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CONSTRUCTION FOR BREAKING FLOW OF HEAT THROUGH METAL

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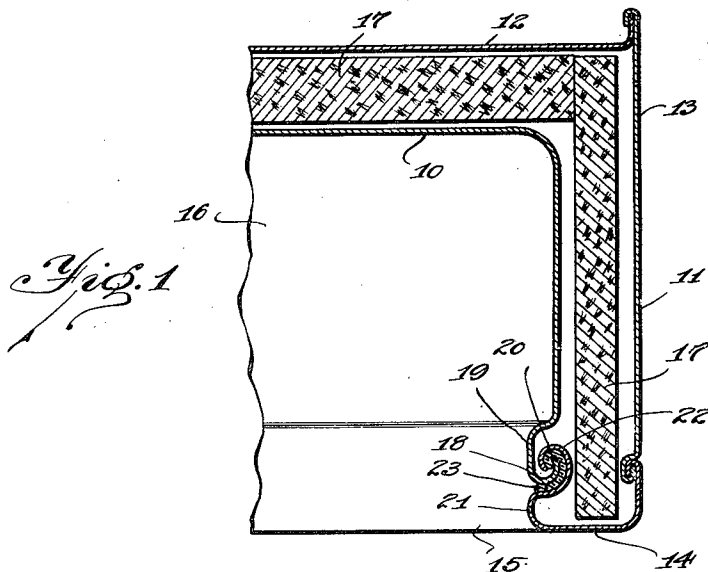
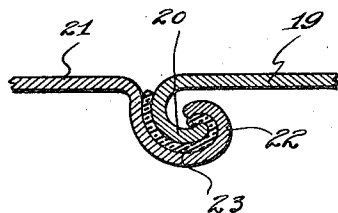


Fig. 2

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CONSTRUCTION FOR BREAKING FLOW OF HEAT THROUGH METAL

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My invention relates to a novel type of union between metallic elements for preventing the transmission of heat therebetween, and it has particular relation to the above designed principal as applied to the construction of refrigerators.

Heretofore, it has been customary to manufacture refrigerators with sheet metal inner linings enclosed within wooden outer casings. As wood is a good heat insulator only a very small portion of the heat absorbed by the outer casing was transmitted to the inner linings and thus to the various storage compartments within the refrigerators. However, with advent of all sheet refrigerators it becomes desirable to secure the outer sheet metal casing to the inner sheet metal lining and at the same time prevent the transmission of heat thereto, and such is the purpose of the present invention.

One object of my present invention is to provide a novel type of union between sheet metal members which permits of a rigid connection therebetween but prevents the transmission of heat therebetween.

Another object of my invention consists in providing a novel type of union between the inner and outer sheet metal casings of an all metal refrigerator.

For a better understanding of my invention reference may now be had to the accompanying drawings of which:

Fig. 1 is a vertical cross-sectional view of a portion of a refrigerator embodying my invention, and

Fig. 2 is an enlarged cross-sectional view of a sheet metal union constructed in accordance with my invention.

Referring first to Fig. 1 I have shown a refrigerator comprising an inner casing or lining 10, which is composed of sheet metal, and an outer casing 11, also composed of sheet metal, but comprising a back wall 12, a side wall 13 and a front wall 14. The front wall 14, at the point illustrated is relatively narrow, as the greater portion of the front wall of the refrigerator is formed by the doors, (not shown) which cover a relatively large opening 15, which provides access to a food storage compartment 16. The walls 12 and

13, and 13 and 14, respectively, are rigidly secured together at their adjacent edges by any desired type of union. The walls 11 and 12 are spaced from the lining 10 and members 17, composed of some heat insulating substance, such as ground cork, are interposed therebetween.

The lining 10 and the front wall 14 of the outer casing 11 are rigidly secured together by means of a union 18. A front edge 19 of the lining 10 is bent inwardly of the food compartment so as to provide ample space for the union 18 without engaging the heat insulating member 17. An extreme outer edge 20 of the portion 19 of the lining 10 is curved inwardly of the side wall of the refrigerator and is coiled or doubled back upon itself but is spaced from the integral portion 19. A front edge 21 of the front wall 14 is bent into the same plane with the portion 19 of the lining, thus providing a smooth inner surface for the refrigerator adjacent the door. An extreme edge 22 of the portion 21 is first bent inwardly of the side wall of the refrigerator and then outwardly thereof and is curved about the edge 20, the edge 22 being parallel to but spaced from the edge 20. Interposed between the edges 20 and 22 is a layer of heat insulating material 23 which is clampingly engaged by the member 22 and in turn clampingly engages the edge 20.

From the foregoing description it will be apparent that no portion of the metal edge 20 engages the metal edge 22 and that the transmission of heat therebetween is, as a consequence, reduced to a minimum. It will also be apparent that the union 18 will serve to rigidly connect the members 10 and 14 and will transmit from one to the other any strain in any direction which may be imposed thereon.

Although I have illustrated but a single form of my invention, and have described in detail but a single application thereof, it will be apparent to those skilled in the art that it is not so limited but that various modifications and changes may be made therein without departing from the spirit of

my invention or from the scope of the appended claims.

What I claim is:

1. A refrigerator comprising an outer metallic casing, and an inner metallic casing, said casings being arranged in spaced telescopic relation and interlocked in heat insulating relation.

2. A refrigerator comprising a metallic outer casing, a metallic inner casing arranged in spaced telescopic relation within said outer casing, the edges of said casings being rigidly joined, and a layer of heat insulating material interposed between said edges.

3. A refrigerator comprising an outer metallic casing, an inner metallic casing adapted to telescope said outer casing in spaced relation thereto, the adjacent edges of said casing being rigidly joined in spaced heat insulating relation, and a layer of heat insulating material disposed between said edges to prevent transmission of heat therebetween.

4. A refrigerator comprising an outer metallic casing, an inner metallic casing adapted to telescope said outer casing in spaced relation thereto, the adjacent edges of said casings being spirally joined to form a rigidly interlocking connection therebetween, and means interposed between said edges for preventing conduction of heat from one of said casings to the other.

In testimony whereof I hereunto affix my signature.

PERCY T. SEALEY.

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