L. J. SCHILLINGER.

MEANS FOR LOCKING CAN COVERS.

APPLICATION FILED MAR. 24, 1919.

1,308,197. Patented July 1, 1919.

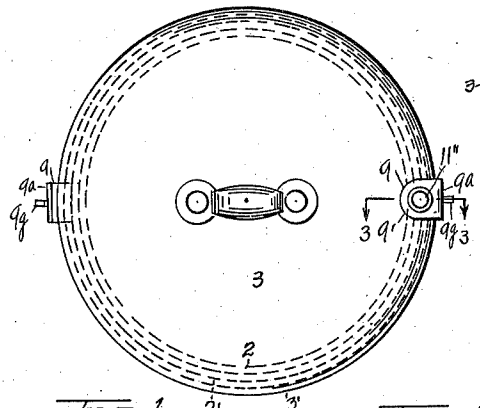


Fig. 1.

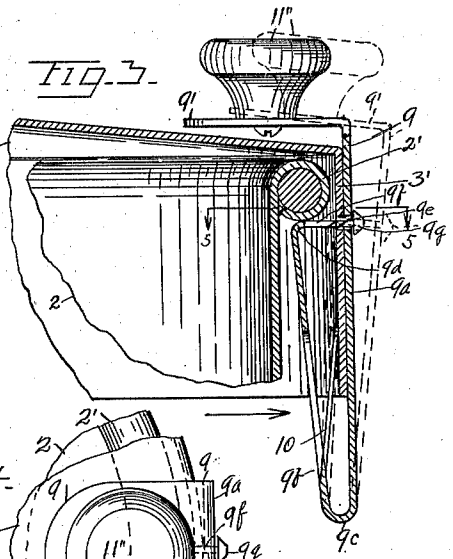


Fig. 3.

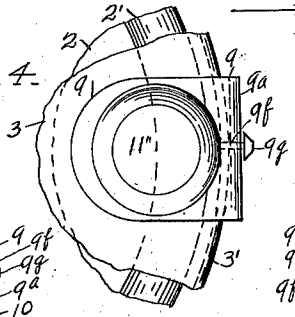


Fig. 4.

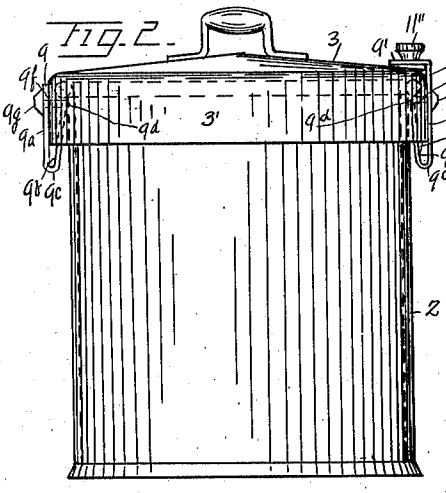


Fig. 2.

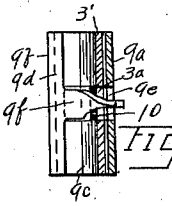


Fig. 5.

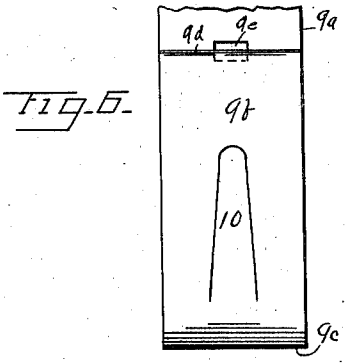


Fig. 6.

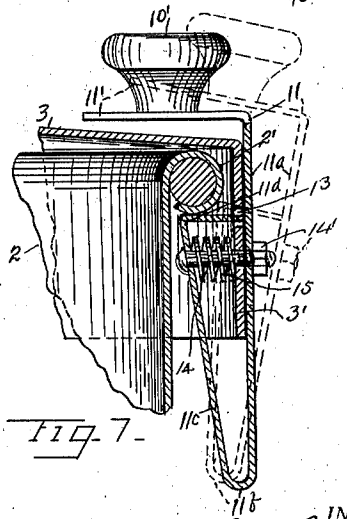


Fig. 7.

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MEANS FOR LOCKING CAN-COVERS.

1,308,197. Specification of Letters Patent. Patented July 1, 1919.

Application filed March 24, 1919. Serial No. 284,579.

To all whom it may concern:

Be it known that I, LINUS J. SCHILLINGER, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Means for Locking Can-Covers, of which the following is a specification.

This invention relates to means for locking the covers of cans, and has for its object to provide a novel and simple locking device, designed particularly for securing the covers of garbage and similar receptacles, for preventing their accidental removal or loss.

I attain these objects by the means set forth in the detailed description which follows, and as illustrated by the accompanying drawing, in which—

Figure 1 is a top-plan view of a garbage or other can, showing my improvement applied thereto.

Fig. 2 is a side elevation of the same.

Fig. 3 is an enlarged broken vertical cross-section, substantially on line 3—3 of Fig. 1; showing the preferred construction and arrangement of the locking device; also showing by full and dotted lines the operated and released positions of the lock.

