

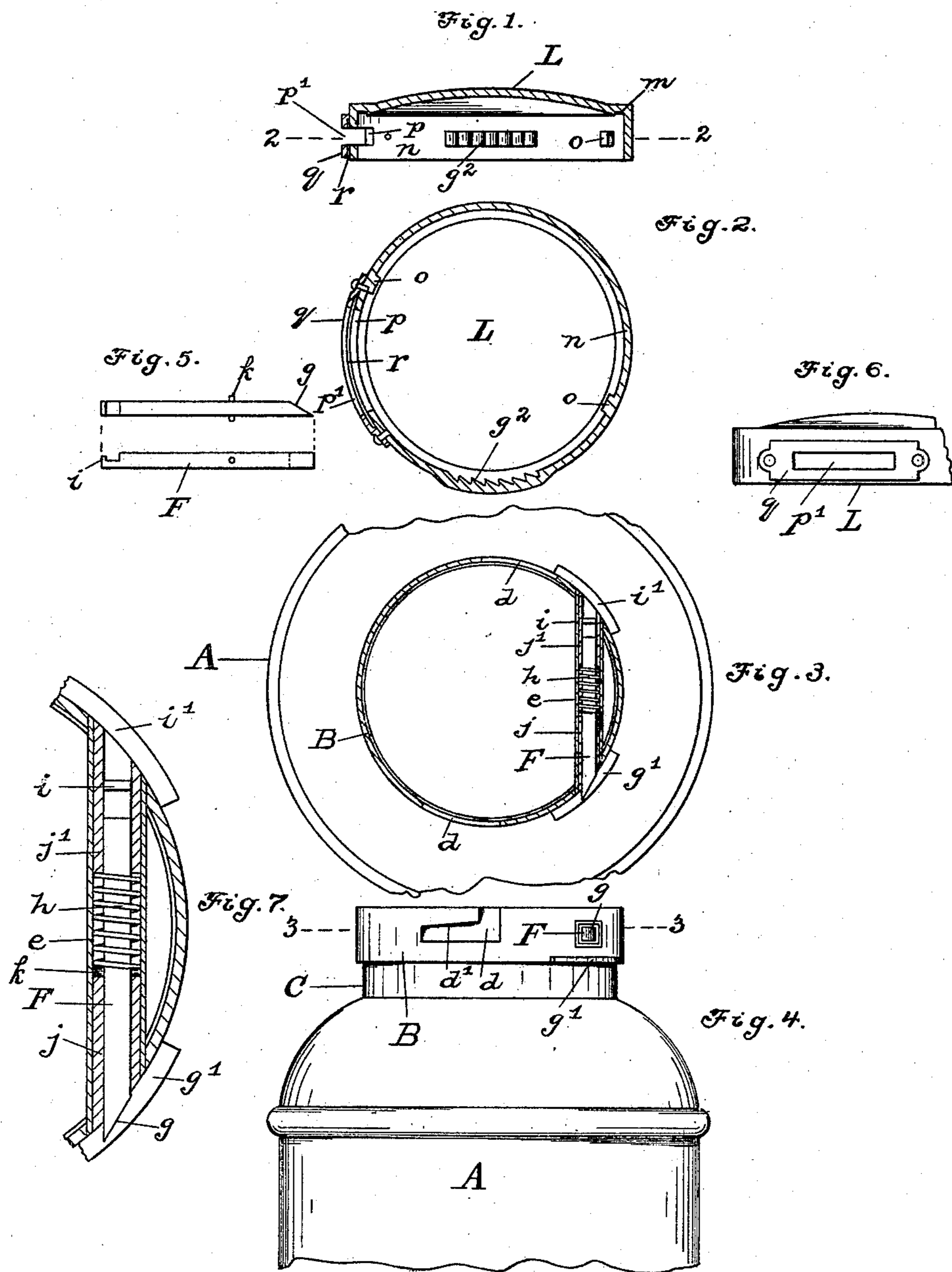
No. 654,567.

Patented July 24, 1900.

R. J. W. HAMILL.
MILK CAN LOCK.

(Application filed Mar. 28, 1900.)

(No Model.)



Witnesses:—

Charles B. Mann Jr.,
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UNITED STATES PATENT OFFICE.

ROBERT J. W. HAMILL, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO GEORGE W. EVANS, OF SAME PLACE.

MILK-CAN LOCK.

SPECIFICATION forming part of Letters Patent No. 654,567, dated July 24, 1900.

Application filed March 28, 1900. Serial No. 10,427. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. W. HAMILL, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Milk-Can Locks, of which the following is a specification.

This invention relates to a milk-can lock which will prevent the cover being opened by an unauthorized person without the fact being known.

The invention is shown in the drawings herewith, in which—

Figure 1 is a diametrical section of the cover of the milk-can. Fig. 2 is a horizontal section of the cover on the line 2 2 of Fig. 1. Fig. 3 is a horizontal section of the collar of the milk-can on the line 3 3 of Fig. 4. Fig. 4 is a side elevation of the upper part of a milk-can the cover of which is removed. Fig. 5 shows two views of the locking-bolt. Fig. 6 is a side view of a part of the cover and shows the slotted paper-retaining plate. Fig. 7 is a section view, on an enlarged scale, of the bolt-tube which is attached across the can-mouth.

