(No Model.)

T. C. MERZ.
BOTTLE STOPPER.

No. 345,249.

Patented July 6, 1886.

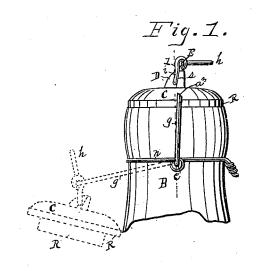
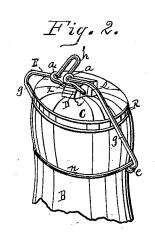
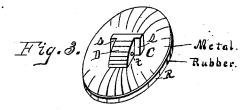
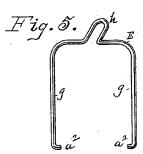


Fig. 4.







WITNESSES: C. W. Ruspell. B. O. Wheelen Theodore & Merz Roscos Bothsolar

## United States Patent Office.

THEODORE C. MERZ, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO PAUL PLESSNER, OF SAME PLACE.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 345,249, dated July 6, 1886.

Application filed December 12, 1885. Serial No. 185,502. (No model.)

To all whom it may concern:

Be it known that I, THEODORE C. MERZ, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Bottle-Stoppers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of my present invention in bottle-stoppers is to provide a cheap and durable means for instantly closing or opening the mouth of a bottle, one that will be air tight when closed, and may be used as often as the bottle is filled; and my invention consists in the general arrangement of parts, as hereinafter set forth, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a side elevation of my invention attached to the neck of the bottle, having the bail-wire g broken away at a to show locked position of the locking-lever z. Fig. 2 is a perspective of same, showing parts unlocked. Figs. 3, 4, and 5 are detail 30 views.

In the drawings, B is the bottle; n, the usual wire encircling the neck of the bottle, having eyelets e formed on diametrically opposite sides.

25 E is the bail, having arms gg with inwardly-projecting ends  $a^2$ . The bail is arched at the upper end, and has a loop handle or lever, h, formed integral therewith and extending outward at right angles to the arms gg, as clearly 40 shown in Figs. 1, 2, and 5.

C is a metal cap, and D is a T-shaped lug attached to the upper center of said cap, or said lug may be formed integral therewith.

R is a rubber or flexible disk, attached to the under face of the metal cap D, and when in position, as in Figs. 1 and 2, fits within and over the mouth of the bottle.

The lug D of the cap C has on opposite sides a slanting ledge or stop, s. (See Figs. 1,2, and 50 3.) Passing horizontally through the body of

the lug D, at one side of the stops s s, is a hole, t, forming a journal-bearing for the horizontal portion of the  $\mathbf{U}$ -shaped locking-lever z. The free or upper ends of this lever are provided with eyelets a a, which are formed around the 55 horizontal portion of the bail, having the handle h of said bail located between them, whereby lateral movement of the locking-lever z and cap e is prevented, and the cap and flexible covering or stopper held in a direct line 60 over the mouth of the bottle when locking it. The pivots  $a^2$   $a^2$  of the bail are sprung into the eyelets e e of the wire n, and swing on said points, which is common.

The hole t, through the lug D of the cap, and 65 the eyelets e e are in a direct vertical line with each other. The ledges or stops s s of the cap or lug D are at one side of the center, as as shown in Figs. 1, 2, and 3.

The lug D is made sufficiently wide to pre- 70 vent any lateral movement of the locking-lever z.

The operations is as follows: The cap c being in the dotted position of Fig. 1, to close the bottle the handle h is grasped by the hand, 75 the bail E is swung up, as shown in Fig. 2, carrying the cap over the mouth of the bottle, when the handle h is depressed, as shown in Fig. 1, causing the bail E to pass the vertical center on dotted line of Fig. 1, when the 80 arms i i of the locking-lever strike the ledges or stops s s of the cap, thus holding the cap in a locked position. The device may be unlocked by simply lifting the handle h over from the position of Fig. 1 to that of Fig. 2. 85 The locking-lever arms are made sufficiently long, so that when passing the vertical center with the bail E they will press firmly down upon the cap.

Having thus fully set forth my present in- 90 vention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the bottle, the wire encircling the neck thereof, the bail pivotally attached thereto having the handle formed 95 integral therewith, the cap, its lug having ledges or stops s s, the locking-lever journaled in said lug, and having its free ends coiled around the bail, substantially as specified.

2. In combination with the bottle, the bail 100

E, pivotally attached thereto, the handle h, formed integral with said bail, the metal cap, the rubber or flexible stopper, the lug D with its stops ss, the locking U-shaped lever pivoted to said lug and having its free ends coiled round the bail, the arms of said locking-lever being adapted to meet the stops ss as and for being adapted to meet the stops s s, as and for the purposes specified.

Intestimony whereof I affix my signature in presence of two witnesses.

THEODORE C. MERZ.

Witnesses:
R. B. WHEELER,
B. F. WHEELER.