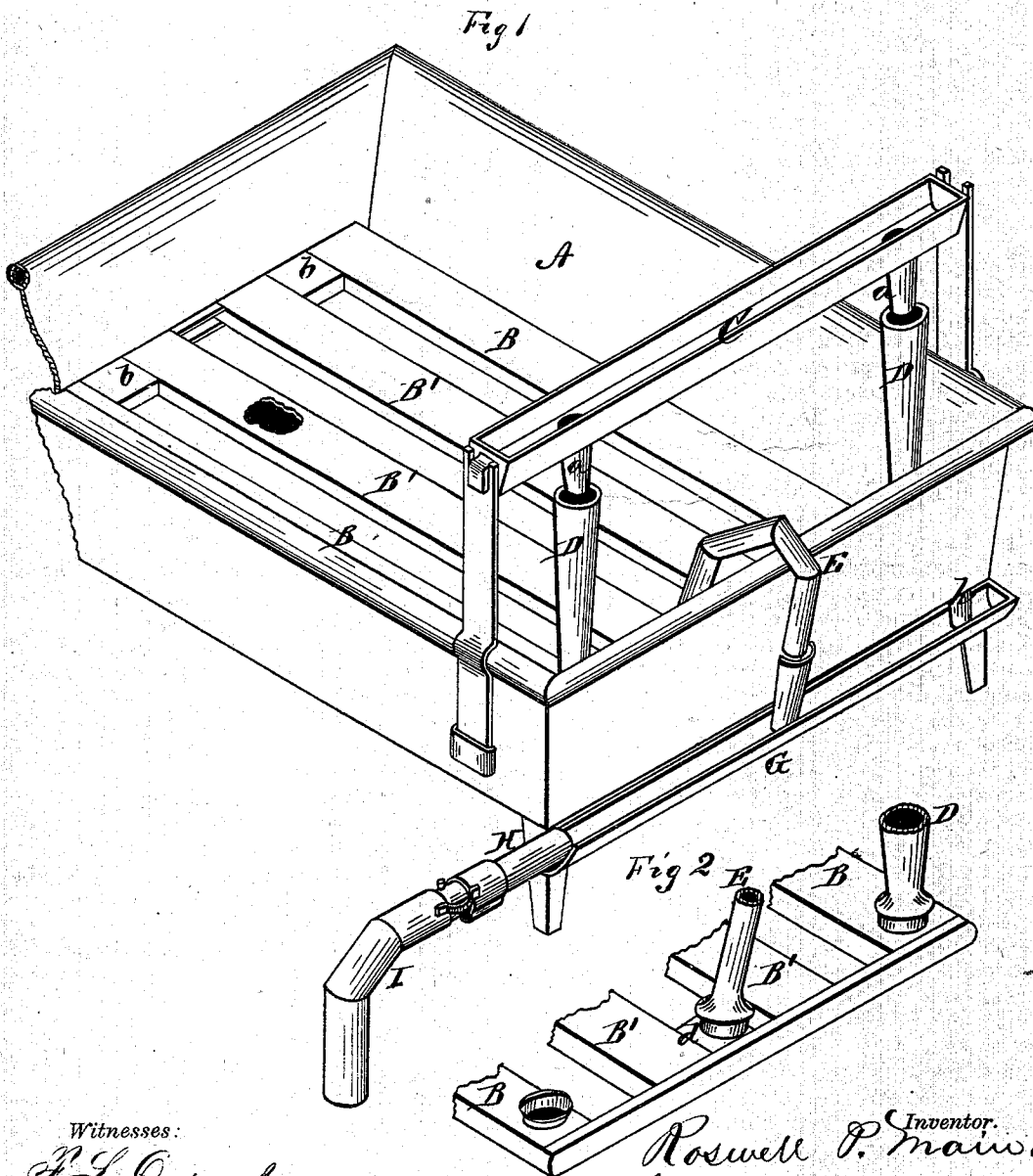


R. P. MAIN.
Milk-Coolers.

No. 146,084.

Patented Dec. 30, 1873.



Witnesses:
P. L. Ousland
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Attorneys.

UNITED STATES PATENT OFFICE.

ROSWELL P. MAIN, OF CANTON, NEW YORK.

IMPROVEMENT IN MILK-COOLERS.

Specification forming part of Letters Patent No. 146,084, dated December 30, 1873; application filed June 24, 1873.

To all whom it may concern:

Be it known that I, ROSWELL P. MAIN, of Canton, in the county of St. Lawrence 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 drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a milk-cooler, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my entire milk-cooler, and Fig. 2 is a similar view of one end of the cooling apparatus.

A represents a milk-pan, of any suitable construction and of any desired size and shape. On the bottom of this pan A is placed the cooling apparatus, which consists of four flat tubes, B B and B' B', extending the entire length of the pan. Above the pan, at one end, is an elevated trough, C, provided, near each end, with a spout or outlet-tube, *a*, which leads into tapering tubes D D. These tubes are screwed one into each of the side tubes B at one end, water flowing in a constant stream into the trough C, and, through the spouts *a* and tubes D D, into the flat side tubes B B the entire length of the same; then, through connections

b b at the other ends of the same, into the two flat center tubes B' B'. The water then flows back through said center tubes B' B' into a connection, *d*, between them, from which it passes, through a curved tube, E, over the edge of the pan A into a trough, G, located under the bottom edge of the pan. At one end of this trough is a tube, H, with an elbow-pipe, I, capable of being turned in either direction, so as to convey the water which has passed through the cooling apparatus to any place where desired. The milk in the pan A is emptied, through the same trough and pipe, into a vessel placed for its reception by a spout, *h*, in the bottom of the pan.

The cooling apparatus can readily be removed from the pan for cleaning or other purposes, when desired.

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

The combination, with a milk-pan, A, of the flat tubes B B and B' B', with connections *b b*, trough C, with spouts *a a*, inlet-tubes D D, outlet-tube E, and trough G with adjustable elbow-pipe I, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of May, 1873.

ROSWELL P. MAIN.

Witnesses:

A. N. MARR,
E. B. SIMS.