C. H. ZWERMANN.

LINING FOR REFRIGERATORS.

APPLICATION FILED FEB. 21, 1910.

963,198.

Patented July 5, 1910.

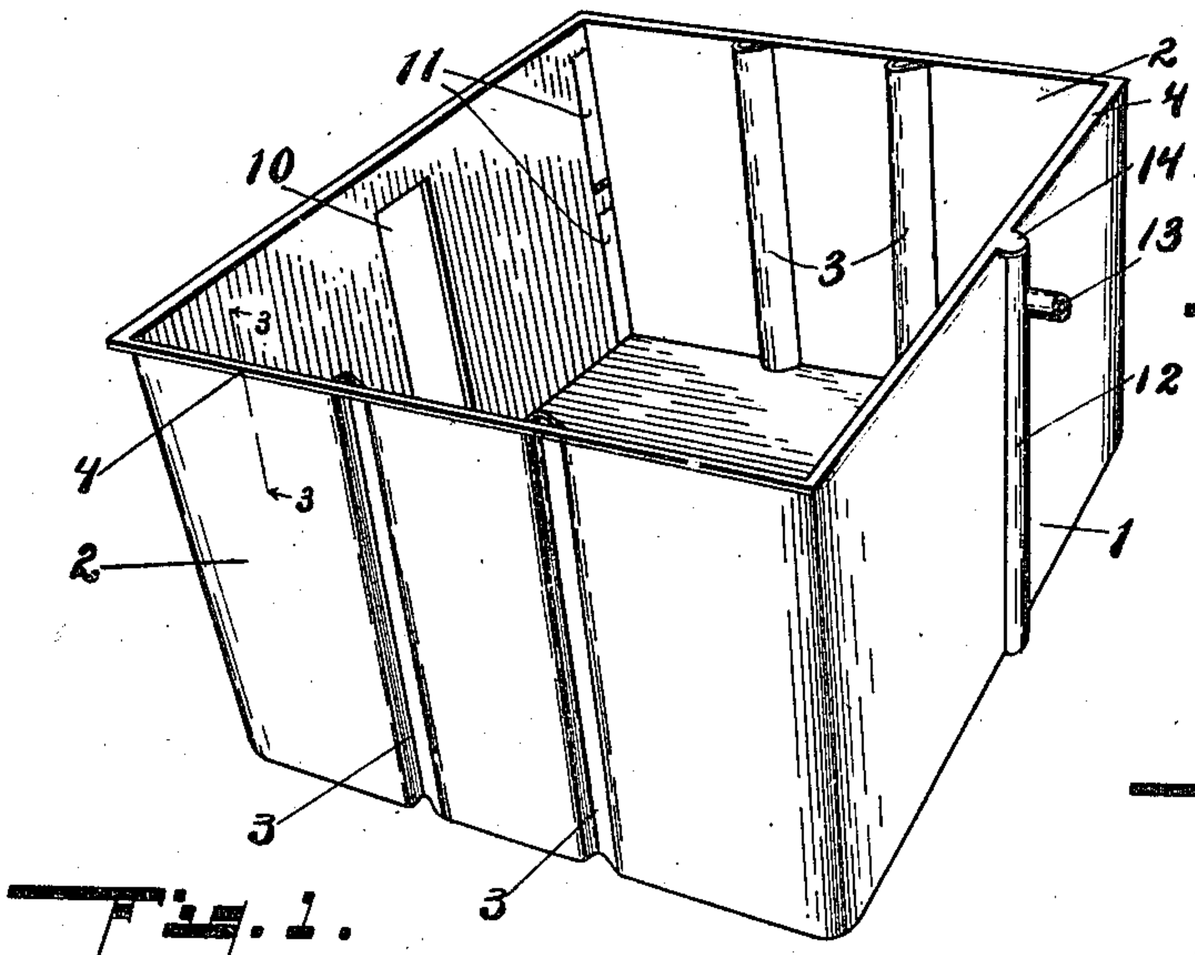

Fig. 1.

