side overlapping the edge 11 of the outer sheathing which is offset under the molding 16. Along the inside of the other side of the molding 16, a projecting rib 16' engages against the offset edge 14 of the inner sheathing. The rib 16' reinforces the molding at the point of engagement with the edge 14.

In Figure 4 a right-angular molding 25 is illustrated which is of a different shape on the inside than the molding 16. In the molding 25 a groove 26 is provided for receiving the edge 11 of the outer sheathing 10 and the molding 25 is thicker in the body at the corner than the molding 16. Further, the inner end 27 of the molding 25 is beveled on the inner surface to fit against the inner edge 14' of the sheathing of the refrigerator illustrated in this construction. In each case the right-angular molding 16 and 25 provides a rectangular or virtually square corner at the opening of the refrigerator. This provides a better appear-

ing finishing strip for the edge around the opening of the door. Further, it provides a non-metallic breaker strip which will not chip off like enamel would if it were knocked by articles being placed in or taken out of the refrigerator A. Insofar as known, this right-angular corner molding is entirely new in refrigerators.

The neat design and character of this refrigerator will be apparent because it provides a smooth outer and inner surface which may be readily kept clean, making the refrigerator more sanitary, and the appearance is more pleasing. The large door which covers the opening into the cold zone B forms a single panel-like member extending over the entire front of the refrigerator. It will also be apparent that a better seal is provided between the door and the body of the refrigerator, so that there is less chance for a leak from or into the cold zone B. This construction also provides a nonrefrigerated marginal space about the door between the door and the body which is adapted to receive the hardware and may be used for an electric light so that these elements are kept entirely out of the cold zone. This is a material advantage in the construction of refrigerators. The construction of this refrigerator is also more desirable than old types and forms of refrigerators, because the shelf space is increased and the shelves are more accessible. Further, the right-angular molding permits a uniform contour at the opening of the refrigerator.

I claim:

A sealing joint between a refrigerator body having an inner sheathing and an outer sheathing, and a refrigerator door having inner and outer sheathings, the joint consisting in offset marginal edges on said inner and outer sheathings arranged on planes intersecting at substantially right angles, a right angular molding including a flange overlying the offset marginal edge of said outer sheathing, the outer surface thereof extending substantially flush with said outer sheathing adjacent said offset marginal edge; a second flange extending at substantially right angles to said first named flange and overlying said marginal offset edge of said inner sheathing, the outer surface of said second flange extending substantially flush with the inner sheathing adjacent said offset marginal edge thereof; portions of said inner and outer sheathings of said door arranged in substantial alignment, a nonmetallic gasket interposed between said door sheathings, grooves in said gasket receiving the marginal edges of said sheathing portions, said portions arranged on a plane substantially parallel to the first named flange and partially overlapping said first named flange of said right angular molding, and a hollow bead on said gasket extending longitudinally thereof and engaging said first named flange of said right angular molding.

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