

J. W. DORSEY & F. L. REED.
Water-Tank for Milk-Cans.

No. 227,503.

Patented May 11, 1880.

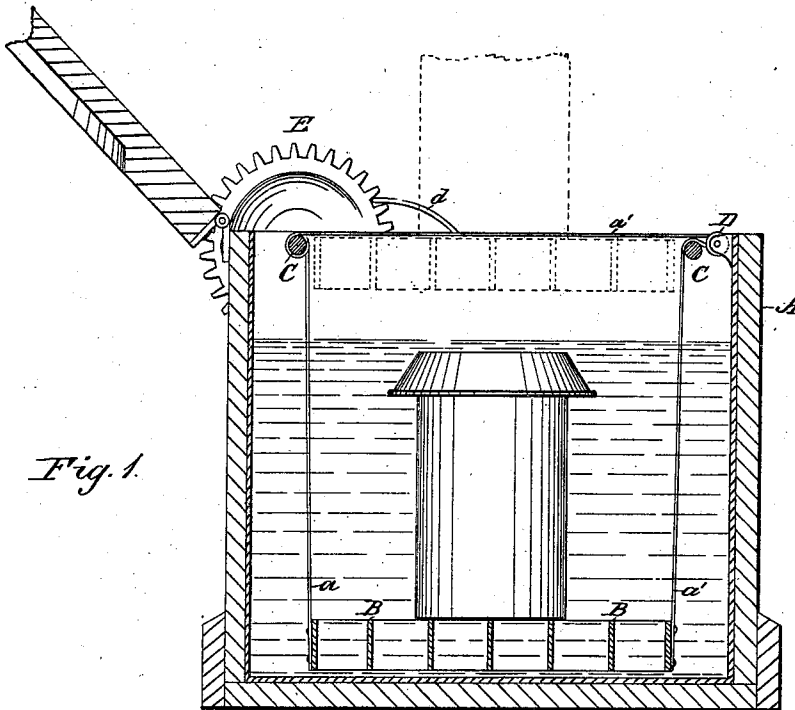


Fig. 1.

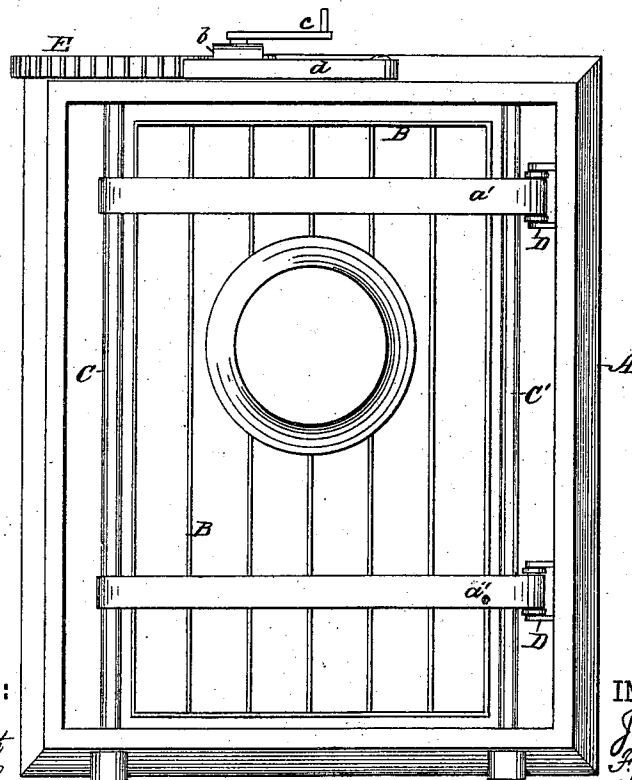


Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN W. DORSEY, OF MIDDLEBURY, AND FREDRICK L. REED, OF BENSON,
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WATER-TANK FOR MILK-CANS.

SPECIFICATION forming part of Letters Patent No. 227,503, dated May 11, 1880.

Application filed November 28, 1879.

