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M. J. GOULOOZE

2,349,419

REFRIGERATING APPARATUS

Filed July 28, 1941

Fig. 1.

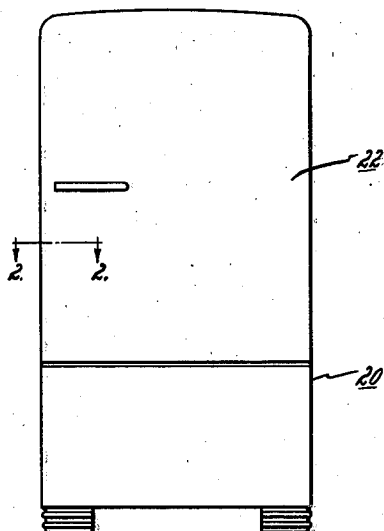


Fig. 2.

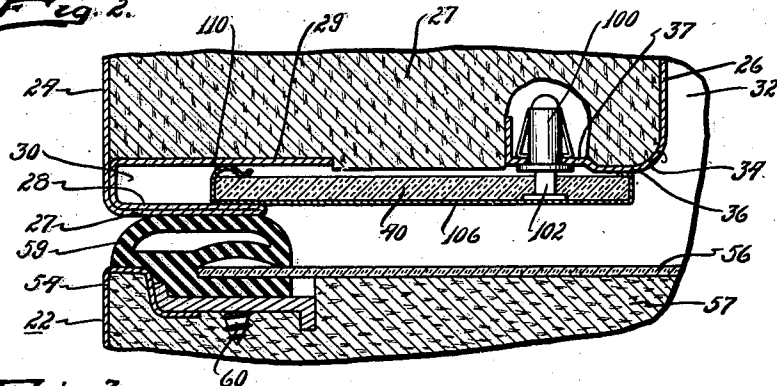
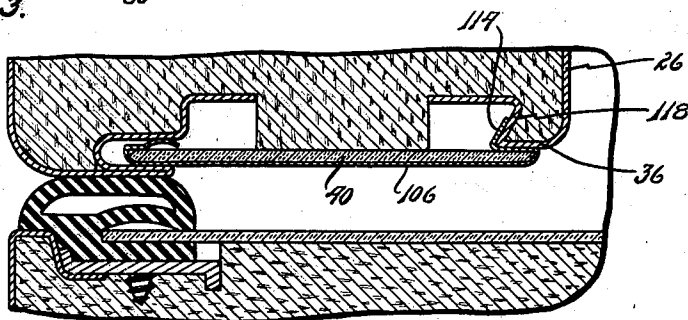


Fig. 3.



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2,349,419

REFRIGERATING APPARATUS

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Application July 28, 1941, Serial No. 404,271

1 Claim. (Cl. 220—9)

The present invention pertains to a refrigeration apparatus and more particularly to an improved refrigerator cabinet construction.

The present application is a continuation in part of my copending application Serial No. 392,613, filed May 9, 1941, for Refrigerating apparatus, and now matured into Patent No. 2,329,754.

It is an object of the present invention to provide a breaker strip for interconnectively joining the edges of the inner and outer wall of a refrigerator cabinet which is readily attached by use of resilient members.

It is another object of the present invention to provide an improved breaker strip construction which is readily attachable without the aid of tools.

It is a further object of the present invention to provide a cabinet construction whereby the breaker strip forms a portion of the front wall of the cabinet to extend peripherally adjacent to a door opening.

The invention itself, however, both as to its organization and its operation, together with additional objects and advantages thereof, will best be understood from the following description of specific embodiments when read in conjunction with the accompanying drawing, in which:

Fig. 1 is a front elevational view of a refrigerator cabinet;

Fig. 2 is a view taken in the direction of arrows 2—2; and

Fig. 3 is a view similar to Fig. 2 of a modified form of apparatus embodying features of my invention.

Shown in the drawing is a refrigerator cabinet 20 having a door 22. The cabinet is formed of an outer sheet metal casing or shell 24 and an inner sheet metal shell, casing or liner 26. Suitable insulation 27 is interposed between the shell's 24 and 26.

