A. C. CLARK.
Milk-Cooler.

No. 205,839. Patented July 9, 1878.

Fig. 1,

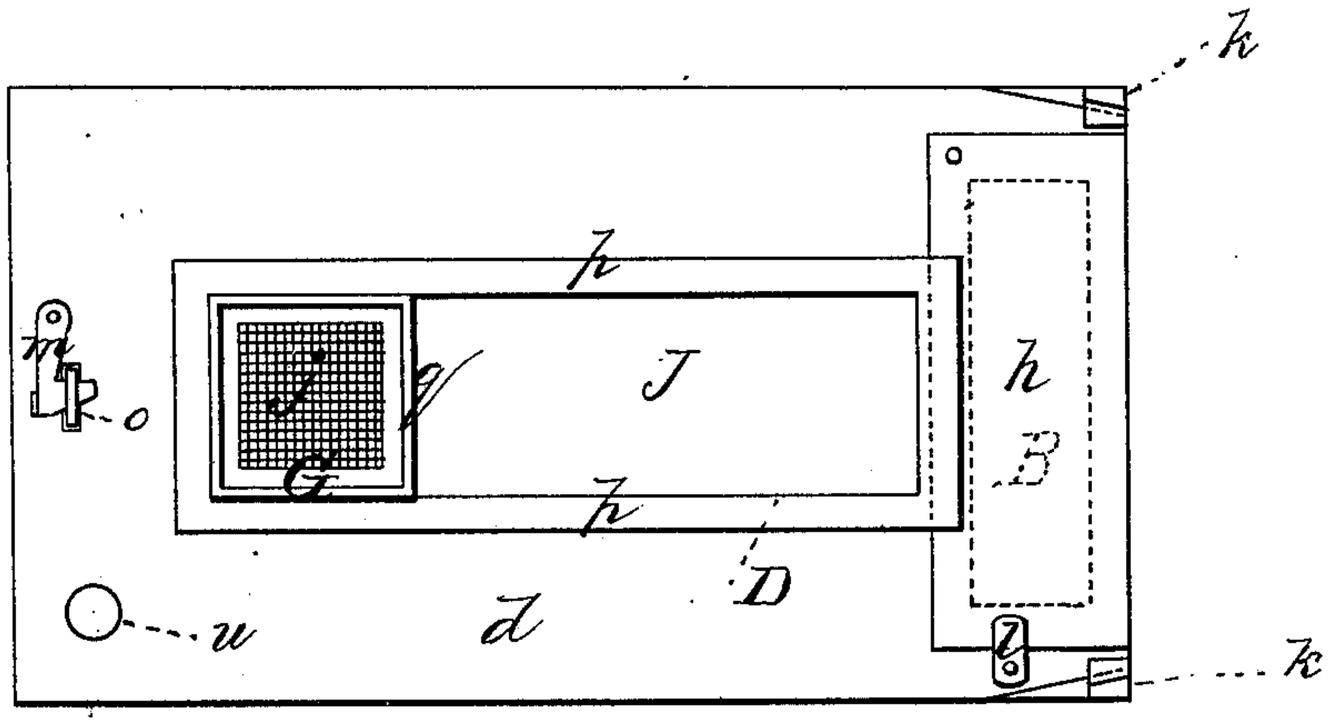



Fig. 2,

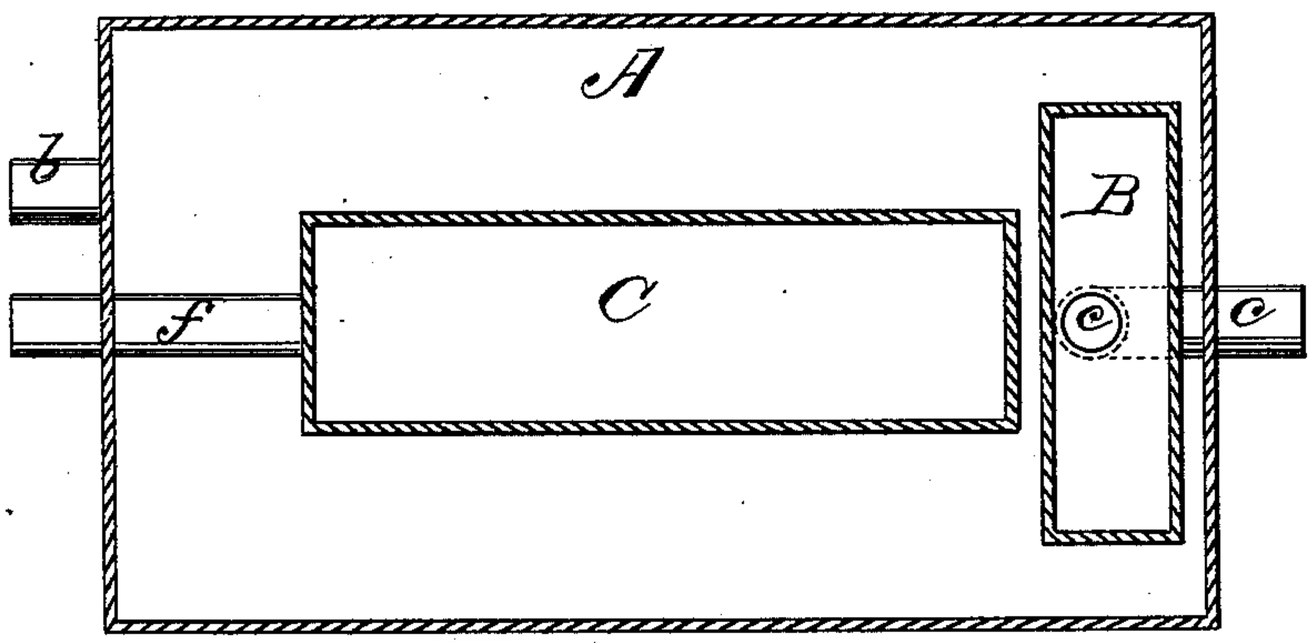
