Aug. 13, 1929. G. R. MEYERCORD ET AL 1,724,882

BASE FOR REFRIGERATOR CABINETS

Filed July 5, 1927 2 Sheets-Sheet 1

Fig. 1.

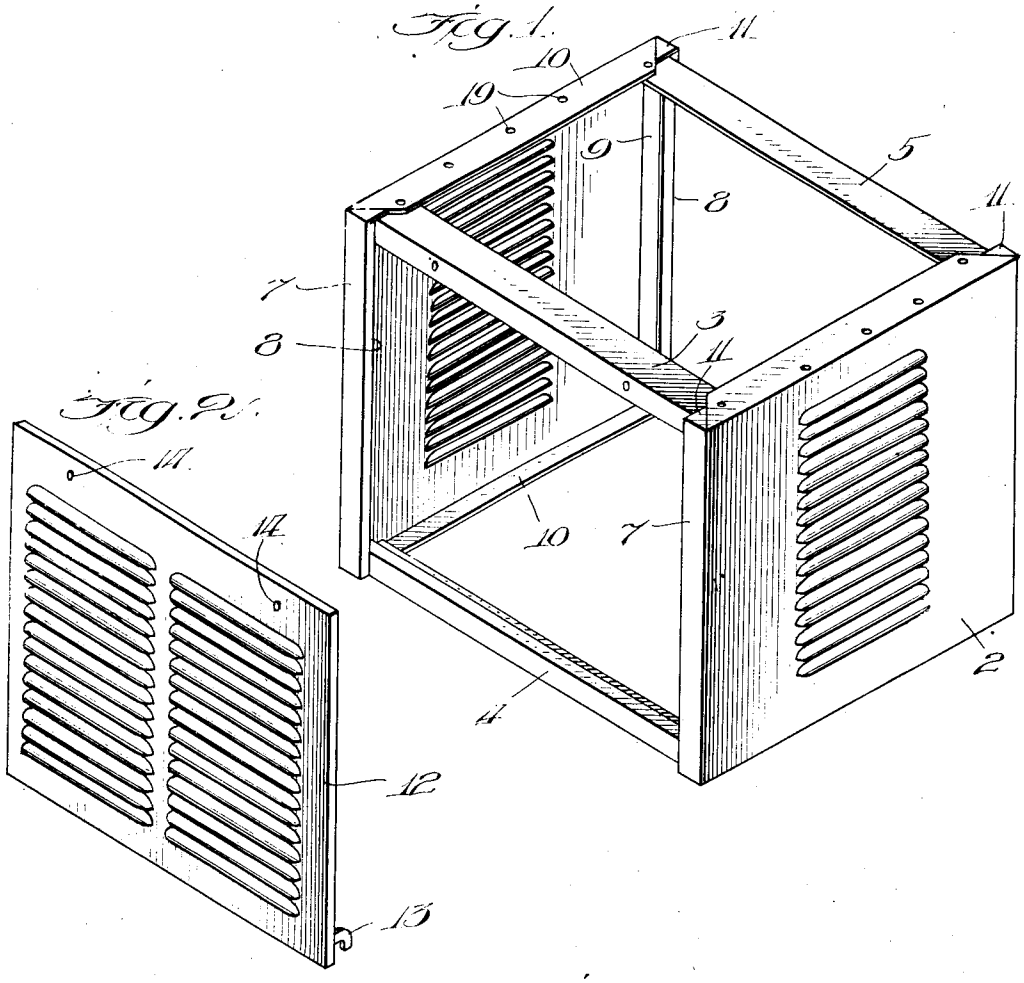
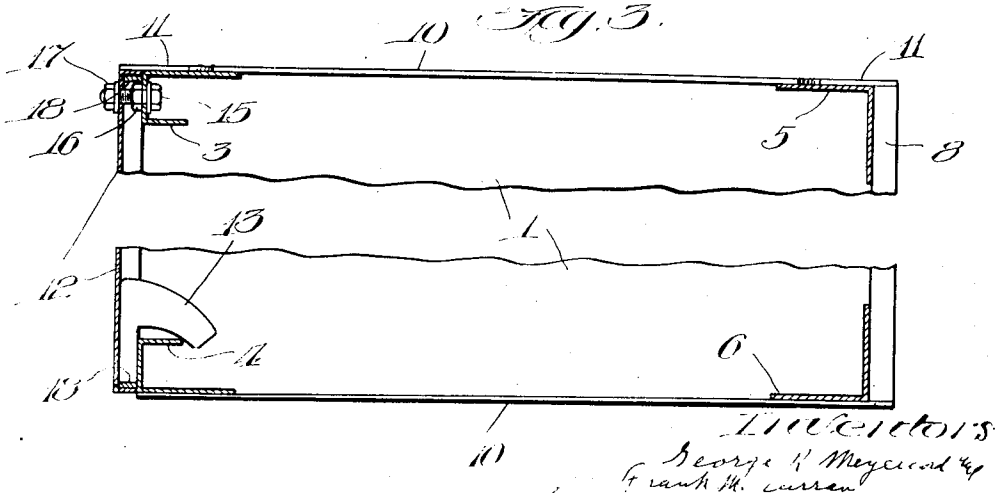


