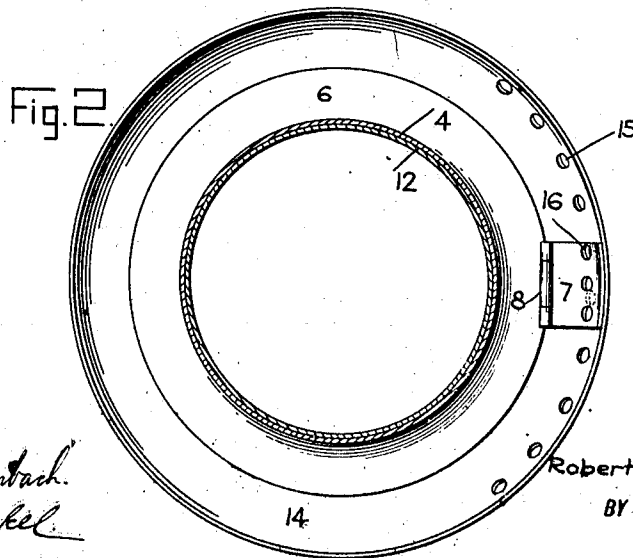
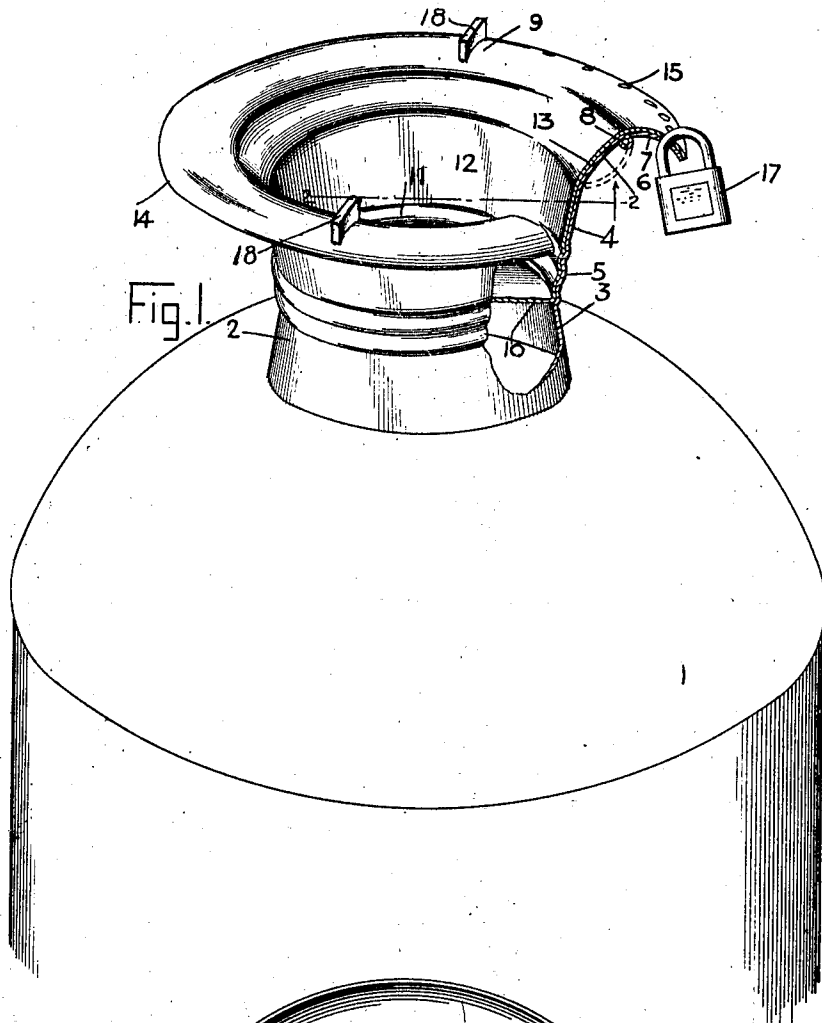


R. O. THOMPSON.
MILK CAN COVER.
APPLICATION FILED APR. 18, 1912.

1,053,756.

Patented Feb. 18, 1913.



WITNESSES

C. H. Reichertsch
Wm. F. Nickel

INVENTOR

Robert. O. Thompson

BY

Wm. L. Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

ROBERT O. THOMPSON, OF CAMPBELL HALL, NEW YORK.

MILK-CAN COVER.

1,053,756.

Specification of Letters Patent.

Patented Feb. 18, 1913.

Application filed April 16, 1912. Serial No. 691,177.

