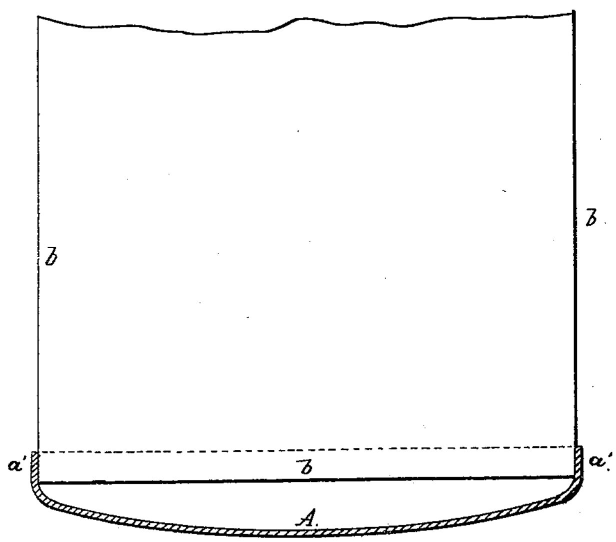
E. M. MANIGLE.

Bottom for Ice Cream Freezers.

No. 51,468. Patented Dec. 12, 1865.



Witnesses:
Benj. Morison
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Inventor:
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UNITED STATES PATENT OFFICE.

EDWARD M. MANIGLE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED BOTTOMS FOR ICE-CREAM FREEZERS.

Specification forming part of Letters Patent No. 51,468, dated December 12, 1865.

To all whom it may concern:

Be it known that I, EDWARD M. MANIGLE, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Bottoms for Ice-Cream Freezers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, and to the letters of reference marked thereon.

An ice-cream freezer has usually been made of tinned sheet-iron, and its bottom protected against rapidly wearing away by a supplemental or outside bottom of thick sheet-lead; and the object of my invention is not only to lessen the original cost of construction, but to produce more durable bottoms for these tin vessels.

It consists in making a flanged bottom, of cast-iron in, a single piece, then rendering it malleable, and finally coating it with tin, as a new article of manufacture, for the use of the trade.

The drawing represents a vertical diametrical section of a concave bottom, A, having a flanged periphery, *a'*, whereby, when tinned, the said bottom can be readily and quickly soldered fast to the tin body of the can or vessel.

For a common-sized freezer, I cast the bottom A about an eighth of an inch thick, more or less, then render it malleable or free from carbon by the usual well-known process, cleanse its surface, and finally coat it by passing it through a bath of melted tin. The iron being malleable or decarbonized, as described, such a perfect and strong adhesion of the tin thereto takes place that the whole flanged portion of the said bottom can be readily and quickly soldered to the tin-plate body, so as to remain strongly and permanently united in use.

In applying one of these bottoms A to the tin body of the freezer, the latter (see the faint lines *b b b* in the figure) is made to fit tightly within the flange or rim *a'*, and then, by means of a hand soldering-tool, the two surfaces are easily soldered firmly together throughout, because, the cast-iron bottom being previously decarbonized or converted into malleable iron, the tin coating becomes alloyed with its surface, and therefore, in soldering the bottom to the body of the vessel, the solder flows freely over the whole connecting surfaces of the two parts, and makes a strong and durable union between them.

It will be seen that these bottoms can be made and applied at less cost than the double bottoms of sheet tin and lead heretofore used, and also that they will be more strong and durable in use.

I am aware that a malleable-iron band has been united to a cast-iron bottom for a tin tea-kettle by casting the bottom into union with the said band, and then tinning the band for the purpose of causing a strong union between the vessel and the bottom by soldering, as in the patent granted to J. L. Worden, June 20, 1862; and therefore I do not desire to claim; broadly, a cast-iron bottom for tin vessels, nor do I desire to claim the conversion of cast-iron vessels into malleable-iron ones; but,

Having fully described the nature of my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein-described tinned decarbonized cast-iron bottoms for ice-cream freezers, as a new article of manufacture.

EDWARD M. MANIGLE.

Witnesses:

BENJ. MORISON,

BEN H. KNICKERBOCKER.