(No Model.)

H. L. TROTTER.

REFRIGERATOR.

No. 457,962. Patented Aug. 18, 1891.

Fig. 1.

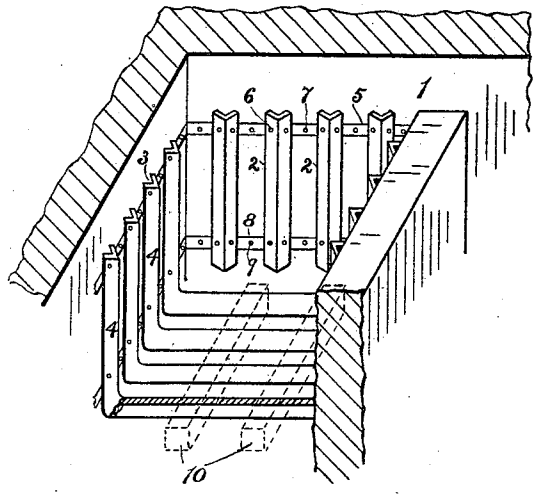
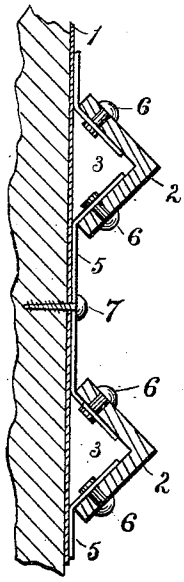


Fig. 2.



WITNESSES;

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UNITED STATES PATENT OFFICE.

HARRY L. TROTTER, OF ROCHESTER, NEW YORK.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 457,962, dated August 18, 1891.

Application filed April 20, 1891. Serial No. 389,675. (No model.)

To all whom it may concern:

Be it known that I, HARRY L. TROTTER, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Refrigerators; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures of reference marked thereon.

My invention relates to ice-boxes or receptacles for refrigerators and refrigerating-chambers, and has for its objects to improve their construction, whereby not only will they be simplified, cheapened, and strengthened, but a free circulation and the better refrigeration of the air insured; and to these ends it consists in certain improvements in construction and combinations of parts, all as will be hereinafter described, and the novel features pointed out particularly in the claims at the end of this specification.

In the drawings, Figure 1 is a perspective view, partly in section, of a portion of an ice-receptacle constructed in accordance with my invention; Fig. 2, a horizontal section of a portion showing the attachment of the ribs to the chamber walls.

Similar figures of reference indicate similar parts.

In carrying out my invention I first provide the interior walls of the ice or refrigerant chamber with a sheet-metal covering 1 or its equivalent, as usual, and then secure to the side and end walls sections 2 4 of angle iron, with the open sides toward the lining, forming with the latter vertical air-passages 3 from top to bottom of the chamber, while the sharp projecting angles of said irons form supports for the ice, holding the latter out of contact with the lining and providing for a free circulation of air between them. While these side irons may be long enough to extend only from near the top of the chamber to near the bottom thereof, and the bottom may be formed of any suitable material, I prefer to make the bottom bars integral with the bars 4 on two of the sides, continuing bars from the top of one side down across the bottom and up the other side, as shown in Fig. 1, thereby materially cheapening the construction and forming a strong support for the ice, which permits access of air to all parts, except that directly in contact with the sharp edges of the angle bars or irons, the air in said channels being thereby cooled and falling, creating a cold current. Of course numerous means may be devised for securing these angle-bars to the chamber walls; but I find that the best and most economical way is to punch holes in the sides of the bars near their upper ends and connect each to the adjacent one by strips 5 of sheet metal, preferably band iron or steel, which pieces are secured by rivets 6, passing through the strip ends and the apertures in the bars. These strips are then secured directly to the sides of the ice-chamber by screws or bolts 7, as shown, and while for security I prefer to employ connecting-strips 8 near the lower portions of the bars, secured by corresponding screws 9, as shown, these may be dispensed with, if desired, and the first-mentioned ones will be found to constitute a sufficient fastening for ordinary family refrigerators, though also, if desired, supporting-bars 10, as in dotted lines, could be placed underneath the horizontal bars, if necessary, in large refrigerators. These angle-bars, beside being cheap and readily utilized for the purpose intended, are very strong and do not increase the weight of the refrigerator in proportion to the strength and stability they insure, as would be the case if corrugated metal of sufficient thickness were employed for the purpose, and as they are preferably plated or galvanized the chamber will be found to be very cleanly and the inside as well as the outside can be easily cleansed and washed, when desired, to remove any deposit that might collect upon them. The air-channels insure a free air-circulation, thus securing the maximum effect of the ice on the articles in the refrigerator.

This same construction of ice-chamber could be employed in rooms or cars, and may be of different shape, if desired, from that shown herein.

I claim as my invention—

1. In an ice-chamber for refrigerators, and in combination with the walls thereof, the separate angle-bars secured to the wall having the vertical and horizontal portions, the edges of said vertical portions co-operating

with the walls and constituting vertical air-passages open at their ends, and the horizontal portions serving as an ice-support, substantially as described.

2. In an ice-chamber for refrigerators, and in combination with the walls thereof, the separate vertical angle-bars connected to each other and to said walls by the connecting-strips, the open sides of said bars forming with the walls vertical air-channels, substantially as described.

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