Fig. 2.

Fig. 3.



Inventors
George R. Meyercord &
Frank H. Curran,
By Wm. F. Freudenreich
Atty

Aug. 13, 1929. G. R. MEYERCORD ET AL 1,724,882

BASE FOR REFRIGERATOR CABINETS

Filed July 5, 1927 2 Sheets-Sheet 2

Fig. 4.

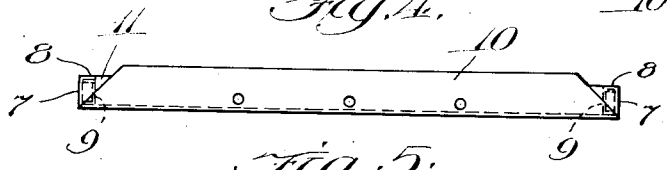


Fig. 7.

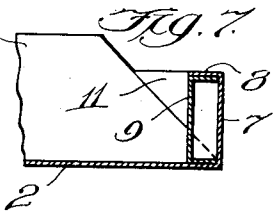


Fig. 5.

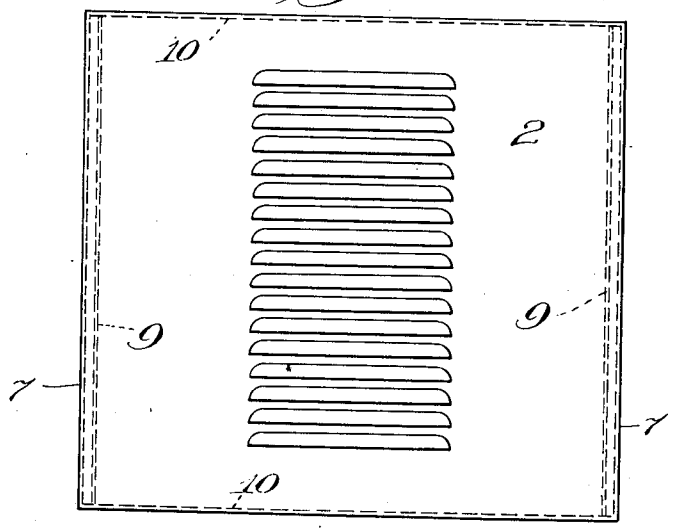


Fig. 6.

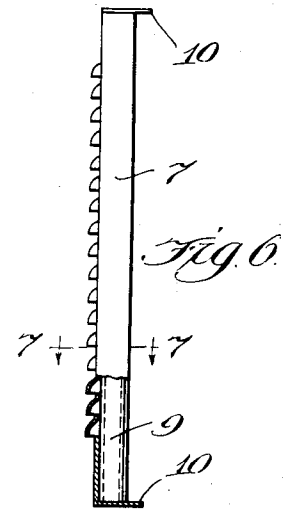


Fig. 8.

