April 14, 1953 E. D. DRAKE 2,634,879

REFRIGERATOR CABINET

Filed June 29, 1946 2 SHEETS--SHEET 1

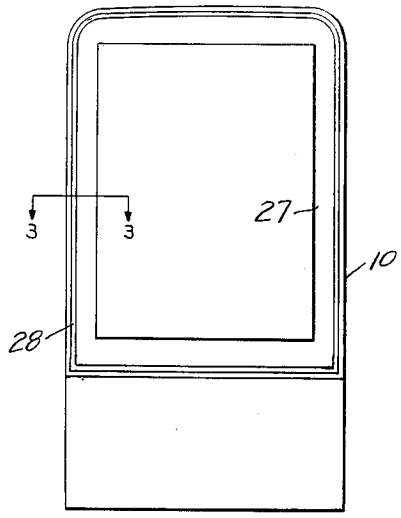


FIG. 1

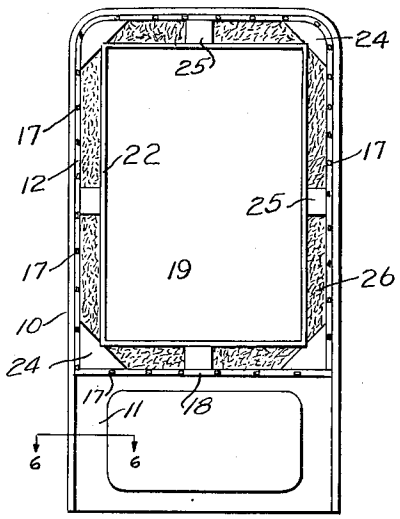


FIG. 2

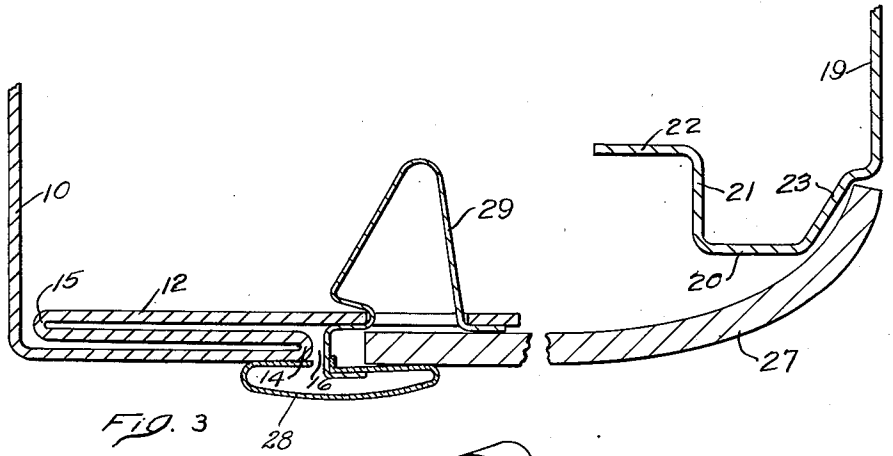


FIG. 3

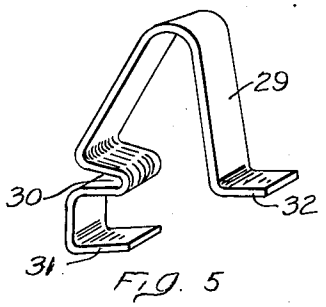


FIG. 5

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REFRIGERATOR CABINET

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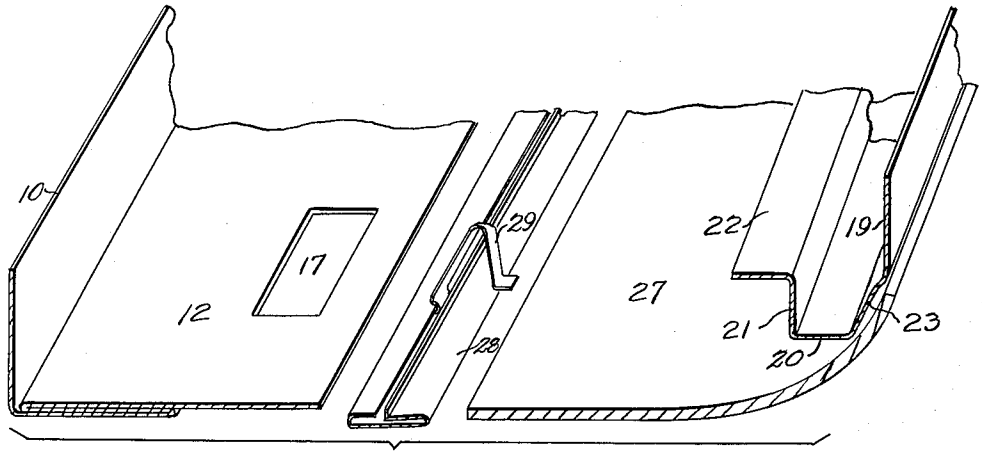