To all whom it may concern:

Be it known that we, JOHN W. DORSEY, of Middlebury, Addison county, and FREDRICK L. REED, of Benson, Rutland county, in the State of Vermont, have invented a new and Improved Water-Tank for Milk-Cans; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical transverse section, showing in dotted lines the raised position of the false bottom. Fig. 2 is a plan view looking into the tank.

Our invention has reference more particularly to what is known as the "Cooley" process of raising cream, in which the cans containing the milk are entirely submerged in water-tanks. In such case the cans are frequently made of considerable depth and capacity, so that the insertion or removal of the same involves much awkward exertion.

Our invention is designed to facilitate the manipulation of said cans; and to that end it consists in providing the tank with a movable false bottom and suspending the latter by four belts or chains, which at the top are connected to and wound upon one or more shafts rotated by a crank and gear, which shafts are located in the body of the tank and sufficiently below its upper edge to permit the cover to be shut down.

The invention also consists in the peculiar arrangement of the parts in connection with pulleys for permitting the false bottom to be raised to a point flush with the upper surfaces of the shafts and edges of the tank, so that said cans may be slipped off without further lifting, as hereinafter described.

In the drawings, A represents the tank, which is strongly built, and lined, as usual, with zinc or other surface impervious to water. In the bottom of the tank is placed the false bottom B, upon which the cans rest when submerged. The false bottom we connect at four points with belts, straps, cords, or chains *a a a' a'*. At the upper edge of the tank, upon the front and rear sides of the same, are arranged

in bearings the parallel shafts C C'. Two of the straps, *a a*, upon one side of the false bottom, are attached directly to and wound upon the corresponding shaft C on that side, while the other two straps, *a' a'*, pass up to and over the shaft C', and then around pulleys D D, fastened to the front side of the tank, and thence to the back shaft, C, so that both sets of straps are wound upon the same shaft. The object of this arrangement is to permit the false bottom to be raised up flush with the tops of the shafts C C', as shown in dotted lines, so that the cans may be slid off without the necessity of lifting them at all, the two shafts being so spaced that the false bottom can readily pass between them.

For raising or lowering the false bottom with the cans thereon a gear-wheel, E, is fixed on the end of the rear shaft, C, outside of the tank, and with this a pinion, *b*, is made to engage, which pinion is rotated by a crank-handle, *c*, to rotate the shaft C, wind up the straps thereon, and elevate the false bottom, the latter being held at any desired point by a detent or pawl, *d*, engaging with the teeth of the gear-wheel upon the outside of the box.

In defining our invention more clearly we would say that we do not confine ourselves to the pulleys D and the principle of winding the straps all upon one shaft, as shown, as the separate sets of straps *a a* and *a' a'* may be attached and wound upon the separate shafts C C', the latter being in such case connected by a chain, belt, or other device for giving positive movement and causing both sides of the false bottom to rise equally.

Referring to the general principle of raising and lowering the cans in the tank by bands and pulleys, we would state that we are aware that the general principle is old in elevators for raising and lowering the platform, and also in dyers' vats for raising and lowering an inner vessel. We therefore only claim a creamery cabinet or tank for containing milk-cans having a cover with shafts for raising the false bottom when such shafts are journaled in the body of a tank, so as to allow the cover to close down tightly.

By means of the improved tank, as thus de-

scribed, it will be seen that all direct manipulation of the heavy cans in raising them from the water or lowering them into the same is avoided, and the management made much easier and more perfect.

Having thus described our invention, what we claim is—

1. A creamery-cabinet having a false bottom suspended therein upon straps or bands, and rotary shafts journaled in the body of the cabinet below the cover for winding up said bands, all combined as shown and described.

2. The combination, with a creamery-cabinet, of the two shafts C C', journaled in the body of the cabinet, a movable false bottom, the suspending-straps *a a'*, both wound upon

the same shaft C, and one set of which, *a*, connects directly with the shaft C, and the other of which passes over the shaft C' and around pulleys D, whereby the false bottom may be raised flush with the edges of the tank, as and for the purpose described.

The above specification of our invention signed by us.

JOHN W. DORSEY.

FREDRICK L. REED.

Witnesses to signature of Dorsey :

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