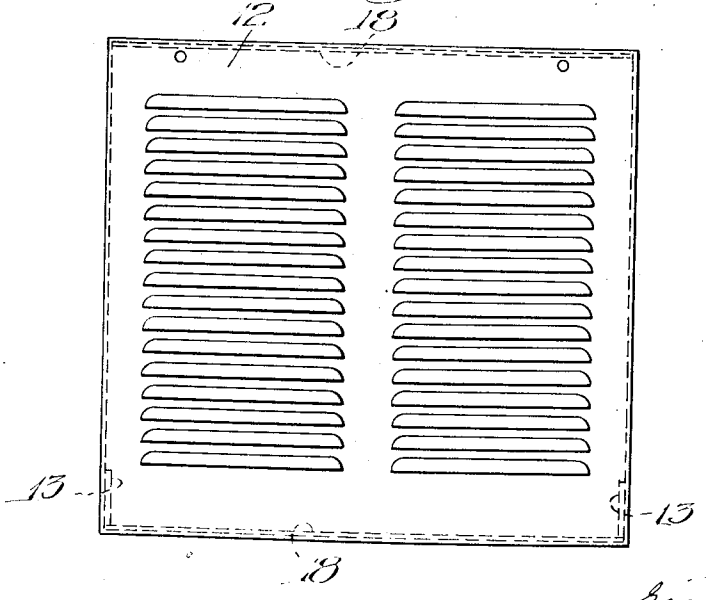
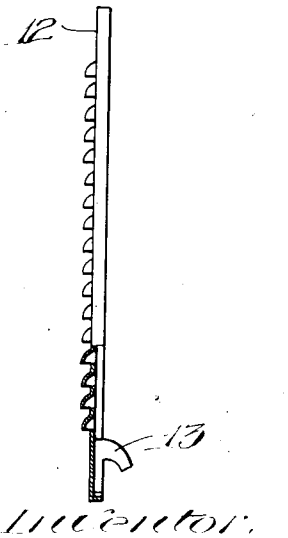


Fig. 9.



Inventor:
George R. Meyercord &
Frank M. Curran,
Wm. F. Freudenreich,
by Attys

Patented Aug. 13, 1929. 1,724,882

UNITED STATES PATENT OFFICE.

GEORGE R. MEYERCORD, OF CHICAGO, ILLINOIS, AND FRANK M. CURRAN, OF GRAND RAPIDS, MICHIGAN, ASSIGNORS TO HASKELITE MANUFACTURING CORPORATION, A CORPORATION OF NEW YORK.

BASE FOR REFRIGERATOR CABINETS.

Application filed July 5, 1927. Serial No. 203,667.

A type of refrigerator that is coming largely into use is that in which the food compartment or cabinet is set upon a base containing the refrigerating machinery. While the external appearance of the cabinet or food compartment and the machinery compartment or base should harmonize, their functions are so totally different that, for the sake of efficiency and utility their constructions should also vary widely. Thus, the food compartment must be thoroughly insulated, while the machinery compartment or base needs only serve as a housing for the machinery and as a mechanical support for the food cabinet. The present invention has for its object to produce a simple and novel base construction of the type to which reference has just been made, which shall be mechanically strong, neat in appearance, and be adapted to be produced at a low cost.

The various features of novelty whereby our invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of our invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawings, wherein:

Figure 1 is a perspective view of a housing or base made in accordance with the present invention, the closure for the front being omitted; Fig. 2 is a perspective view of the door or closure for the front side of the housing shown in Fig. 1; Fig. 3 is a sectional view on a larger scale than Figs. 1 and 2, taken on a vertical plane extending from front to rear through the housing, only the upper and lower portions of the housing being shown; Figs. 4, 5 and 6 are respectively a top plan view, a front elevation, and an edge view, partly in section, of one of the side walls before it is built into the structure; Fig. 7 is a section taken approximately on line 7—7 of Fig. 6, on a larger scale than Fig. 6; and Figs. 8 and 9 are respectively a front view and an edge view of the door, the lower portion of the door in Fig. 9 being shown in section.

In the preferred form, the housing or base is made in the form of a shell open at the front and at the rear and having a door for closing the front opening. Sheet metal elements are preferably employed in building up the structure, the individual pieces being spot welded to secure them together into substantially an integral whole and being so shaped and proportioned as to give a maximum mechanical strength for a given weight of material.

The main portion of the housing or base is composed of two similar sheet metal side panels, 1 and 2 connected by top and bottom cross pieces at the front and rear, the front cross pieces, 3 and 4, being preferably L-shaped, and the rear cross pieces, 5 and 6, being preferably angle irons. The side panels are flanged along the four edges for the sake of stiffness and to provide elements for attachment to the cross pieces. The front and rear flanges of the side panels first extend laterally, at right angles to the panels, and then inwardly parallel with the planes of the panels; each therefore consisting of two wings 7 and 8 at right angles to each other. Into the trough formed between each of these flanges and the body of the panel is set a channel member 9 whose open side is closed by the wing 7. The top and bottom flanges 10 are cut off diagonally at the ends so as to leave free a triangular space into which may be set a flange 11 bent inwardly from the corresponding end of the wing 7. Therefore the flanges consisting of the wings 7 and 8, together with the channels 9 form hollow posts closed at the top and the bottom by the flanges 10 and 11. By spot welding the channels to the wings 8 and to the flanges 10 and 11, the reinforced side panels are completed without making it necessary to weld within the area of any broad outer face of the structure when completed.

