

W. EATON.  
Milk-Coolers.

No. 134,043.

Patented Dec. 17, 1872.

Fig. 1.

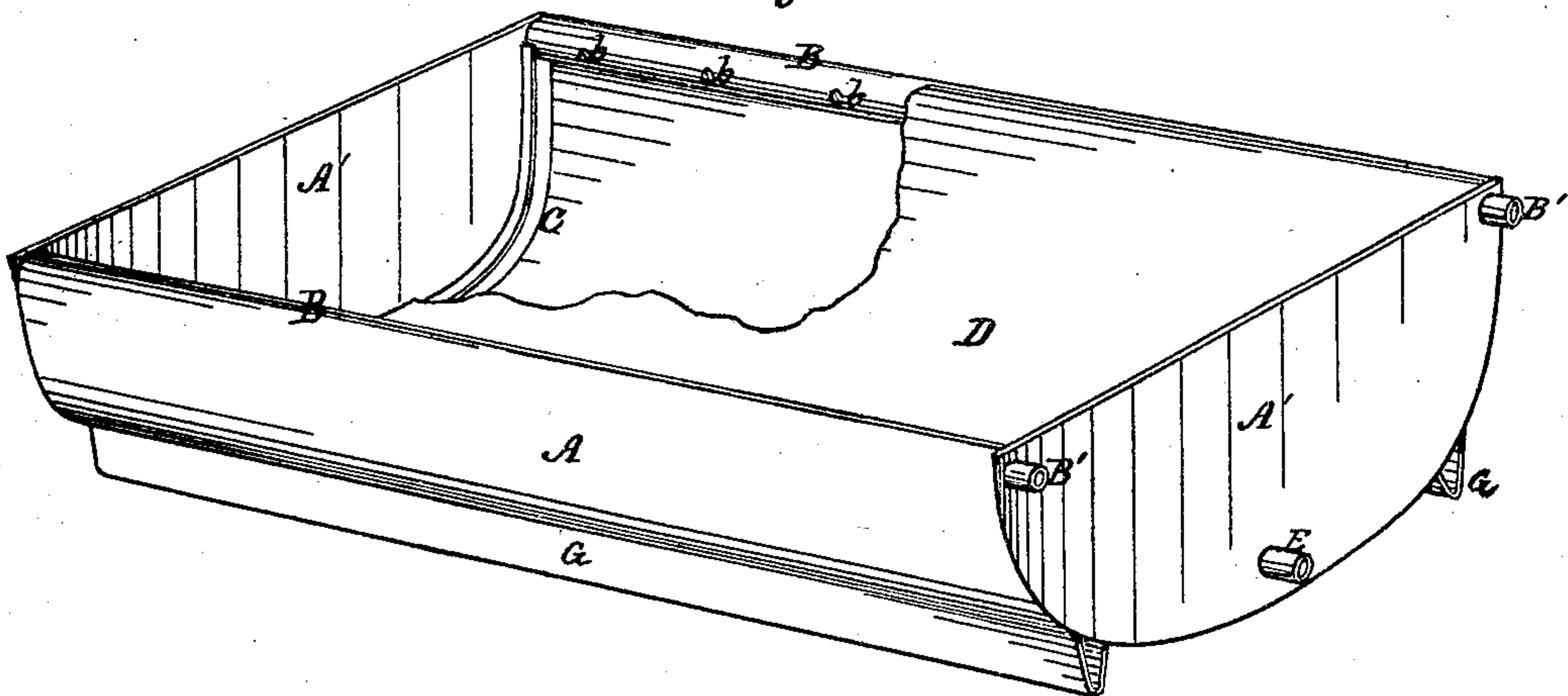


Fig. 2.