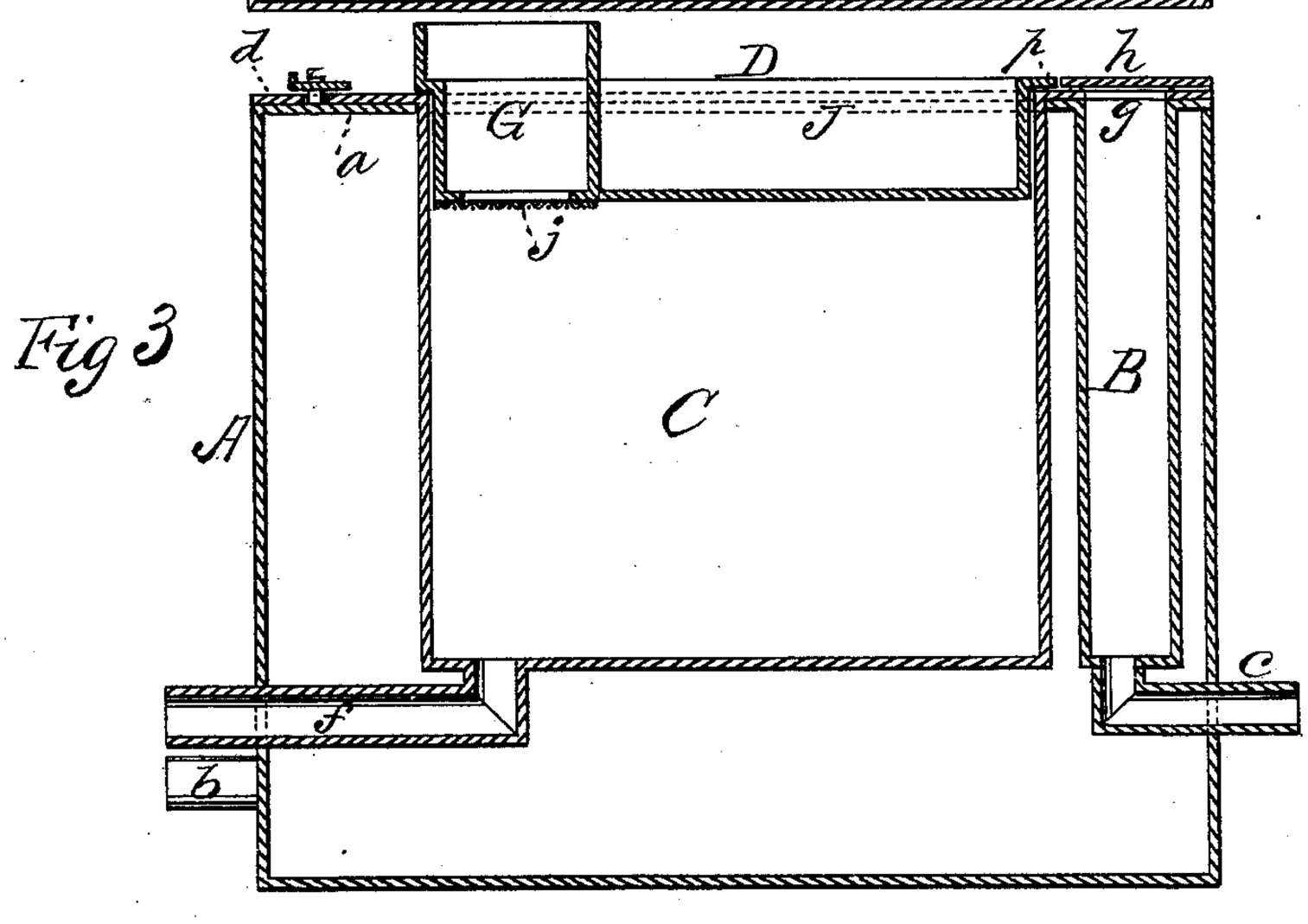



Fig 3

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# UNITED STATES PATENT OFFICE.

