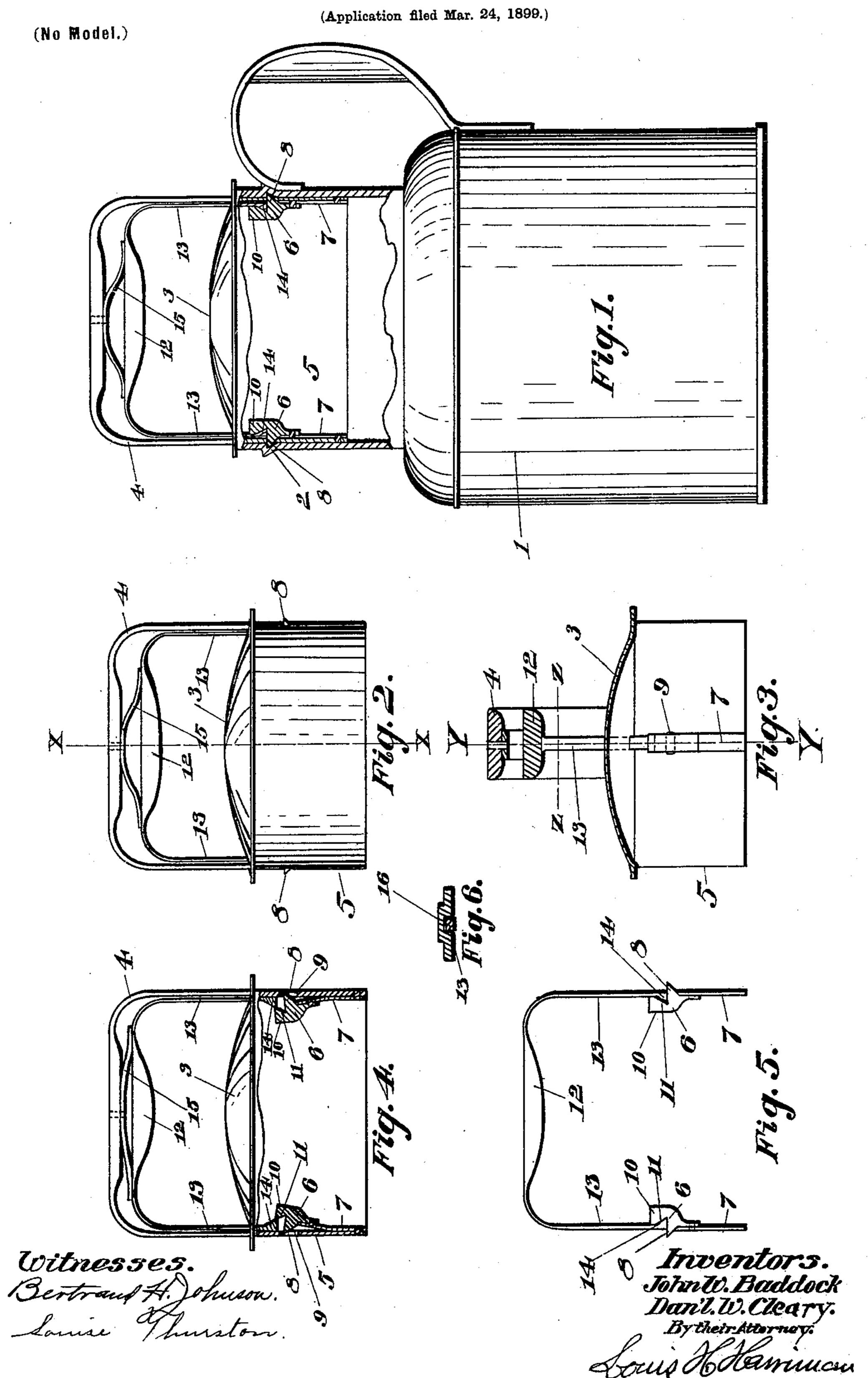
J. W. BADDOCK & D. W. CLEARY. AUTOMATIC LOCKING DEVICE FOR CAN COVERS.



