Feb. 15, 1927. 1,618,145

T. M. BORGLUM

MILK CAN TOP LOCK

Original Filed Oct. 20, 1925

Fig. 1.

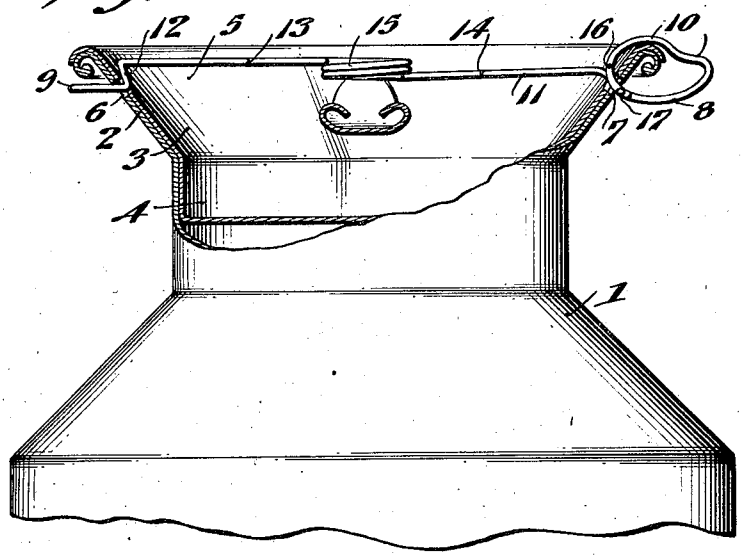
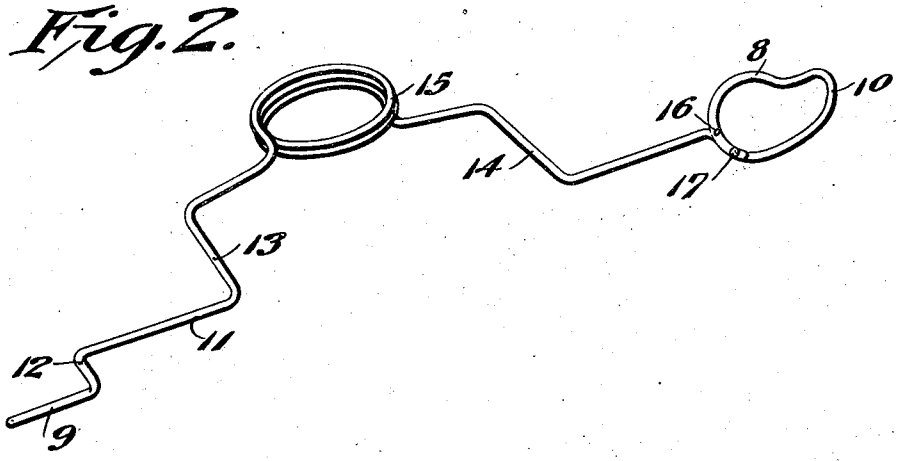


Fig. 2.



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UNITED STATES PATENT OFFICE.

TORVALD M. BORGLUM, OF PORTLAND, OREGON.

MILK-CAN-TOP LOCK.

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My invention relates to an improvement in milk can top locks, and particularly to a device of this character which can be applied to cans by the individual user or can be affixed when the cans are manufactured, and which will positively lock and retain a can top in place.

An object of this invention is to provide a locking structure of simple and inexpensive construction and of such form that it can be applied or affixed to the can without the use of special tools and without altering or mutilating the can or top in any manner.

A further object is to so construct the parts that my improved lock can be manufactured in a single size and will adjust to fit different sizes and characters of milk cans.

With the above and other objects in view, which will be apparent to those skilled in the art, this invention includes certain novel features of construction and combinations of parts which will now be set forth in connection with the drawing.

In the drawing:

Figure 1 is a view in elevation of the upper portion of a milk can, with parts in section to show the application of my improved locking structure.

Fig. 2 is a perspective view of the top locking member.

The milk can 1 is of any standard form, and is provided with the flared collar 2 around the mouth opening. The can top 3 is provided with a substantially cylindrical lower portion 4 to fit within the neck of the can 1, and has a flared collar 5 which fits the flared collar 2 on the can. The collar 5 of cover, and collar 2 of the can are provided with aligned openings 6 and 7, at diametrically opposite points. It is customary for dairymen and others handling and shipping milk in cans of this character to insert a piece of wire through the aligned openings of the cover and can and twist the same, or to tie a piece of cord or rope through these openings to secure the cap to the can; but such practice is obviously disadvantageous, and it is a purpose of my invention to provide a securing means which can be fitted through the aligned openings of the milk can and cover of standard construction, and which will hinge the cover to the can and will releasably secure and lock the same in the closed position, when desired.