AMASA C. CLARK, OF MANCHESTER, IOWA.

## IMPROVEMENT IN MILK-COOLERS.

Specification forming part of Letters Patent No. **205,839**, dated July 9, 1878; application filed December 22, 1877.

*To all whom it may concern:*

Be it known that I, AMASA C. CLARK, of Manchester, in the county of Delaware and State of Iowa, have invented a new and valuable Improvement in Milk Pans or Vats for Raising Cream; 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 drawings is a representation of a top view of this invention. Fig. 2 is a horizontal section of the same, and Fig. 3 is a longitudinal vertical section thereof.

This invention has relation to improvements in devices for tempering milk for the purpose of accelerating the formation of cream.

The nature of the invention consists in the construction and novel arrangement of an outer or water vessel having an inside marginal flange, a depending milk-receptacle, having a broad flange covering the inside flange of said outer vessel, a water-trough, having a strainer, and extending down into the milk-vessel and resting on the broad flange thereof, and the discharge-pipes of the water-vessel and milk-receptacle, all as hereinafter fully shown and described.

In the annexed drawings, the letter A designates a preferably rectangular wooden vessel, having at its upper edge an inside flange, *a*, of suitable width, extending completely around it. This vessel has at one end a spout, *b*, and at the other a preferably rectangular open-ended metallic pocket, B, that extends through the flange *a*, and whose upper edge is flush therewith. This pocket is provided at its lower edge with an L-shaped metallic pipe, *c*, one branch of which extends through the end wall of tank A.

C indicates a metallic milk-receptacle of less dimensions than the tank A, and provided upon its upper edge with a flange, *d*, which rests upon the flange *a* aforesaid, and serves to sustain the said milk-receptacle in the tank. This receptacle is provided with an L-shaped discharge-pipe, *f*, one branch of which extends through the end wall of the water-tank A, and forms a water-tight joint therewith. At the end of the flange *d*, adjacent to pocket B, an opening, *g*, is made, that is closed by a vibrating or sliding door, *h*, and is of the same dimensions as the said pocket. This door, when closed, engages an angular catch, *l*, upon the flange *d*, and accurately closes the open upper end of the pocket B.

The milk-receptacle is removably secured to tank A by engaging the edge of its flange *d* under the angular metallic catches *k* on flange *a*, and by means of a hook, *m*, upon the flange *d*, that engages a staple, *o*, upon the said flange *a*, projecting through a slot in the said flange *d*.

The open upper end of the milk-receptacle is closed by means of a trough, D, having an edge rim, *p*, that bears upon the flange *d*, and that supports the trough when in position for closing the said receptacle. This trough is divided by a partition, *q*, into two unequal compartments, G J, the former being the smaller, and having its open lower end closed by a reticulated material, *j*. It is thus converted into a sieve or strainer, which, the milk being poured into it, excludes all foreign matter from the milk-receptacle.

Cold water is admitted to the tank A through an opening extending through the flanges *u*, and surrounds the sides and bottom of the milk-receptacle. It also surrounds the pocket B, which receives the cream after it forms and keeps it sweet and fresh.

The compartment J is designed to receive water or ice, and aids materially in quickening the formation of cream.

The strainer G serves a double purpose. In the first instance it excludes all foreign matters from the milk, and allows heat and animal odors to pass out of the receptacle.

By this construction the broad flange of the milk-receptacle prevents spilling the milk into the water-casing, and prevents all matter from the water-casing getting into the milk-pan. It also serves as a ready means for lifting the milk-pan, when necessary, as the cream-pocket depends from the flange of the outer case. The object of fastening the flange of the milk-vessel is to preserve its relationship to the flange of the water-case, so that the lid opening will coincide with the mouth of the milk-vat, and the exit-pipe of the milk, which is

hooked in the wall of the water-case, will not be disarranged by accidental moving of the milk-pan.

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

The milk-cooler consisting of the outer vessel A, having the inside flange *a*, the depending milk-receptacle C, having the broad flange *d* covering the flange *a*, the water-trough D, having the strainer G extending down into the milk-vessel and resting on said flange *d*, and side pipes *f* and *b*, substantially as specified.

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

AMASA C. CLARK.

Witnesses:
R. M. EWART,
E. F. PADDOCK.