Fig. 4 is an enlarged top view of the locking device in connection with fragments of the can and cover.

Fig. 5 is a horizontal section, taken on line 5—5 of Fig. 3.

Fig. 6 is an enlarged broken view of the latch, taken in the direction of the arrow in Fig. 3.

Fig. 7 is a vertical cross-section, similar to Fig. 3; showing a modification of the locking parts, in both the operated and released positions.

In the drawing, 2 represents a can, such as is used for depositing garbage and other refuse, which is provided with the usual bead 2′ around its open top. 3 is the cover which telescopes the open top of the can, and 3′ is the depending flange of the cover. Both the can and cover may follow any of the usual constructions. The diameter of the flange 3′ is usually slightly greater than the outer diameter of the beaded rim 2′ of the can, as shown in Figs. 3 and 7; so that the cover loosely fits the can.

My improved cover lock, in its preferred form, consists of a strip of sheet spring steel 9, which is first bent like an inverted L having arms 9′ and 9^a, both of which substantially conform to the outer edge of the cover 3. The strip 9 is next bent upwardly at 9^c to provide a spring latch portion 9^b, the free end of which is again bent substantially at right angles to form a shoulder 9^d, which engages the underside of the bead 2′, the lateral portions of the shoulder being cut away to provide a relatively narrow tongue 9^f, which passes loosely through a slot 3^a in the flange 3′, and also through a corresponding slot 9^e in the arm 9^a. The free end of the tongue is provided with an enlarged head 9^g, which is positioned outside of the arm 9^a. After the tongue 9^f is inserted through the slot in the flange 3′ and through the arm 9^a, its free end is given a half-twist for positioning the head 9^g in a vertical plane crosswise of the slot 9^e. This prevents the tongue from becoming detached from the part 9^a, while permitting the latch 9^b to be sprung toward and away from the flange 3′, when applying and removing the cover from the can. 10 is a narrow tongue-like spring which is struck out of the latch portion 9^b, and its free end is constantly in engagement with the inner surface of the flange 3′. The purpose of the spring 10 is to normally and resiliently hold the part 9 in the locking position, shown by the full lines in Fig. 3. When the cover 3 is applied to the can 2, the bend 9^c first encounters the bead 2′, and as the cover is forced downwardly, the latch portion 9^b and also the spring 10 flex or bend toward the flange 3′ (see dotted lines in Fig. 3) sufficiently to allow the latch to pass by the bead 2′. When the cover finally rests upon the top edge of the can, the latch and the tension part 10 spring back to their normal positions, shown by the full lines in Fig. 3, which brings the shoulder 9^d into locking engagement with the bead 2′. To remove the cover from the can, the operator grasps a hand-knob 11″, which is mounted on top of the arm 9′, and forces the latter outwardly, as from the full line to the dotted line position shown in Fig. 3, which frees the shoulder 9^d from the bead 2′. The cover may then be lifted clear of the can without interference from the lock 9.

Fig. 7 shows certain modifications, which consists of a non-spring body 11, similar in shape to the part 9, having arms 11′ and 11^a, the former supporting a hand-knob 10′. The body 11 is also bent at 11^b to provide

an upwardly extending latch portion 11^c, the latter being bent toward the arm 11^a to provide a shoulder 11^d, which engages the underside of the bead 2′ of the can 2. The shoulder portion 11^d passes loosely through a slot 13 in the flange 3′, and its free end bears against the inner face of the arm 11^a. 14 represents a bolt, which passes through alining perforations in the arm 11^a, the latch portion 11^c and the flange 3′, the said bolt being held in place by a nut 14′. 15 is a coil spring which encircles the bolt 14, its opposite ends engaging respectively the latch 11^c and the inner face of flange 3′. The tension of the spring 15 normally holds the device in the locking position, shown by the full lines in Fig. 7. In applying, as well as removing the cover 3 from the can, the locking parts are forced outwardly, from the full line to the dotted line position (Fig. 7), as described.

Having thus described my invention, what I claim is—

1. The combination with a can having an annular bead, and a cover having a depending flange encircling said bead, of a locking device comprising an L-shaped body, one arm of said body folded upon itself to provide a flexible latch, said latch having a shoulder engaging the bead of the can and having a tongue which pierces the flange of the cover and said arm, the said body adapted to be tilted on said tongue for freeing said shoulder from said bead.

2. The combination with a can having a beaded mouth and a telescoping cover having a depending flange, of a lock comprising an inverted L-shaped body of spring material, one arm of said body bent upon itself to provide a shouldered latch adapted to engage the bead of the can, said latch having a tongue which passes through slots in said flange and said body, and a spring carried by said latch and engaging the flange of the cover for normally holding said latch in the locking position.

3. The combination with a can having a bead around its mouth and a cover having a depending flange provided with a slot, of a lock supported by said flange, said lock comprising a spring metal body, a portion of said body bent U-shaped for receiving said flange, one arm of said U having a shoulder engaging the bead of the can for locking the cover to the can, and having a tongue adjacent said shoulder which passes through the slot in the flange and through the opposite arm of said U, and a spring for normally holding said shoulder beneath said bead.

In testimony whereof I affix my signature.

LINUS J. SCHILLINGER.