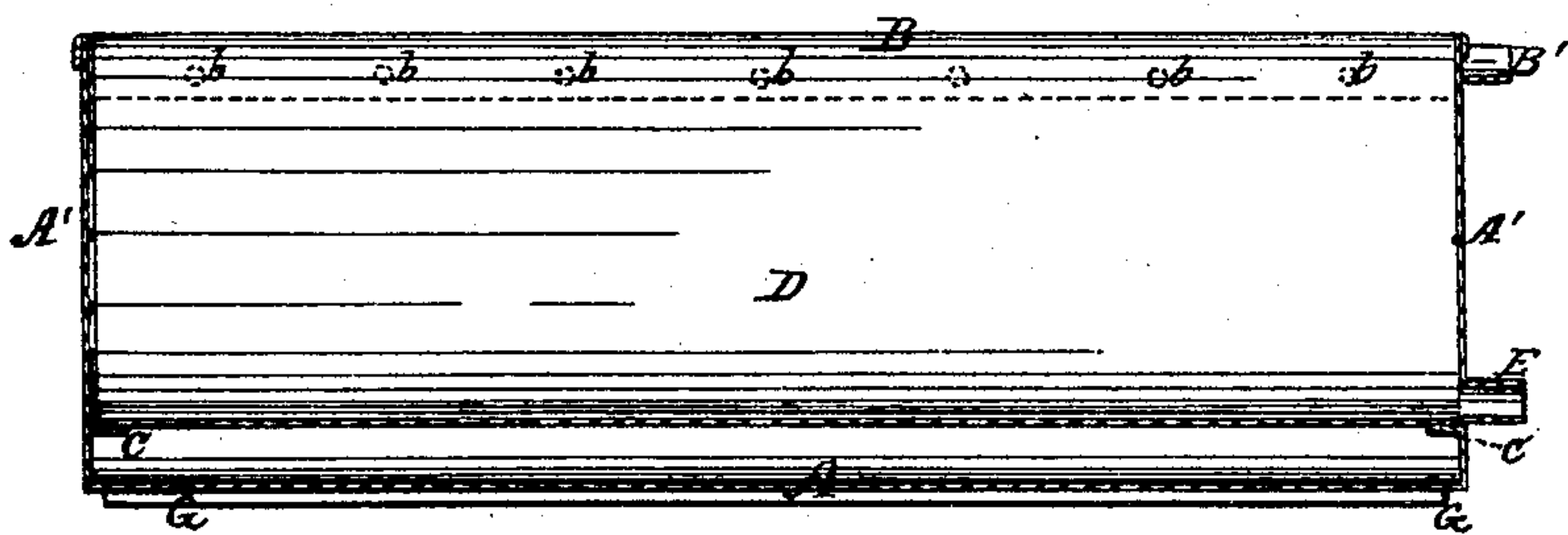
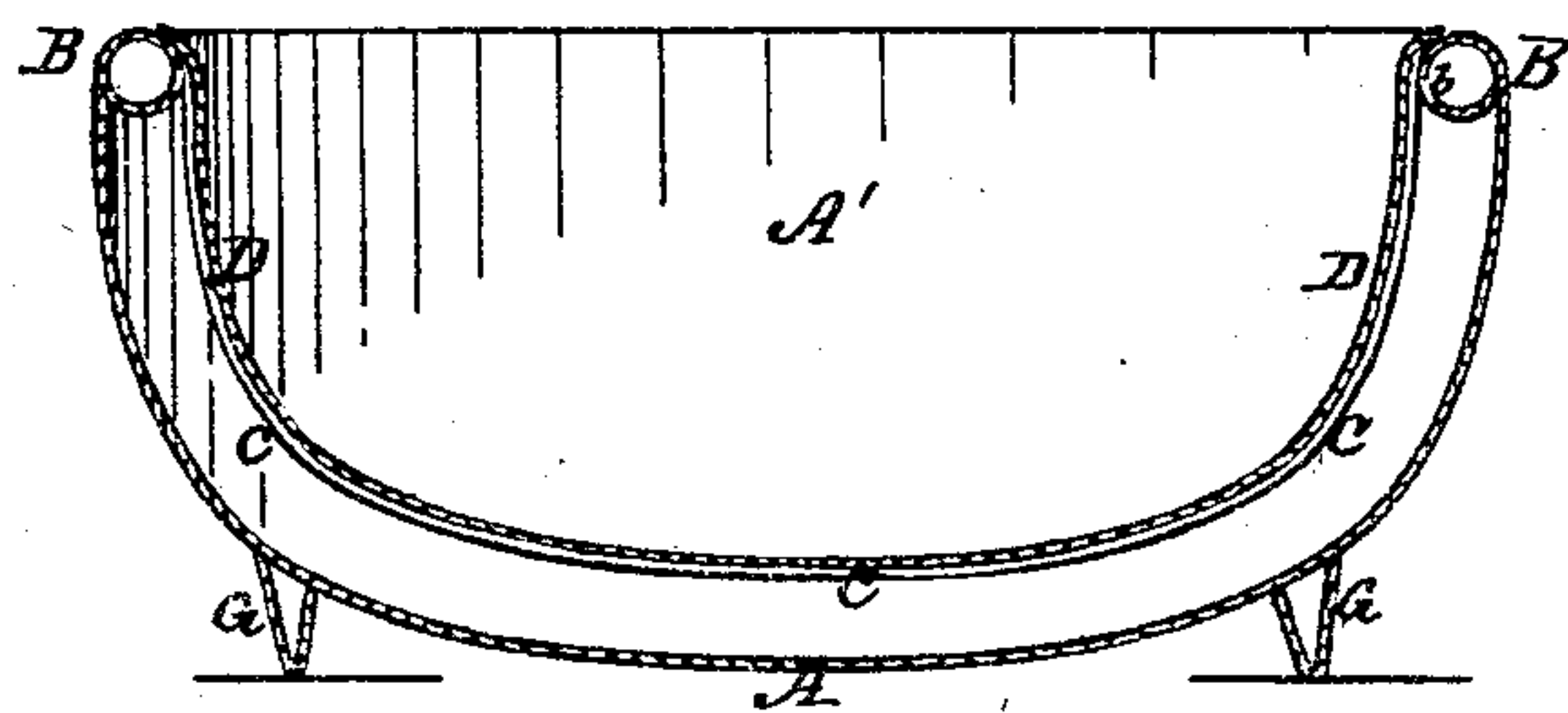