The outer casing 24 forms the sides, top, and, if desired, the rear wall of the refrigerator. It is bent at a marginal distance from its front edge at right angles to the side portion to provide a portion 27 forming the front wall of the refrigerator cabinet. The face portion 27 is formed with extended metal which is doubled upon the portion 27 to extend reversely, as at 28, thence rearwardly adjacent to the side wall of the casing a determinable distance upon which it is bent at right angles forming a rear portion 29 substantially parallel to the face portion 27. The rear portion 29 forms with the double face portion a recess or pocket 30. By this form of construc-

tion the front edge or front wall is reinforceably strengthened by being formed of double thickness.

The inner liner 26 which forms the walls of a food storage compartment 32 is marginally bent adjacent the door opening 34 to provide a laterally extended flange 36. The outer edge portion of the flange 36 is offset, as at 37. The flange 36 is substantially in parallel planular alignment with the face portion 27 of the outer shell with their edges terminating a substantial distance apart.

Extending from the face portion 27 to the lateral flange 36 is a breaker strip 40 confined on one edge thereof to the pocket 30 and clamped on the other edge to the flange 36. The breaker strip may be made of plastic, fibrous material, "Bakelite" or any suitable non-hydroscopic, non-metallic material. Similar breaker strips are positioned along the other side of the cabinet on the front wall adjacent the opening 34 thereof, and immediately above the food storage compartment at the top of the cabinet, and also immediately below the food storage compartment. Since the principle of attaching the breaker strip 40 to the cabinet and the principle of attaching the other breaker strips are the same, I have only shown in detail the breaker strip 40 and the way it is attached to the cabinet.

Any door of suitable construction may be used with the cabinet. As shown in the drawing, there is provided a door 22 having an outer metallic shell 54 and an inner panel 56. The inner panel 56 is formed of plastic, fibrous material, or other low heat conducting material. Insulation 57 is interposed between the shell and panel.

Secured to the door is a gasket 59 that extends around its perimeter and adapted for engagement with the front part 27 of the cabinet. The gasket is secured by a tongue which lies beneath the inner panel by means of screw 60 which also secures the panel to the shell 54. The screw head 60 is covered by overlapping the gasket thereon. The door gasket 59 is arranged to contact the front part of the cabinet to form a seal so as to prevent air entering the food storage compartment.

The food storage compartment 32 is cooled by means of a refrigerating system (not shown).

The breaker strip is secured to flange 36 by a snap comprising a female portion 100 which is secured in said flange in the liner and is adapted to receive a male portion 102 carried by the breaker strip. The opposite edge of the breaker strip ex-

tends into pocket 30. The face portion of the breaker strip is covered by a relatively thin gauge metallic member 106 of low heat conductivity, such as stainless steel or the like. As will be noted in the drawing, the metallic member, on one edge, extends around the edge of the breaker strip and abuts the flange 36 where it is thus held in place. It will also be noted in the drawing that the opposite edge of the metallic member 106, on its opposite edge, extends around the opposite edge of the breaker strip in the form of a U, and on the rear side of the breaker strip is provided with a beaded portion 110 which engages wall 29 of pocket 30, while the front part of member 106 engages wall 28 of pocket 30. By virtue of the beaded portion 110, the breaker strip, including member 106, is snugly held in pocket 30.

Fig. 3 is similar to Fig. 2, however, the snap parts 100 and 102 are omitted and the right edge, as viewed in the drawing, of the metal member 106 is provided with a return bend flange 114 which engages a V-shaped flange 118 of liner 26 to resiliently and removably hold the right edge of the breaker strip in position.

While I have shown and described the preferred form of my invention, I do not wish to

limit myself to the precise details as shown but wish to avail myself of such variations and modifications as may come within the scope of the appended claim.

I claim:

In a cabinet construction, the combination of inner and outer shells having heat insulation therebetween and being provided with a door opening, said shells having edge portions bent inwardly toward each other, the edge portion of one of the shells being bent to form a pocket opening toward the edge portion of the other shell, an insulated breaker strip bridging the space between said shells and having one edge thereof received in said pocket, a thin metallic strip covering the outer face of the breaker strip and extending around the edges thereof, said metal strip on the outer face of the breaker strip contacting the front wall of the pocket and having a resilient extended portion formed thereon extending along the rear face of the breaker strip and engaging the rear wall of the pocket and frictionally securing the breaker strip and metal covering in said pocket, and means for connecting the opposite edge of the breaker strip to the other shell.

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