The cover-lock may be applied to milk-cans of any construction.

The can A has a metal collar B surrounding the neck C, and at diametrically-opposite sides the collar has circumferentially-extending right-angled grooves *d*, one branch of which opens upward at the rim edge of the collar and the other branch of which has an inclined upper edge *d'*. The locking-bolt F is movable endwise in a tube *e*, secured crosswise of the can-mouth. Both ends of the tube open through to the outside of the collar B, but fit tight in the collar to prevent leakage. The locking-bolt has one end beveled, as at *g*, to engage with the cover, a spring *h* keeping it shot or projected, and the other end has suitable means *i* for engagement of a hook or other instrument by which to draw the bolt back and disengage it. The tube *e* has within it a sleeve or bushing made in two separate sections *j j'*, and the bolt F moves in the said sleeve. The two sleeve-sections do not join, but are separated at the middle of the tube, and a space is thereby left for the spiral spring *h*, which surrounds

the bolt. One end of the spiral spring bears against two lugs *k* on the bolt, which are at the said middle space, and at the other end the spring bears against the end of the sleeve-section *j'*. This construction insures that the spring *h* will keep the bolt normally in the projected position and also that the lugs *k* will prevent the bolt from projecting too far.

The milk-can cover L is to fit down over the can-collar B. The cover may have a suitable gasket at *m* to fit on the rim edge of the collar and prevent leakage of milk in case the can should be accidentally upset. The down-flange *n* of the cover has on its inner side two lugs *o*, diametrically placed, so as to enter the upper open ends of the two right-angled grooves *d* on the collar B. When the cover L is placed over the open neck C, these lugs *o* enter the upward branch of the grooves *d*, and when the cover is fully down it should be partly rotated to cause the said lugs *o* to pass along the horizontal branch of the grooves *d*, whose upper edge *d'* is inclined. This inclination serves to draw the cover down tightly. The inner side of the down-flange *n* of the cover has a series of serrated teeth or notches *g²*, with which the beveled end *g* of the bolt engages for locking. These teeth or notches are pitched, so as to slip past the beveled end of the spring-pressed bolt when the cover is being partly rotated, and when the cover becomes tight the said bolt remains engaged with one tooth or notch, and the cover is thereby securely locked.

To prevent any tampering with the bolt ends after the cover has been locked, two segment-flanges *g' i'* are secured to the neck-collar B immediately below the open ends of the bolt-tube *e*. The lower edge of the down-flange *n* of the cover will thus be in close relation to said segment-flanges. The segment-flange *g'* guards the beveled end *g* of the bolt, and the other segment-flange *i'* guards the hook end *i*.

The down-flange *n* of the cover has a slot *p*, and a plate *q*, also provided with a slot *p'*, is riveted onto the down-flange, so that the two slots *p p'* are coincident. At its top edge the plate *q* fits tightly to the rim *n* of the cover, but at its bottom edge there is a slit or crevice *r* between the plate *q* and said rim *n*. (See

Fig. 1.) This slit or crevice permits the insertion of a slip of paper before the cover is placed on the milk-can. The slip of paper will conceal that open end of the tube *e* where the hook end *i* of the bolt is located.

In order to unlock the can, the end of a suitable hook or other instrument (not shown) is to be inserted through the slot *p'* and puncture the slip of paper, and said instrument will engage the notch *i* on the bolt end, and then by drawing back on the instrument the bolt *F* may be retracted to disengage its beveled end *g* from the teeth or notches *g'* on the cover, and then the cover may be partly rotated in the backward direction for removal. In washing the can there is no danger of any of the locking parts becoming injured or detached.

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

1. The combination of a milk-can collar having circumferentially-extending grooves; a tube secured crosswise of the collar and having both ends open through to the outer sides of the collar; a locking-bolt movable endwise in said tube and one end normally projecting; and a cover which takes over the milk-can collar and having lugs to engage the said circumferentially-extending grooves and provided with teeth or notches with which the said projecting bolt end engages.

2. The combination of a milk-can collar having circumferentially-extending grooves; a tube secured crosswise of the collar and having both ends open through to the outer sides of the collar; a locking-bolt movable

endwise in said tube and having its front end beveled and its back end provided with means for retraction; a spring in the said tube to project the beveled end of the bolt at one end of the tube; and a cover which takes over the milk-can collar and having lugs to engage the said circumferentially-extending grooves and provided with teeth or notches with which the said beveled end of the bolt engages, and also provided with a slot to afford access of a suitable instrument to the back end of the bolt to effect its retraction.

3. The combination of a milk-can collar having circumferentially-extending grooves; a tube secured crosswise of the collar and having both ends open through to the outer sides of the collar; a sleeve in said tube made in two sections separate at the middle, the separation forming a space in the tube; a locking-bolt having two lugs, *h*, which are at said space—the bolt being movable in said sleeve and one end projecting; a spiral spring surrounding the bolt at the middle space and bearing against the lugs on the bolt and against the end of one sleeve-section; and a cover which takes over the milk-can collar and having lugs to engage the said circumferentially-extending grooves and provided with teeth or notches with which the said projecting bolt end engages.

In testimony whereof I affix my signature in the presence of two witnesses.

ROBERT J. W. HAMILL.

Witnesses:

CHARLES B. MANN, Jr.,
CHARLES L. VIETSCH.