Fig. 3.



Witnesses

Edmund Masson

John R. Young

Inventor.

Wm Eaton, by  
Prindle & Co. his Attys



# UNITED STATES PATENT OFFICE.

WILLIAM EATON, OF NORWICH, NEW YORK.

## IMPROVEMENT IN MILK-COOLERS.

Specification forming part of Letters Patent No. 134,043, dated December 17, 1872.

*To all whom it may concern:*

Be it known that I, WILLIAM EATON, of Norwich, in the county of Chenango and in the State of New York, have invented certain new and useful Improvements in Milk-Coolers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of my improved device; Fig. 2 is a longitudinal section of the same; and Fig. 3 is a cross-section upon a central line.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is, mainly, to secure a more uniform temperature of the water employed within a milk-vat for regulating the temperature of the milk; to which end said invention consists, principally, in the construction and relative arrangement of the inlet and outlet passages for the water, substantially as and for the purpose hereinafter specified. It consists, further, in the peculiar construction of the vat, substantially as and for the purpose hereinafter shown.

In the annexed drawing, A represents the exterior or water vat, constructed preferably in the form shown, and having its sides extended inward in a curve so as to form at the upper edge of each a pipe, B, which extends between the ends A'. Secured upon the inner face of each end A' is a ledge, C, formed of a strip of sheet metal, which, from the inner side of one pipe, B, extends at a uniform distance from the sides and bottom, downward, across, and then upward to the inner side of the opposite pipe, and furnishes a bearing for and upon which the inner pan D rests, said pan being soldered to said strip so as to cause the ends A' of the outer vat or pan to also constitute a part of the same. An opening, E, is provided in and through one end of the device immediately above the bottom of the inner vat for the purpose of discharging the contents of the same, while at the same end communication with the interior of the pipes B is furnished by means of an opening,

B', formed at the end of each. From said pipes B a series of openings, b, afford communication with the space F' between the inner and outer vats. Two angular ledges, G, which extend longitudinally along and downward from opposite sides of the outer pan, and furnish a support for the same, complete the device, the operation of which is as follows:

Milk being supplied to the inner vat, a stream of water is caused to enter the opening B' of one of the pipes B, from whence it passes through the openings b into the space F', and after filling the same escapes through the openings b of the opposite pipe B into and through said pipe to the waste-pipe.

By reason of the peculiar construction of the device, the body of water surrounding the sides and bottom of the milk-vat has a uniform thickness, and as it enters into and escapes from the space F', along the entire length of the same, the temperature of said water is rendered uniform, instead, as heretofore, of being higher at some points than at others.

The peculiar construction and combination of the pans are such as to secure the greatest possible strength from the material employed, while the simplicity of said parts renders the cost of the finished article much less than that of similar devices of equal capacity constructed in the usual manner.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. The inlet and outlet passages B and B', constructed as shown, and arranged upon opposite sides of the device so as to discharge water into and remove it from the entire length of the space between the milk and water vats, substantially as and for the purpose specified.

2. The milk-tempering vat shown, when its parts are constructed and combined substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of November, 1872.

WILLIAM EATON.

Witnesses:

D. M. HOLMES,  
JAS. McCAW.