

S. S. WELDON.
 Cream-Raising Apparatus.

No. 210,729.

Patented Dec. 10, 1878.

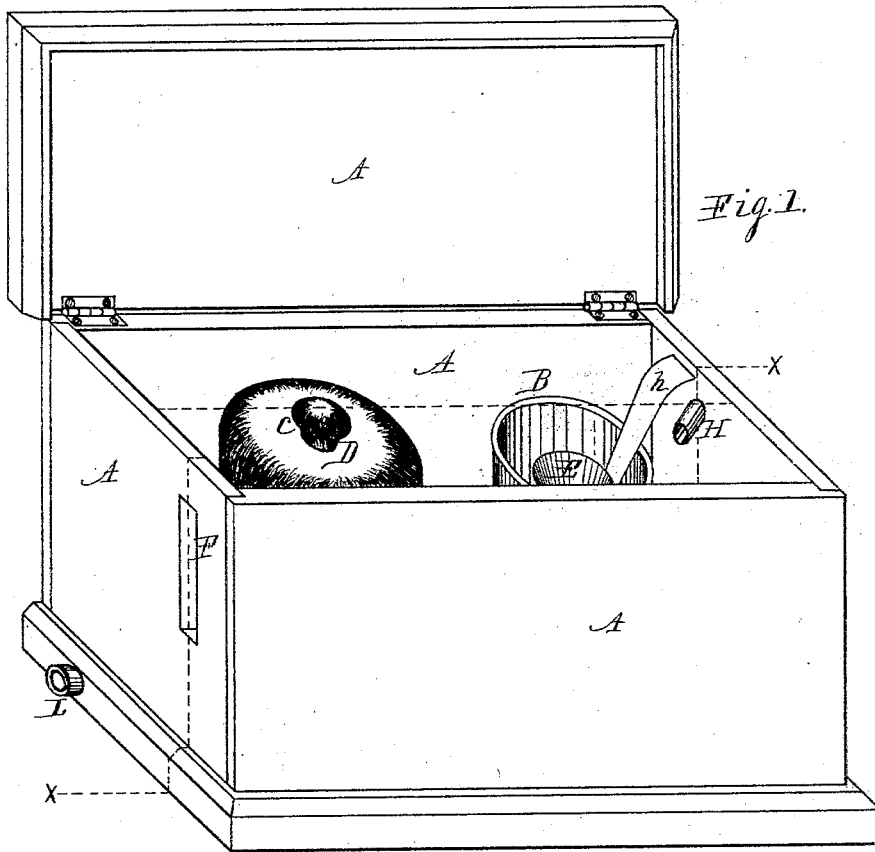


Fig. 1.

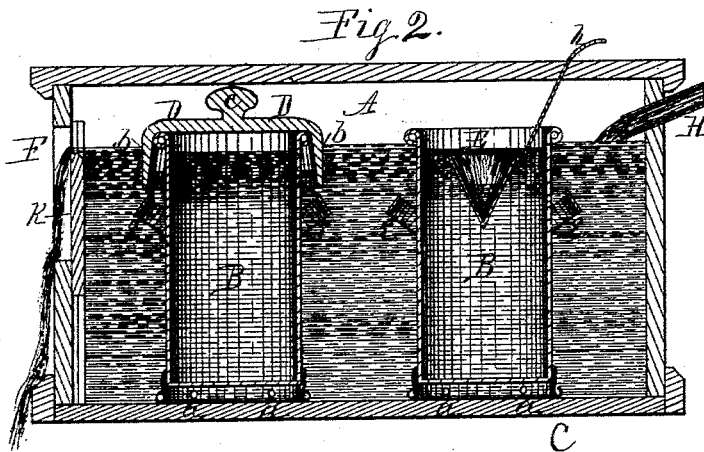


Fig. 2.

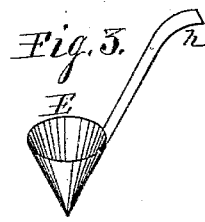


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

SPENCER S. WELDON, OF ROCKFORD, ILLINOIS.

IMPROVEMENT IN CREAM-RAISING APPARATUS.

Specification forming part of Letters Patent No. **210,729**, dated December 10, 1878; application filed August 5, 1878.