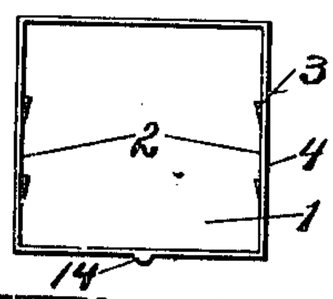

Fig. 7.

Fig. 3.

Fig. 2.

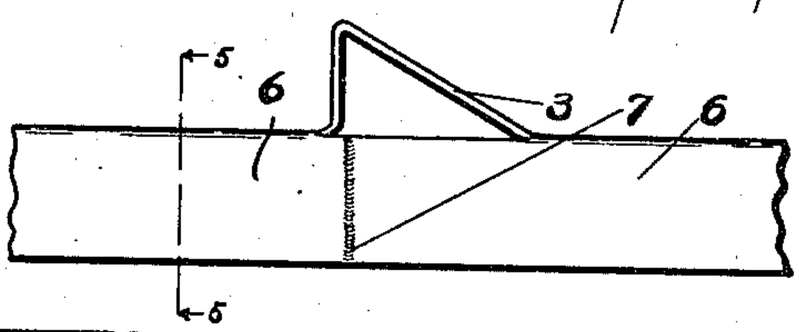

Fig. 4.

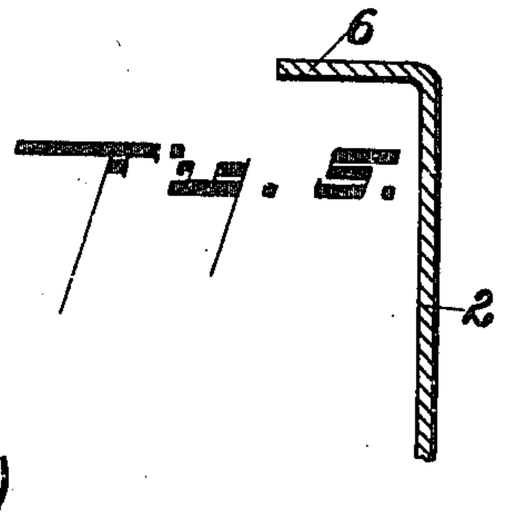

Fig. 5.

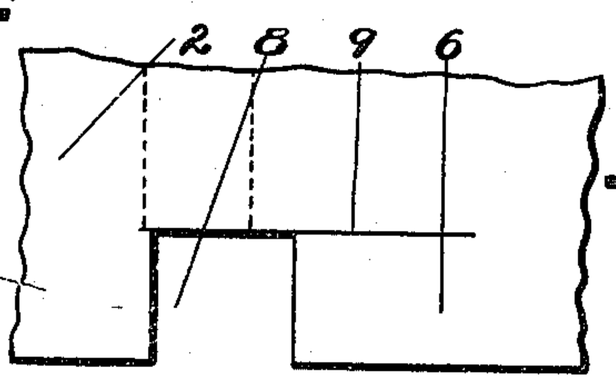

Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

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LINING FOR REFRIGERATORS.

963,198. Specification of Letters Patent. **Patented July 5, 1910.**

Application filed February 21, 1910. Serial No. 545,038.

To all whom it may concern:

Be it known that I, CARL H. ZWERMANN, citizen of the United States, residing at Kalamazoo, Michigan, have invented certain new and useful Improvements in Linings for Refrigerators, of which the following is a specification.

This invention relates to improvements in linings for refrigerators.

The objects of this invention are to provide an improved sheet metal enameled lining for refrigerators which shall be effective for the purpose and complete in itself, with a shelf support and the remaining parts all properly braced and held in position.

A further object is to provide in an enameled refrigerator or sheet metal refrigerator lining, an improved construction of shelf support.

A still further object is to provide an improved flange construction for sheet metal refrigerator lining which shall effectively brace the various parts.

I accomplish the objects of my invention by the devices and means described in the following specification.

The invention is clearly defined and pointed out in the claims.