The cross piece 3 underlies the flanges 10 and 11 at the top of the structure, the top horizontal chord fitting up against these flanges, while the front vertical flange lies against the inner faces of the front posts. The lower front cross piece 4 lies upon the lower horizontal flanges 10 and 11 and against the inner sides of the posts. Likewise, the rear upper and lower cross pieces 5 and 6 lie on the inner sides of the rear posts, underneath the upper flanges on the side panels, and on top of the lower flanges on the side panels. When the cross pieces are welded to the flanges engaged thereby,

they form with the side panels a rigid unitary structure.

The door 12 may be in the form of a shallow pan or tray having hooks 13 welded to the side flanges at the lower end. These hooks may be engaged over the lower front cross piece, as best shown in Fig. 3, while the upper end of the door engages the front face of the upper cross piece 3. The door is just wide enough to fit between the front posts, and its overall thickness is preferably equal to that of the posts so that the front faces of the door and of the posts lie in the same plane. The upper part of the door may be fastened to the upper cross piece in any suitable way. In the arrangement shown the door has two holes 14 extending through the same near the top. As shown in Fig. 3, the vertical chord of the upper cross piece may be provided with two bolts 15 extending through the same and provided on the outer side of the cross piece with locking nuts 16. These bolts are so disposed that they will extend through the holes in the top of the door, permitting the door to be securely fastened in place by applying nuts 17 on the outer ends of the bolts. Any suitable fastening means may, however, be provided.

The upper and lower flanges of the door are preferably reinforced by strips 18 laid on the inner sides thereof and welded thereto.

An entire or a partial floor may be laid in the housing or base, resting at its ends upon the horizontal flanges of the lower front and rear cross pieces; the refrigerating machinery or mechanism being supported on such floor or partial floor.

The top flanges 10 of the side walls or panels may be provided with bolt holes 19 for receiving bolts with which to fasten the food containing cabinet to the base.

It will thus be seen that we have produced a light, rigid and simple sheet metal housing or base of great strength from a few pieces that are easily prepared and that can be assembled and secured together at small cost. It will further be seen that by reason of the peculiar disposition of the elements of which our improved structure is composed, the welding may all be done in areas that are concealed when the base is in use; thus avoiding on the outer faces of the housing any welded spots that would either disfigure the structure or require work to be done to efface the marks caused thereby.

While we have illustrated and described with particularity only a single preferred form of our invention, we do not desire to be limited to the exact structural details thus illustrated and described; but intend to cover all forms and arrangements which come within the definitions of our invention constituting the appended claims.

We claim:

1. A sheet metal housing comprising two side panels flanged at the four edges reinforcing elements welded to the inner sides of the front flanges to form hollow posts, and upper and lower cross bars at the front and rear of the said panels, said cross bars being welded to the said upper and lower flanges.

2. A side member for a housing comprising a sheet metal panel having a marginal portion flanged to produce two wings the inner of which is at right angles to the panel and the outer of which is parallel with the panel, and a sheet metal channel fitted into the space between the outer one and the body of the panel with the open side of the channel closed by said inner wing, one of the flanges of the channel lying flat against the panel and the other flange lying flat against that wing which is parallel to the panel, the channel and the panel being welded together.

3. A side member for a housing comprising a sheet metal panel having a marginal portion flanged to produce two wings the inner of which is at right angles to the panel and the outer of which is parallel with the panel, and a sheet metal channel fitted into the space between the outer wing and the body of the panel with the open side of the channel closed by said inner wing, the ends of said inner wing and the top and the bottom of the panel being flanged across said channel, the channel being welded to said outer wing and to the top and bottom flanges.

4. A sheet metal housing comprising two side panels flanged inwardly at the four edges, means welded to the flanges along the vertical edges of said panels to form with the same hollow posts reinforcing said vertical edges, upper and lower cross bars extending between said side panels at the front and at the rear, said cross bars lying against the inner sides of said posts and against the upper and lower flanges on said panels, said cross pieces and said flanges being welded together.

5. A sheet metal housing having an open front bounded by posts at opposite sides of the housing and by upper and lower cross pieces engaged with the inner sides of the posts, a door having a thickness equal to that of the posts and adapted to fit between the posts and against said cross pieces, hooks on the inner side of the lower portion of the door to engage with the lower cross piece and means for fastening the top of the door to the upper cross piece.

In testimony whereof, we sign this specification.

GEORGE R. MEYERCORD.
FRANK M. CURRAN.