To all whom it may concern:

Be it known that I, ROBERT O. THOMPSON, a citizen of the United States, and a resident of Campbell Hall, in the county of Orange and State of New York, have invented a new and Improved Milk-Can Cover, of which the following is a full, clear, and exact description.

My invention relates to an improvement in milk can covers, and the object thereof is to provide a novel construction of this sort which will form a perfectly tight closure for a vessel of the kind mentioned, and be capable of being securely locked in closing position, so as to prevent access to the can by unauthorized persons. For this purpose I construct the neck of the can and the closure which is fitted to the same so as to have snugly engaging surfaces, eliminating all possibility of leakage; and I provide an attachment for the top of the can which co-operates with the edge of the closure to enable a locking device to secure the closure in position on the can until the same is removed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which the same characters of reference indicate the same parts in both the views.

Figure 1 is a perspective view showing the top of a milk can which is partly broken away to illustrate the construction of the parts; and Fig. 2 is a horizontal sectional view on the line 2—2 of Fig. 1, looking in the direction of the arrow.

Referring particularly to the drawings, the numeral 1 represents a milk can having a neck 2. This neck comprises a pair of sections, the lower one of which is illustrated at 3, and is in the form of a truncated cone in upright position, and the upper one of which, 4, is in the form of a similar truncated cone, but inverted so as to make the smaller bases of the truncated conical sections 3 and 4 coincide with each other. The lower part of the section 4 is screw-threaded, as shown at 5, and the upper end of this section 4 flares outwardly, as shown at 6, the outwardly-flaring portion being curved to a slight extent if desired. To the edge of this curved section 6 is connected a tongue 7, by means of a hinge shown at 8, the purpose of this tongue being to enable the closure to be

locked in place on the can, as will appear later.

The lid or cover is indicated as a whole by the numeral 9, and it has a closed inner end 10. The shape of the lid 9 is made to correspond with the shape of the inner surface of the neck 2, above the section 3, and the inner end of the lid is threaded around its outer surface, as shown at 11, to engage with the threads 5 and form a tight joint.

12 represents a conical wall corresponding to the conical section 4; and 13 represents a section forming a continuation of the wall 12, and curved to correspond with the portion 6 of the neck 2. The cover 9 is extended beyond the section 13 to form a rim 14, this rim being curved over as shown in Fig. 1, to overlap the seam between the upper edge of the lid 2 and the edge of the portion 13 when the lid or cover is screwed down.

The edge of the rim is provided with a plurality of holes 15, and the tongue 7 is provided with a plurality of holes 16, so that when one of the holes 15 comes into registry with one of the holes 16, a padlock 17 can be passed through the same to lock the lid or cover and the tongue 7 together, to hold the cover in position.

From the above description it will be seen that the cover or lid 9 of the can when screwed into the neck 2 will carry the threads 11 into engagement with the threads 5. When the lid or cover is turned it will screw down into the end of the neck until the outer surface of the conical wall 12 fits against the inner surface of the section 4, and the outer surface of the section 13 fits tightly against the inner surface of the portion 6, which forms the edge of the neck. The rim 14 of the cover 9 will overlap the seam between the portion 6 of the neck and the portion 13 of the lid, and as the outer edge of this rim 14 will be turned down, an efficient lap joint will be formed by means of which the lodgment of dirt and dust between the edge of the neck and the cover which closes the can will be entirely prevented.

The lid 9 is of course made hollow, and, if preferred, can be stamped out of a single blank of metal. The apertures 15 and the apertures 16 are placed close enough together to enable the locking to be easily and

readily effected, and at the same time permit a sufficient range of adjustment to allow the cover 9 to be screwed in as tightly as necessary to seal up the mouth of the can without interfering with the operation of locking the lid to prevent its removal. As a result, milk can be shipped from place to place with perfect security, and no one can remove the lid and help himself to the contents without breaking or damaging the parts, and thus revealing the fact that the can has been tampered with; but when the can reaches its destination, the person authorized to receive the same can take the cover off at any time simply by inserting the key with which he will be provided into the lock 17 to release the catch and enable the lock to be removed. On account of the down-turned edge of the rim 14, the joint between the edge of the mouth of the can and the lid or cover will be protected and shielded, and no dirt will be likely to get into the milk, even if the cover is not screwed in as tightly as it should be before the lock 17 is attached thereto.

In practice, the height of the section 3 is considerably less than the height of the section 4, so as to minimize the amount of space between the surface of the milk and the inner end 10 of the can cover, and thus reduce splashing and otherwise agitating the milk in transportation. This agitation is of course objectionable, as it tends to churn the cream and result in the formation of butter.

