(No Model.)

J. F. SWAB.

MILK COOLER.

No. 264,367. Patented Sept. 12, 1882.

Fig. 1.

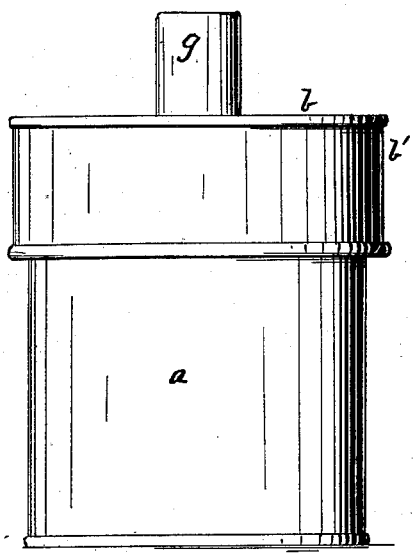


Fig. 2.

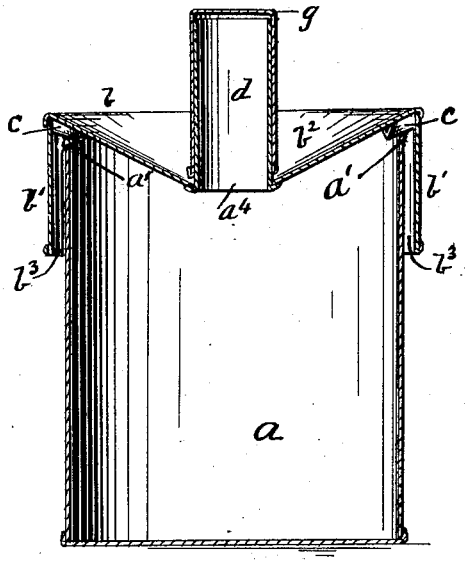
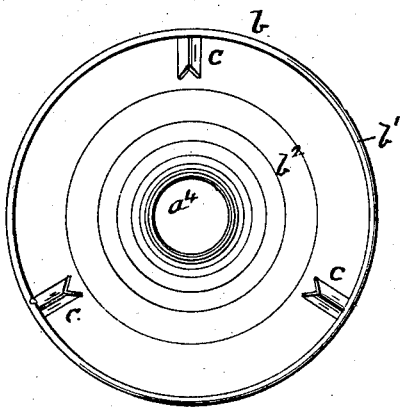


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOSEPH F. SWAB, OF CEDAR RAPIDS, IOWA.

MILK-COOLER.

SPECIFICATION forming part of Letters Patent No. 264,367, dated September 12, 1882.

Application filed March 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. SWAB, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Milk-Coolers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention has for its object to furnish a milk-can which can be used either as a ventilated or submerged milk-can at will, at the same time be water-sealed, so as to prevent the inconvenience of free atmospherical circulation.

It consists in a can of ordinary construction, and in a cover or lid provided with a depending rim, which fits loosely around and provides an air space or passage between it and the outer side of the can. The top of the lid is held from close contact to the rim of the can by a series of small supports, so as to provide an open way for air to pass from the outside of the can to the inner side. The top of the lid is depressed and made preferably in the shape of an inverted cone, the apex of which extends down into and is provided with an opening, which is below the rim of the can. From the apex or lowest point of the depressed top of the lid, and from the opening therein, a vertical tube is extended, so that its upper end is above the rim of the can. Over the central tube there is placed a cap, which has its upper end, closed while its lower end extends down into the space provided by the depressed top of the lid and to a point below the level of the rim of the can. In practice I prefer to make the lower end of the cap rest down against or very close to the top of the can. The can may be made in any ordinary shape; but I prefer to make it round, which is the usual form for milk-cans.

In the drawings, Figure 1 is a front view, Fig. 2 is a vertical section, and Fig. 3 is a plan view, of a can constructed according to my invention.

a is the milk-can.

b is the cover or lid, which is provided with the depending rim b', which extends down on the outside of the can. The cover is so constructed that its rim b' fits loosely around and provides an air space or passage, b^3, between it and the side of the can, as shown in Fig. 2. On the under side of the top b^2 of the cover I provide a series of small projections, *c*, which are so arranged as to hold the cover from fitting down close against the rim a' of the can. When the cover is placed in position on the can there will be an open passage for the ingress or egress of air. The top b^2 of the cover is depressed at its center into a concave or inverted conical shape, as shown. When the cover is placed on the can the apex or lowest point of the depressed top plate, b^2, will be below the level of the rim a', as shown. Through the top of the lid an opening, b^4, is provided, which is preferably placed at the lowest point of the trough formed by the depression. It is essential that the opening b^4 shall be lower than the rim of the can. I prefer to place the opening at the lowest point in the depressed top.

d is the ventilating-tube, which surrounds the opening a^4 and extends upward, so that its upper end is above the level of the highest part of the cover *b*. Its height is such that no water will flow into it when the trough of the depressed top is full. It may be extended to any desired height.

g is the cap, which fits down over the tube *d*. Its upper end is closed and its lower end extends down to or nearly to the top b^2. It may be made to touch the top. It may be cut shorter, if desired; but its lower end must extend below the level of the rim of the top, so that the water in the trough will extend upward and submerge the lower end thereof.

This can, when the cap *g* is removed, will give perfect ventilation to the milk by permitting a free circulation of the air.

To submerge the can it is only necessary, first, to pour water into the trough till the lower end of the cap *g* is submerged. After this the can may be set in a reservoir and submerged.

Cans designed to be always submerged when containing milk can have the cover fitting closer to the can. The top plate may rest di-

rectly on the upper end of the can. In this construction no air-passage is provided between the depending rim and top of the cover into the milk-reservoir of the can.

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

1. The combination, with a milk-can, of a cover having a depending rim fitting over the top of the can and held slightly up off the rim thereof, and having its top depressed into and provided with an opening below the level of the rim of said can, and having a vertical tube extending upward from the opening above the level of the rim, and a cap fitting over the vertical tube, and having its upper end closed and its lower end extended down to or near to the top plate of the cover, substantially as set forth.

2. In a milk-can, a cover provided with a depending rim extended downward on the outside of the can, and having its top depressed to form a water trough or receptacle below the level of the top of said can, and having the open tube *d* extended upward above the top of cover, and a cap fitting snugly over the open tube, with its lower end extended to or nearly to the top plate of the cover, substantially as set forth.

JOSEPH F. SWAB.

Witnesses:
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