FIG. 4

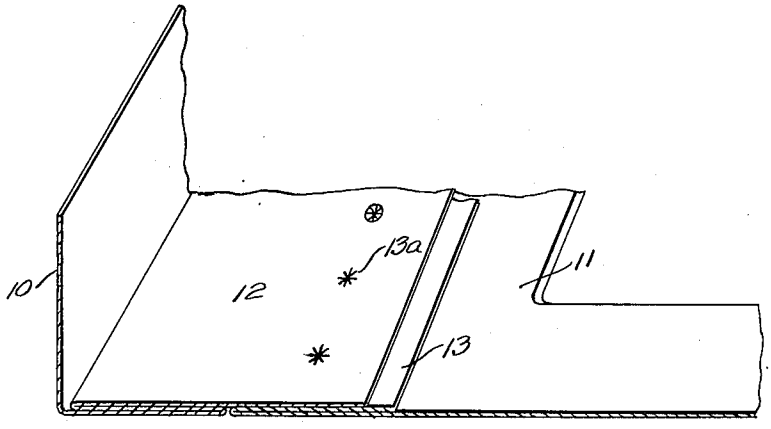


FIG. 6

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REFRIGERATOR CABINET

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4 Claims. (Cl. 220—9)

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This invention relates to refrigerator cabinets and more particularly to breaker strips therefor.

The principal object of the present invention is to provide a novel form of ornamental breaker strip for a refrigerator.

Another object is to provide novel means for attaching a breaker strip to a refrigerator cabinet.

A still further object is to provide a combined attaching means for a breaker strip and ornamental moulding for concealing the edge of the breaker strip.

These objects will more fully appear in the following specification when read in connection with the accompanying drawings, wherein:

Figure 1 is a front elevational view of a refrigerator cabinet embodying the invention, the door of the cabinet having been removed;

Figure 2 is a front elevational view of the cabinet with the breaker strip removed;

Figure 3 is a fragmentary cross-sectional view taken on substantially the line 3—3 of Figure 1;

Figure 4 is a fragmentary pictorial view of the front of one side of the cabinet, taken from the inside thereof, and with the parts separated to better show the construction thereof;

Figure 5 is a perspective view of an attaching clip; and

Figure 6 is a fragmentary pictorial view of the bottom portion of the cabinet.

The invention is illustrated herein as embodied in a refrigerator cabinet for a household refrigerator. The refrigerator cabinet comprises an outer shell 10 of sheet material, preferably sheet steel. The sides and top of the shell are preferably formed from a single piece of metal bent into U-shape. The lower ends of the sides are tied together by a base (not shown), a machinery compartment front panel 11, and a back wall (not shown) is connected to the rear edges of the sides and top. A horizontal partition (not shown) is attached to the back and sides intermediate the top and bottom of the cabinet, and divides the latter into a storage compartment and a machinery compartment.

The front edges of the sides and top of the outer shell are flanged inwardly at 12. The flanges are formed as shown in Figure 3, by bending the metal laterally inwardly, then reversely outwardly, at 14, and then again inwardly at 15. The free edge of the flange extends laterally inwardly a substantial distance past the bend 14. Thus, a forwardly opening rabbeted seat 16 is formed for a purpose which will appear presently. A plurality of spaced apart rectangular openings 17 are cut in the flange 12 as shown in Figures 3 and 4.

The lower ends of the side walls of the outer

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shell are stiffened by the rectangular machinery compartment front panel 11. The panel 11 has a large central access opening therein. The upright edges of the panel 11 are folded back upon themselves as at 13 and spot welded to the flange 12 at 13a (see Figure 6). The double thickness of metal at the upright edges of panel 11 brings the front surface of panel 11 flush with the front surfaces of flange 12. Also, due to the double thickness the spot welds do not show at the front of the cabinet.

The upper edge of the panel 11 is provided with a flange 18 folded the same as is flange 12 on the outer shell of the cabinet. The ends of the innermost layer of the flange 18 are cut away sufficiently to permit the front surface of the flange to be flush with the front surface of flange 12. Openings 17 are formed in the flange 18 just as they are in flange 12.

The food storage compartment is defined by a rectangular box shaped lining 19 open at the front. The front edge of the lining is turned laterally outwardly as shown at 20 in Figure 3, then rearwardly at 21, and finally flanged laterally outwardly at 22. This results in a flanged channel construction which materially stiffens the front of the liner. A rabbet 23 is formed in the wall of the liner adjacent the front thereof for a purpose which will presently appear.

The liner 19 is rigidly connected to the outer shell by means of four corner gussets 24. The gussets preferably are welded to the flanges 12 and 18 on the outer shell and to the flange 22 on the liner at the corners thereof.