The locking member is preferably made up from a single length of wire, bar iron, or other suitable resilient material, and is shaped to provide a loop 8 at one extremity to be permanently secured in the aligned openings at one side of the can and cover, and a locking pin 9 at the remaining extremity to be releasably engaged in the aligned openings at the opposite side. The loop 8 is preferably formed substantially as shown in the drawing, so that the inner end thereof will fit around and clear the lip edges of the collars 2 and 5 of the can and cover, and the loop is deformed at its outer end to provide a supporting loop portion 10 from which the cover 3 will hang when swung back to the open position.

The body portion 11 of the lock member is bent at a sharp angle adjacent the locking point or pin end 9, to provide a stop shoulder 12, and the body portion is bent laterally at points spaced from the shoulder 12 and ring 8 to provide hand-grip portions 13 and 14. The middle portion of the lock member is bent into a coil 15, between the hand-grip portions 13 and 14, and by exerting pressure upon these portions 13 and 14, inwardly, the locking point 9 can be drawn toward the ring 8, coil 15 serving to resiliently urge the end 9 to its full outwardly extended position.

The end of the locking member bent to provide ring 8 has a plurality of openings 16 formed transversely therethrough to register with a corresponding portion of the ring 8 against which this end is overlapped, and the ring is permanently secured by means of a rivet 17, or other suitable fastening, inserted through the aligned openings of the ring. The aligned openings 6 and 7 in the can and cover are located a greater or less distance from the top of the lip, and this adjustment in the size of the ring 8 will allow for proper fitting upon different makes of cans.

In the use of my improved lock, the ring 8 is inserted through the aligned openings on one side, and is secured by the rivet 17, and when the locking member is swung down to a position over the handle of the cover, as shown in Fig. 1, the hand-grip portions 13 and 14 are grasped, and pressure is exerted thereon to withdraw the locking end 9 sufficiently to fit down within the cover flange 3 to aline with openings 6. When this pressure is removed, the coil 15 resiliently extends the

locking member to project the point 9 through the aligned opening 6 and shoulder 12 engages with the cover flange 5, in which relation the cover is securely held in place in the mouth of the can. The lock is released by exerting pressure upon the hand-grip portions 13 and 14, sufficient to withdraw the locking end 9, and then swinging the locking member upwardly and outwardly. The cover can be swung up and outwardly, and will be supported from and retained upon the can by the ring 8.

While I have herein shown and described only certain specific embodiments of my invention and have set forth only certain possible manners of applying and using the same, it will be appreciated that changes and variations may be made in the form, construction and mounting, without departing from the spirit and scope of my invention.

I claim:—

1. A milk can top lock adapted for use with milk cans having aligned openings through the neck and cover thereof, comprising a resilient body portion having a ring at one end to be secured in the aligned openings at one side of the can and cover and provided with a locking end to be releasably inserted through the aligned openings at the remaining side of the can and cover, said body being looped in its middle portion to resiliently urge the locking end into the openings of the can and cover.

2. A milk can top lock adapted for use upon a milk can having aligned openings through the neck and cover thereof on opposite sides, comprising a body portion of resilient material having a ring at one end to be secured through the aligned openings at one side, means by which the end of the ring is secured, said body portion having a locking point at the remaining end and a shoulder adjacent the locking point, and hand-grip portions on the body member by which the same is sprung to retract the locking point for insertion in and removal from the aligned openings on the opposite side of the can and cover.

3. A milk can top lock adapted for use with a milk can having aligned openings through the neck and cover thereof on opposite sides, comprising a body member of resilient material provided with a ring at one end to be inserted through the aligned openings at one side of the can and cover and having a stop shoulder adjacent its remaining extremity with a locking point extending beyond the shoulder, said resilient body member being coiled and shaped in its middle portion to provide a spring normally urging the locking point outwardly from the ring and also provide hand-grip portions by which the spring is compressed to retract the locking point.

4. A milk can top lock adapted for use with a milk can having aligned openings through the neck and cover thereof on opposite sides, comprising a body member of resilient material provided with a ring at one end to be inserted through the aligned openings at one side of the can and cover and having a stop shoulder adjacent its remaining extremity with a locking point extending beyond the shoulder, said resilient body member being coiled and shaped in its middle portion to provide a spring normally urging the locking point outwardly from the ring and also provide hand-grip portions by which the spring is compressed to retract the locking point, the ring end of the body member having openings therethrough, and means received in said openings to secure the ring end within the openings of the can and cover.

In testimony whereof I hereunto affix my signature.

TORVALD M. BORGLUM.