A preferred embodiment of my invention is clearly illustrated in the accompanying drawings, forming a part of this specification, in which,

Figure 1 is a perspective view of my improved refrigerator lining laid down upon its back, the bottom portion being toward the right. Fig. 2 is an enlarged detail of the flange and shelf support, showing the relation of the same. Fig. 3 is a detail sectional view on line 3—3 of Fig. 1. Fig. 4 is an enlarged detail view of a modification of the structure appearing in Figs 1, 2 and 3. Fig. 5 is a detail sectional view of the structure appearing in Fig. 4, taken on a line 5—5 of Fig. 4. Fig. 6 is a detail view of the blanks from which the structure appearing in Figs. 4 and 5 are formed. Fig. 7 is a reduced detail front view of my improved refrigerator lining showing the exact relation of the various parts when looking into the front of the refrigerator.

In the drawings, similar reference numerals refer to similar parts throughout the several views, and the sectional views are taken looking in the direction of the little arrows at the ends of the section lines.

Referring to the numerals of reference, the improved sheet metal refrigerator lining 1 is provided with sides 2 in which are formed corrugations 3, 3 for the shelf supports. Up and down the side 2 and securing the same rigidly in position is a flange 4, which flange extends substantially around the refrigerator, and may be turned either outwardly or inwardly, as the case may be. It ordinarily is preferred to turn the flange inwardly or upwardly at the bottom of the refrigerator so that it serves to collect any moisture at that point, although it is often desirable to turn it outwardly or downwardly so that the moisture will readily flow out at the front and can readily be wiped off.

The flange 4 may be a strap of metal, as indicated in Fig. 2, which is welded, preferably by oxyhydrogen welding, at 5, 5 to the sides of the refrigerator lining at different points. It is, of course, strongest and best if the welding extends the entire length of the joint, but it is found not to be really necessary, for if the welding occurs at intervals, as indicated in Fig. 2, the enamel flows between the parts for the balance of the way, making a practically complete flange.

The flange may be formed as appears in Figs. 4, 5 and 6 by turning over the edge of the sheet metal, after cutting a slit 9 to permit of the folding of the corrugation 3 for the shelf support. A portion, as 8, is then cut out opposite this point and the two portions, 6, 6 welded together at 7, as indicated in Fig. 4. The flange is cut loose by a slit 9, as seen in Fig. 6. Openings 10 and 11, 11 are in the top of the refrigerator lining to permit of circulation of cold air from the ice chamber above. A corrugation 12 is usually formed in the bottom, terminating in an outlet nozzle 13 for the discharge of the drip. The front end of this corrugation is closed by a projection 14 of the flange 4 at that point.

Having thus described my improved sheet metal enameled refrigerator lining, I desire to say, as appears from the description, that this can be considerably modified without departing from my invention. The parts might be entirely pressed out of sheet metal but that will be found objectionable in that

where the corrugation for the shelf support is formed, unnecessary stress will be put upon the metal, and extra expense will be incurred in properly forming the same in that way, as it will require a heavy and expensive die for the purpose. I therefore prefer the details I show, which details I desire to cover by specific claims, as well as the broad features.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an article of manufacture, a refrigerator lining of sheet metal containing corrugations at the sides for forming shelf supports, and a flange extending across the said corrugations and welded thereto, to reinforce and support the same, as specified, the whole being suitably coated with enamel, as specified.

2. In an article of manufacture, a refrigerator lining of sheet metal containing corrugations at the sides for forming shelf supports, and a flange extending across the said corrugations to reinforce and support the same, as specified, the whole being suitably coated with enamel, as specified.

3. In an article of manufacture, a refrigerator lining of sheet metal containing corrugations at the sides for forming shelf supports, and a flange extending across the said corrugations to reinforce and support the same, as specified.

4. A sheet metal refrigerator lining with shelf supports formed therein and supported by a suitable welded flange extending across the said supports and around the front of said lining, the joints of the structure being welded and the whole being suitably coated with enamel, as specified.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

CARL H. ZWERMANN. [L. S.]

Witnesses:
LUELLA G. GREENFIELD,
H. E. ROETHER.