Intermediate the gussets are additional struts 25 which are rigidly fastened to the flanges 12, 13 and 22. The struts 25 may be of metal, but preferably they are fashioned from a stiff heat insulating material, such as fiber or the like.

Insulating material 26 is placed between the outer shell and the lining.

To cover the adjoining edges of the outer shell 10, liner 19 and panel 11, as well as the space therebetween, a breaker strip 27 is provided. The breaker strip is made from stiff heat insulating material, preferably one of the plastics which can be molded and when taken from the mold has a high polish. The breaker strip is formed in one piece, as a rectangular frame, surrounding the access opening in the liner. The cross section of a side of the frame, which is uniform throughout its perimeter, is shown in Figure 3. The breaker strip is placed against the fronts of the outer shell 10, liner 19 and panel 11, with the outer edge of the breaker strip in the rabbet 16 and the inner edge in the rabbet 23.

The breaker strip is attached at its outer per-

imeter only to the refrigerator cabinet, by a moulding 28 and a plurality of metal clips 29. Only the outer perimeter need be attached to the cabinet because of the one piece frame construction.

The moulding may be made up of four pieces, but preferably it is formed from a single piece, bent or extruded to the cross-section shown in Figures 3 and 4, and then bent to form a rectangular frame.

The clips 29 are generally V-shaped, but have a recess 30 in one leg thereof. The free ends of the legs are turned laterally in the same direction to provide flanges 31 and 32.

The flanges 31 are inserted into the moulding 28 through the slot in the back thereof. The moulding 28 and the clips 29 are then placed on the breaker strip with the outer perimeter of the latter between one side of the moulding and the flanges 32 on the respective clips. The flanges 31 engage the inside of the back wall of the moulding and thereby holds the flanges 32 against the breaker strip. The entire sub-assembly namely, the breaker strip, moulding and clips, is then brought into juxtaposition with the flanges 12 and 18, and the clips 29 are slid along the moulding until they register with the respective apertures 17. Pressure is exerted on the moulding adjacent the clips, which forces the latter to snap into the openings 17. Each recess 30 receives one edge of each opening while each flange 32 overlies the front surface of the respective flange 12 or 18 on the opposite side of the opening.

One edge of the moulding overlies a part of the front face of the flange 12, while the other edge of the moulding overlies the adjacent edge of the breaker strip 27. The breaker strip is then effectively held in place, and the joint between the outer perimeter of the breaker strip 27 and the flanges 12 and 18 are concealed and ornamented.

In addition, due to the fact that the breaker strip is frictionally attached to the cabinet and is held at one edge only, the breaker strip can move laterally a limited distance to permit expansion and contraction of the cabinet or parts thereof.

From the foregoing it will be seen that the present invention provides a novel ornamental breaker strip which forms the front wall of the cabinet around the access opening in the lining. The breaker strip is easily attached to the cabinet by the clips 29 and moulding 28, the latter concealing the joint between the breaker strip and the outer shell, and forming an additional ornament for the cabinet.

The scope of the invention is indicated in the appended claims.

I claim:

1. A refrigerator cabinet having a storage chamber defined by an inner shell, an outer shell surrounding said inner shell in spaced relation thereto, said shells having registering openings providing access to said storage chamber, said outer shell having an inturned flange surrounding said access opening, a front wall member formed of heat insulating material overlapping said flange exteriorly thereof and the adjacent portion of said inner shell, a decorative molding in overlying securing engagement with the laterally outer edge of said front wall member, and securing devices concealed by said molding for attaching the latter to said flange.

2. A refrigerator cabinet as defined in claim 1 wherein said securing devices comprises resilient clips detachably connected to said flange.

3. A refrigerator cabinet as defined in claim 1 wherein said flange is provided with spaced apart openings and wherein said securing devices comprises resilient clips received in said openings and detachably engaging certain edges thereof.

4. A refrigerator cabinet as defined in claim 1 wherein said front wall member is formed in one piece and entirely surrounds said access opening.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,995,339	Blood	Mar. 26, 1935
2,100,017	Van Lum	Nov. 23, 1937
2,169,419	Hofferberth et al.	Aug. 15, 1939
2,187,321	Johnson	Jan. 16, 1940
2,279,050	Lenning	Apr. 7, 1942
2,301,020	Dailey	Nov. 3, 1942
2,313,671	Rundell	Mar. 9, 1943
2,329,754	Goulooze	Sept. 21, 1943
2,331,845	Rundell	Oct 12, 1943
2,348,645	Quinn	May 9, 1944
2,370,446	Buchanan	Feb. 27, 1945
2,426,055	Rundell	Aug. 19, 1947
2,489,019	Drake	Nov. 22, 1949
2,504,390	Caldwell	Apr. 18, 1950
2,514,926	Benson	July 11, 1950
2,529,380	Fletcher	Nov. 7, 1950