R. SMITH.

Milk-Cooler.

No. 164,048. Patented June 1, 1875.

Fig. 1

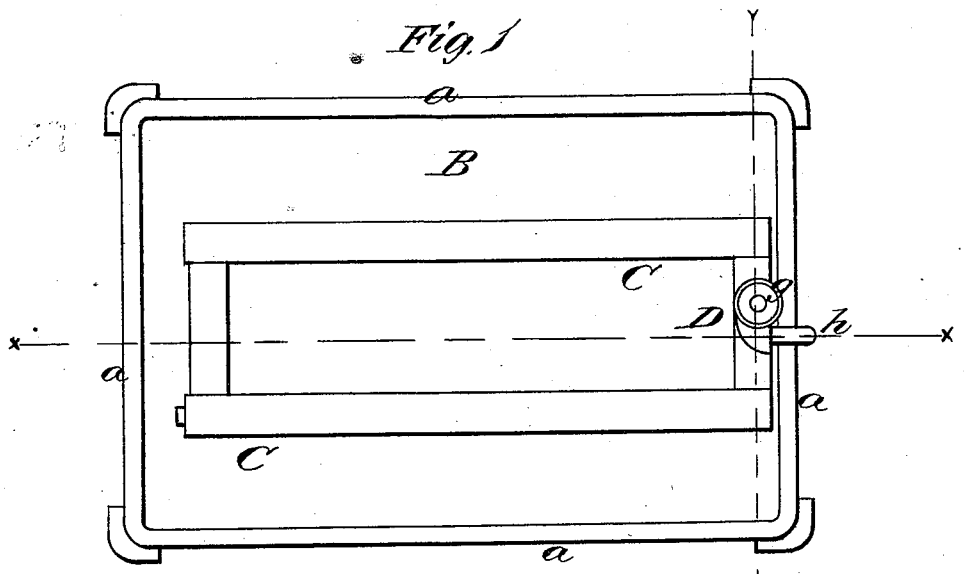


Fig. 2

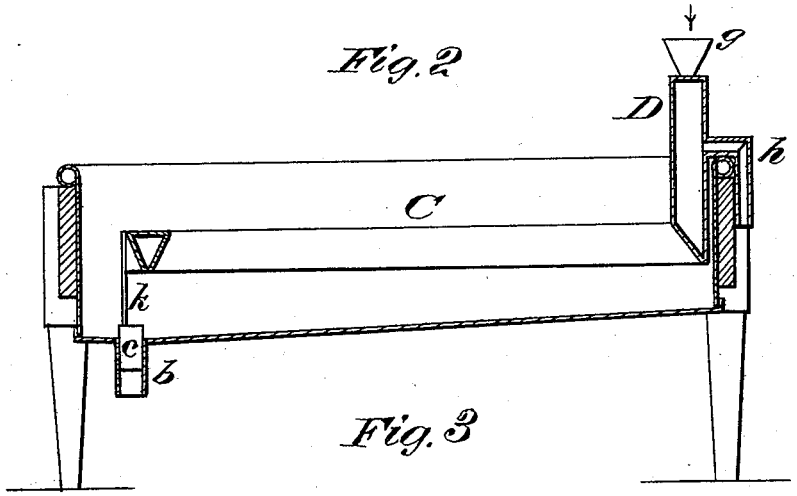
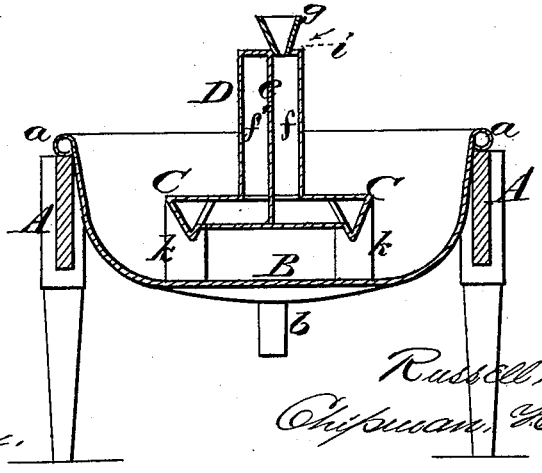


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

RUSSELL SMITH, (NELSON E. SMITH, ADMINISTRATOR,) OF RICHFORD, VT.

IMPROVEMENT IN MILK-COOLERS.

Specification forming part of Letters Patent No. **164,048**, dated June 1, 1875; application filed March 30, 1875.

To all whom it may concern:

Be it known that I, RUSSELL SMITH, of Richford, in the county of Franklin and State of Vermont, have invented a new and valuable Improvement in Milk-Coolers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my milk-cooler. Fig. 2 is a longitudinal vertical sectional view of the same, and Fig. 3 is a transverse vertical sectional view.

The object of this invention is to improve the milk-cooling apparatus for which Letters Patent of the United States were granted to me on the 24th day of November, 1874; and the nature of my invention consists mainly in a continuous pipe having an upright centrally-divided trunk, which is provided with a water-supply funnel and an overflow discharge-pipe, whereby water poured into the funnel will make the circuit of the said continuous pipe, and be discharged from the overflow-pipe, as will be hereinafter explained.

In the annexed drawings, A designates a supporting-frame, on which my improved pan rests by its ledges *a*. In a plan view the pan B is rectangular, and in a cross-section taken vertically it has a rounded bottom—that is to say, its bottom and sides are of one piece of sheet metal without angles, and the bottom is inclined longitudinally, and provided at its lowest point with a draw-off pipe, *b*, in which is a removable plug, *c*. The cooler C is formed of longitudinal and transverse pipes communicating with each other, which pipes are triangular in cross-section. From the middle of the length of one of the transverse pipes of the cooler rises a trunk, D, which is centrally divided by a vertical partition, *e*, which also divides the space in said transverse pipe, as shown in Fig. 3. I thus form in trunk D an inflow-passage, *f*, having a funnel, *g*, and an air-hole, *i*, at its upper end, and an outflow-passage, *f'*, is also formed, provided with an angular discharge-pipe, *h*. One end of the cooler C is supported by means of legs *k* upon the bottom of the pan B, and the other end of the cooler is supported upon the edge of the pan B by means of the angular discharge-pipe *h*.

It will be seen from the above description that water poured into the funnel *g* will circulate through the pipes of the cooler, and flow out through the pipe *h*. The hole *i* admits air, and allows the water to flow freely through the funnel without liability of overflowing at this point.

What I claim as new, and desire to secure by Letters Patent, is—

The rectangular cooler C, formed of triangular pipes, in combination with the centrally-divided trunk D, having a feed-funnel, *g*, and air-hole *i*, and an angular discharge-pipe, *h*, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RUSSELL SMITH.

Witnesses:
H. E. RASTEDT,
L. W. SMITH.