

March 31, 1931.

F. E. STEVENSON

1,798,281

REFRIGERATING APPARATUS

Filed Dec. 30, 1927

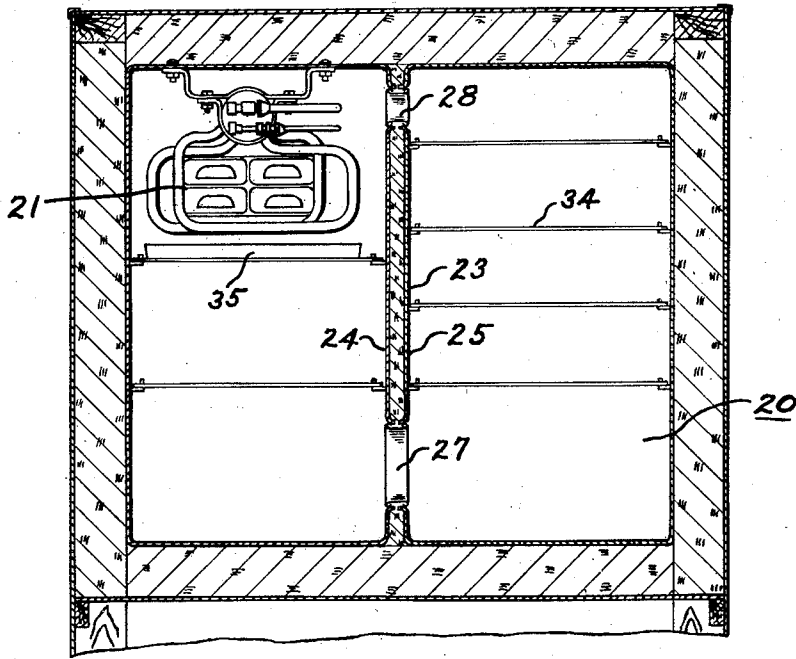


Fig. 1



Fig. 3

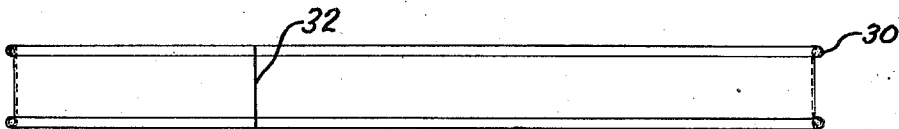


Fig. 4

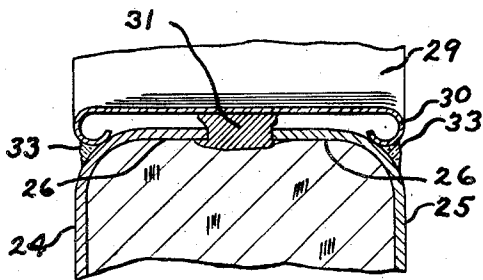


Fig. 2

Francis E. Stevenson Inventor

Spencer, Hardman & Fehr Attorney

UNITED STATES PATENT OFFICE

FRANCIS E. STEVENSON, OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO
FRIGIDAIRE CORPORATION, A CORPORATION OF DELAWARE

REFRIGERATING APPARATUS

Application filed December 30, 1927. Serial No. 243,750.

This invention relates to refrigerators, and more particularly to the partition walls within the refrigerator.

An object of this invention is to provide an improved construction for a partition within a refrigerator which permits the circulation of air within the refrigerator.

Another object of this invention is to provide improved means in a partition wall of a refrigerator to prevent the circulation of air into the space in the wall of the refrigerator.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawing, wherein a preferred form of the present invention is clearly shown.

In the drawings

Fig. 1 is a vertical cross-sectional view of a refrigerator embodying my invention;

Fig. 2 is an enlarged detailed view of a portion of a wall of a refrigerator embodying my invention;

Fig. 3 is an axial view of a collar used in a refrigerator embodying my invention; and

Fig. 4 is a transverse elevation of the collar shown in Fig. 3.

A refrigerator, embodying my invention and generally designated as 20, may be provided with cooling means, such as an evaporator 21 of a mechanical refrigerator. A refrigerator may also be provided with a partition wall such as wall 23. Usually such a wall may have two shells 24 and 25 provided with one or more aligned openings 27 and 28 to permit the circulation of air from one side of the wall to the other. The space in between the shells 24 and 25 may, if desired, be provided with insulation.

In an embodiment of my invention the shells 24 and 25 may be provided with inwardly projecting flanges 26 surrounding the openings 27 and 28 in the wall 23. These inwardly directed flanges 26 may be covered by a split collar generally designated as 29. The collar 29 may have outwardly projecting flanges 30 which may be formed by a bead in the metal of the collar 30. The collar 29 may be inserted in the openings 27 and 28 and may be spread into place by any suitable

means. After the collar 29 has been snapped into place the flanges 26 and the body of the collar may be spot-soldered as shown at 31, the spot of solder conveniently joining the two flanges 26 and the body of the collar 29. One of these spots can be applied at the split 32 of the collar 29 in order to prevent the ends of the collar from slipping apart.

During any suitable time of the assembly a sealing substance indicated at 33 may be used to seal the joint between the flanges and the collar 29 and the shells 24 and 25. The sealing substance, in the preferred form of my invention, may comprise water glass by itself or in combination with another substance such as pumice. This sealing substance prevents circulation of air between the interior of the wall 23 and the interior of the food compartment of the refrigerator 20.

The wall 23, in cooperation with other parts of the refrigerator, may support the trays 34 for holding food receptacles and may also support the drip pan 35 placed underneath the cooling unit 21.

While the form of embodiment of the invention as herein disclosed, constitutes a preferred form, it is to be understood that other forms might be adopted, all coming within the scope of the claims which follow.

What is claimed is as follows:

1. A refrigerator cabinet having an insulated wall with insulation retaining shells and provided with an opening, at least one of said shells having an inwardly projecting flange, a split collar with outwardly directed flanges in said opening and means fused to said collar and extending around said first named flange for securing said collar in place.

2. A refrigerator cabinet having an insulated wall with insulation retaining shells and provided with an opening, at least one of said shells having an inwardly projecting flange, a split collar with outwardly directed flanges in said opening and means fused to said collar where said collar is split and extending around said first named flange for securing said collar in place.

3. A refrigerator cabinet having an insulated wall with insulation retaining shells and provided with an opening, said shells

having inwardly projecting flanges, a split collar with outwardly directed flanges in said opening and means fused to said collar and extending around said first named flange for securing said collar in place.

5 4. A refrigerator cabinet having an insulated wall with insulation retaining shells and provided with an opening, said shells having inwardly projecting flanges, a split
10 collar with outwardly directed flanges in said opening and means fused to said collar where said collar is split and extending around said first named flange for securing said collar in place.

15 5. A refrigerator cabinet having an insulated wall with insulation retaining shells and provided with an opening, at least one of said shells having an inwardly projecting flange, a collar in said opening and a sealing
20 medium along the edge of said collar.

6. A refrigerator cabinet having an insulated wall with insulation retaining shells and provided with an opening, said shells having inwardly projecting flanges, a split
25 collar with outwardly directed flanges in said opening, means fused to said collar and extending around said first named flange for securing said collar in place and a sealing medium between said shells and said out-
30 wardly directed flanges.

In testimony whereof I hereto affix my signature.

FRANCIS E. STEVENSON.