United States Patent Office.

JOHN W. BADDOCK AND DANIEL W. CLEARY, OF HAVERHILL, MASSACHUSETTS.

AUTOMATIC LOCKING DEVICE FOR CAN-COVERS.

SPECIFICATION forming part of Letters Patent No. 641,256, dated January 16, 1900.

Application filed March 24, 1899. Serial No. 710,310. (No model.)

To all whom it may concern.

Beitknown that we, JOHN W. BADDOCK and DANIEL W. CLEARY, citizens of the United States, and residents of Haverhill, in the 5 county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Automatic Locking Devices for Can-Covers, of which the following is a specification.

The object of our invention is to provide a locking means for the ordinary tin-can top or cover which will not in the least interfere with the freedom or readiness with which the cover may be put on or removed and yet 15 which will securely lock the cover in the can, so that there is no chance for it to be accidentally knocked off or to fall out if the can should be overturned. We accomplish this object by providing the can with spring-catches 20 which will automatically engage the can when the cover is placed therein and which are automatically disengaged by the simple act of removing the cover by its handle.

For a more complete understanding of our 25 invention reference is made to the accompa-

nying drawings, in which—

Figure 1 is a side elevation of the can, showing a portion thereof in central cross-section. Fig. 2 is a side elevation of the cover. Fig. 30 3 is a central cross-section of the cover on the line x x of Fig. 2. Fig. 4 is a central cross-section of the cover on the line y y of Fig. 3, showing the supplemental handle drawn up. Fig. 5 is a detached view of the 35 supplemental handle and catches. Fig. 6 is cross-section of a slight modification taken on the line zz of Fig. 3.

The can 1 is provided with an annular groove or notch 2, near the upper end of the 40 neck thereof. The cover 3 is provided with the usual handle 4 and the flange 5, which fits into the neck of the can. The flange 5 is provided on the inside thereof with the spring catches or locks 6. These catches are 45 preferably two in number and are arranged diametrically opposite each other inside the cover. Each of these catches 6 has a spring 7 connected thereto, the lower end of the spring being secured to the flange 5 by any 50 suitable and well-known means, as by riveting. The catches 6 are provided with the top of the cover. Such a means we illus-

side projections 8, which extend through the apertures 9 in the flange of the cover and are adapted to engage the annular groove 2. The under sides of these projections are inclined 55 and the upper sides are level or horizontal, so that when the cover is placed in the can the inclined sides of the catches will strike the neck and be forced inwardly, and when the cover is forced in far enough for them to 60 engage the groove they will prevent the cover from coming out. Obviously it is immaterial if the cover be forced in so far that the catches pass beyond the groove 2, as they would again catch therein on being brought 65 opposite it. The upper side of each catch is provided with a projection 10, having an inclined face 11.

12 is a supplemental handle which is lo-

cated directly under the handle 4. This sup- 70 plemental handle 12 is provided at its ends with depending wires or strips 13, made of tin or other suitable material, which pass through the top of the cover. Wedges 14 are connected to the lower ends of said strips at 75 their thinner ends and are arranged adjacent

to said projections 10, so that the inclined sides of the wedges engage the inclined sides

of the projections 10.

To disengage the catches from the groove 80 2, it is simply necessary to draw upwardly on the supplemental handle. By this movement the wedges will also be drawn upwardly, drawing the projections inwardly, as shown in Fig. 4, so that the cover may be readily re- 85 moved. The spring 15 between the two handles will return the supplemental handle 12 to its original position. The base of the wedge engaging the horizontal portion of the projection of the catch will act as a stop. This 90 spring 15 is not wholly necessary, as the springs 7 on the catches may be made strong enough to draw the handle 12 down. When the spring 15 is used, the springs 7 may not be necessary, provided only that the catches 95 are pivoted in some way. The square ends of the wedges striking on the horizontal surface of the projections 8 would move the catches outwardly.

Some means for guiding the handle may 100 be provided other than the apertures in the

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trate in cross-section in Fig. 6, in which we show the inside of the sides of the handle 4 provided with a groove 16, in which the depending portions 13 of the handle 12 may 5 slide and which will hold the said handle

against lateral motion.