The numerals 18 represent projections or knobs on the top of the rim 14 of the can cover, to be engaged by a bar to loosen the cover in case the same should stick fast.

From the description of my invention it will be seen that the construction of my can cover is practically indestructible, and the shape of the same and of the neck of the can is such that the parts can easily and readily be cleaned. In ordinary cases it is only necessary to open the lock 17, and then grasp the edge of the rim 14 by hand to unscrew the cover; but if the cover should stick too tight to enable it to be removed in this way, a bar can be employed, as described above.

By forming the threads 5 on the inside of the widening portion 4 and forming the lid to fit this widening portion and the threads inside the same, I secure a perfectly tight engagement between the neck and the lid or cover. When this lid is being screwed home most of the shear is on the upper of the inclined sides of the threads on the outside of the cover and on the lower inclined sides of the threads on the inside of the neck section 4. If the section 4 and the interfitting portion of the cover were made cylindrical the tighter the lid or cover is screwed home the tighter would the upper

inclined sides of the threads on the cover engage with the lower inclined sides of the threads on the neck. This will result in leaving a space between the upper inclined sides of the threads on the neck and the lower inclined sides of the threads on the cover, and some milk might work its way into this space, with clogging and fouling as a result. This drawback is avoided by making the neck section 4 and the cover flaring, and the advantage which is derived from this construction resides in the fact that the threads are forced into engagement with one another over their entire area, leaving no spaces or cracks between them for the milk or cream to get into.

I have designed my invention to be used chiefly on milk cans, as above stated, but obviously it is by no means limited to use on such constructions, but may be employed on any shipping or storage vessel of this general type.

From the above description it will be seen that I have devised a milk can cover which is admirably adapted to the purpose which I have in view, and I wish to have it understood that the drawings disclose but one embodiment of my invention, and I do not care to be limited to the details thereof, except in so far as is indicated in the claims. Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a device of the kind described, the combination of a vessel having an open mouth, a tongue joined to the edge of said mouth, a cover having a laterally-extending rim at its outer end, said rim and said tongue having a plurality of apertures therethrough to be brought into registry when the lid is put in place, and locking means to be passed through said registering apertures to secure the lid in place.

2. In a device of the kind described, the combination of a vessel having a neck which first contracts and then widens, said neck having internal screw threads carried by the widening portion and terminating in a flaring portion, a lid or cover having its outer surface shaped to fit the widening portion of the neck and said flaring portion, and having screw threads thereon to engage the screw threads on the inside of the neck, whereby when the lid is screwed in tight it will effectually close the entrance to said neck, and an over-turned rim carried by the lid at its outer end to overlap the seam between the mouth of the neck formed by the flaring portion and the outer surface of said lid.

3. In a device of the kind described, the combination of a vessel having an open mouth, a tongue hinged to the edge of said mouth, a cover having a laterally-extending rim at its outer end, said tongue and said

rim having a plurality of apertures there-
through to be brought into registry when
the lid is put in place, and locking means to
be passed through said registering apertures
5 to secure the lid in place.

4. In a device of the kind described, the
combination of a vessel having a neck which
first contracts and then widens, said neck
having internal screw threads carried by
10 the widening portion and terminating in
a flaring portion, a lid or cover having its
outer surface shaped to fit the widening
portion of the neck and said flaring por-
tion, and having screw threads thereon to
15 engage the screw threads on the inside of the
neck, whereby when the lid is screwed in
tight it will effectually close the entrance to
said neck, an over-turned rim carried by
the lid at its outer end to overlap the seam
20 between the mouth of the neck formed by
the flaring portion and the outer surface of
said lid, and projections carried by said
cover to facilitate the loosening and removal
of the same.

5. The combination of a vessel having an 25
open mouth, said mouth having internal
screw threads, a lid or cover for said mouth,
shaped to extend into the same and having
screw threads to fit the first-named screw
threads, and projections carried by the cover 30
to facilitate the loosening and removal
thereof.

6. The combination of a storage vessel
having a neck, said neck comprising a por-
tion which widens, and having internal 35
screw threads carried by the widening por-
tion, and a lid or cover having its outer
surface shaped to fit the inner surface of
the widening portion of the neck, and hav-
ing screw threads thereon to engage the 40
screw threads on the inside of the neck.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

ROBT. O. THOMPSON.

Witnesses:

WILLIAM F. NICKEL,
JOHN P. DAVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."