To all whom it may concern:

Be it known that I, SPENCER S. WELDON, of Rockford, in the county of Winnebago and State of Illinois, have invented a new and useful Improvement in Creamers, of which the following is a specification:

This invention relates to that class of creamers in which cans are used to set the milk to raise the cream.

The object of this invention is to simplify the creamers of this class, to lessen their cost, and to produce a creamer capable of use with less labor, and yet possessing all the advantages of the more expensive creamers now in use.

To this end I have invented and constructed the creamer represented in the accompanying drawings, in which—

Figure 1 is an isometrical representation of a creamer embodying my invention. Fig. 2 is a lengthwise vertical section on dotted line *x*, and Fig. 3 is an isometrical representation of the skimmer.

In the figures, A represents a tank of rectangular chest or trough form, made from plank or any other suitable material, and of proper depth to receive the milk-cans, and in length and width may be made to contain any reasonable number of cans as may be found convenient for or required by the user. This tank is designed to contain water, into which the cans containing the milk are placed.

B represents the milk-cans, which, in this instance, are cylindrical in form, deeper than wide, with upper end open, made from plate-tin, fitted with a foot-rim, C, perforated, as at *a*, to permit the water to circulate under the bottom of the can. These open-end cans are fitted with removable cup-like weighted lids D, of such construction that their depending cup-like walls *b* shall freely receive the upper open end of the cans in such a manner that the bottom of the cup-like lid shall rest, or nearly rest, on the upper edge of the cans. These cup-like lids are made heavy, having sufficient weight within themselves to resist the lifting action of water, and are provided with a handle, *c*, which serves for convenience in handling, and adds to their efficiency as a weighted lid. As a convenient method, I prefer these lids made from cast-iron, by casting

them in proper form and then coating them with tin or zinc or other suitable substances in any of the known methods to prevent rusting. These lids, may, however, be made from tin-plate and weighted, or from earthenware or other suitable material. These cans are provided with handles *e*, for convenience in handling.

In use, the milk is strained into the cans and the lids put in place. The cans are then placed in the tank or chest, which, if not filled, is then filled with water to rise on the depending walls of the lid, which insures a complete closing of the can against insects or the action of the atmosphere. In this situation, if the proper temperature of the water is maintained, the cream will rise in less time than when its surface is exposed to the atmosphere.

E represents a skimmer, conic in form, the apex of which is downward, the handle rising from the open end thereof, and is represented at *h*. This skimmer is designed to lift the cream from the cans with the least possible disturbance of the milk. This is accomplished by removing the lid from the can and inserting the skimmer, point foremost, through the cream until the cream flows over its edges into the skimmer, as seen in Fig. 2, which, when filled, is carefully removed and the cream emptied into any proper receptacle. This process is repeated until all the cream is removed from the can, after which the can may be removed from the tank and emptied. By this method I remove the cream without disturbing the sediment or settlings of the milk.

F represents a vertical opening cut in the side of the tank, through which the water from the tank flows outward. This opening is fitted on its inside with a gate, *k*, made to slide up and down in guideways, and is employed to regulate the height of the water in the tank, so as not to overflow the cans, which is accomplished by adjusting the gate to the proper height to permit the water to flow over it through the opening. At H is shown an induction-pipe, through which the water is admitted to the tank. At L is represented a discharge-tube, by means of which the tank may be emptied when required.

My improved creamer is designed for use in the dairy under any and all circumstances in

which similar creamers are capable of use. It, however, is particularly applicable in situations where natural flowing springs are found, in which instance the tank can be placed to permit the flow of water to pass through it. It is also well adapted for use in connection with wells provided with windmill-pumps, or in connection with hand-pumps, and is capable of use with ice or in the cellar.

I have described my improved creamer in which the cans are water-sealed without submerging, and this I prefer; but it is evident that with my improved weighted lid the cans may be submerged without departing from the principles of my invention.

I claim as my invention—

1. The apparatus herein described for cooling milk, consisting, essentially, of an outer case having a water-inlet and the adjustable water-outlet, and containing can or cans B, provided with cover or covers D, having depending flanges, and of sufficient weight to submerge the can or cans below the water line or exit, substantially as set forth.

2. A skimmer of cone form, substantially as set forth.

SPENCER S. WELDON.

Witnesses:

A. O. BEHEL,
JAMES FERGUSON.