From the above description it will be clear that we provide a simple and effective locking means for the cover, yet the cover may to be put on and removed as readily as if the locking means were not present, the simple act of putting the cover on, locking it, and the ordinary pull on the handle releasing the lock.

Although our invention is primarily intended to be used in connection with a tin can, as shown, yet obviously it may be used in connection with any receptacle for the cover of which it is desired to provide a lock-20 ing means.

Having described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is as follows:

1. A receptacle having an interior recess 25 near the top thereof, a cover having a downwardly-projecting flange, catches secured thereto which are adapted to automatically engage said recess, a main handle fixed on said cover, apertures in said cover, a supple-30 mental handle arranged within said main handle and having arms extending through said apertures, said arms being arranged to slide therein, and means carried by said arms for engaging said catches and withdrawing them 35 from engagement with said projection when said supplemental handle is drawn in the direction for removing the cover.

2. A receptacle having an interior recess near the top thereof, a cover therefor, spring-40 catches carried thereby which are adapted to be automatically pressed inwardly as the cover is placed in position, and spring outwardly when opposite said recess so as to engage the same, a movable handle having arms 45 which slide in and out with respect to the cover, and a projection carried by each of said arms for engaging said catches and drawing them out of engagement with said recess

when said handle is moved outwardly. 50 3. A receptacle having an interior recess near the top thereof, a cover having a main handle secured thereto, and having a depending flange which is adapted to enter the top of said receptacle, a catch secured to said 55 flange which is adapted to automatically en-

gage said recess when the cover is placed in said receptacle, a supplemental handle located under said main handle which is adapted to slide with respect thereto, means dis-60 connected from said catch and controlled by said supplemental handle for engaging said catch and withdrawing the same from said recess when said supplemental handle is moved

in the direction for removing the cover. 4. A receptacle having an interior recess near the top thereof, a cover having a de-1

pending flange which fits into said receptacle, spring-catches secured to the inner wall of said flange which are adapted to engage said recess when the cover is placed on the 70 receptacle, inclined projections connected to said catches, a handle having arms which pass through the top of the cover, projections carried by the lower ends of said arms which are adapted and arranged to engage 75 said inclined projections upon upward movement of said handle and its arms and withdraw said catches from engagement with said recess.

5. A receptacle having a notch or groove 80 near the top thereof, a cover having a depending flange which fits into said receptacle, spring-catches secured to the inner wall of said flange, side projections carried by said catches which are adapted to engage said 85 groove, top projections on said catches, each having an inclined side, a handle having arms extending through the top of said cover, inclined projections carried by the lower ends of said arms, the inclined surfaces thereof 90 being adapted and arranged to engage the inclined sides of said top projections upon an upward movement of said handle.

6. A receptacle having an annular groove near the top thereof, a cover having a main 95 handle secured thereto and having a depending flange which is adapted to enter the top of said receptacle, spring-catches secured to said flange and adapted to automatically engage said groove when the cover is placed on roc said receptacle, a supplemental handle located under said main handle, a sliding connection between said supplemental handle and said cover, means carried by said supplemental handle for engaging said catches 105 and withdrawing the same from said groove upon said supplemental handle being pulled outwardly.

7. A receptacle having a notch or groove near the top thereof, a cover having a han- 110 dle secured thereto, a flange depending from said cover which is adapted to enter said receptacle, catches pivoted to said flange which are adapted and arranged to engage said groove, a supplemental handle arranged ad- 115 jacent to said main handle having depending arms which extend through the top of said cover, means carried by said arms for engaging said catches and withdrawing the same from said groove upon movement of said sup- 120 plemental handle, a spring interposed between said handles for returning the supplemental handle to its normal position after it has been moved.

In testimony whereof we have affixed our 125 signatures in presence of two witnesses.

> JOHN W. BADDOCK. DANIEL W. CLEARY.

Witnesses:

Louis H. Harriman, LOUISE THURSTON.