

UNITED STATES PATENT OFFICE.

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BOTTLE AND JAR STOPPER AND FASTENER.

SPECIFICATION forming part of Letters Patent No. 313,583, dated March 10, 1885.

Application filed September 26, 1884. (Model.)

To all whom it may concern:

Be it known that I, EDWIN HAAS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Bottle and Jar Stoppers and Fasteners, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention has relation to that class of bottle and jar covers or stoppers in which the stoppers are connected to a swinging bail by a locking-lever, and to that particular description of bottle-stoppers in which the locking-
15 lever is confined in limit to substantially the area of the upper face of the stopper and is adapted to operate between said upper face and the bail passing over the same; and the invention consists of certain features of construction hereinafter described, and specifically set
20 forth in the claims.

Referring to the drawings, Figure 1 is a side elevation of a portion of a bottle provided with my improved stopper and fastener, the
25 same being represented as closed. Fig. 2 is a similar view representing parts in central vertical section, and the stopper, lever, and bail in position to be sprung away from the mouth of the bottle. Fig. 3 is a side elevation of the
30 locking-lever detached. Fig. 4 is a similar view of the metallic part of the stopper proper.

Like letters indicate like parts in all the figures.

To the neck of a bottle, A, is secured, in the
35 usual manner, a neck-wire, B, having formed therein eyes B', for the reception of the bail C, which in this instance is bent outwardly to form trunnions C', which project from the bottle, these parts being of the usual construction. The bail passes through a locking-lever,
40 D, which is pivotally connected to the stopper. The lever D is formed in one piece, and comprises a thumb-piece, D', a body portion, D², having two of its sides, D³ D⁴, arranged at
45 a trifle less than a right angle to each other, projecting bearing-lugs D⁵, which may be in cross-section cylindrical or V-shaped, as shown in Fig. 3, and a rib, D⁶, perforated, as
at D', for the passage of the bail therethrough.

50 The advantages secured by constructing the locking-lever as described comprises such a shape and disposition of the parts that the le-

ver may be cast in a single piece, the rib D⁶ being downward in the sand. The location of the perforation brings the bail against the
55 thicker body portion, as at D³, when under its greatest strain, and the upper inclination given to the side D³ relative to the side D⁴ permits the passage of the bail beyond the straight line passing from its pivot through the pivot
60 of the locking-lever to the point of the pivotal attachment of the bail to said lever, whereby the stopper is locked in a closed position. The stopper comprises two pieces—the metallic cap-piece or plug E and the rubber stop-
65 per or washer F. The cap-piece or plug E comprises a disk, E', having diametrically-opposite pairs of lugs, E², a cylindrical shoulder or washer, E³, on the lower surface of the disk E', and a projecting cylinder, E⁴, having
notches E⁵ extending from its lower end toward the washer E³. By the construction de-
scribed this part may be cast in a single piece, in which case the lugs E² and the cylinder E⁴
75 are cast straight—the former as shown in dotted lines, Fig. 1, and the latter as shown in dotted lines, Fig. 4--so that by any suitable tool having a U-shaped recess the said lugs E² may be bent over the pivots D⁵ of the locking-lever D, and so that by any suitable tool the prongs
80 E⁶, formed by notching the cylinder E⁴, as described, may be bent outwardly, so that a properly-recessed rubber stopper may be secured to the cap-piece, as hereinafter described. In this instance the rubber cap-piece is centrally recessed and cut under, as at F',
so that it may be buttoned onto the cylinder E⁴. The face, and it may be other portions of the rubber stopper F, is coated, as at G, with
90 paraffine, to prevent contact of the contents of the bottle with the rubber.

This being the construction, the operation is as follows: To withdraw the stopper a thumb is placed against the lever D', and said lever is
95 oscillated upon its pivots D⁵, carrying the bail over said pivots, when, by the resiliency of the rubber, said lever is brought to the position shown in Fig. 2, where its face D⁴ rests upon the cap-piece or plug E. A further movement of the bail, and a partial rotation thereon
100 of the stopper, removes it completely from the mouth of the bottle. A reversal of these movements serves to close the bottle and lock the stopper in the mouth thereof.

Having thus fully described my invention and its operation, what I claim is—

1. The cast-metal cap-piece or plug having pivot-lugs capable of being bent to form eyes and a notched depending hollow cylinder formed in one piece or casting, substantially as specified.

2. A plug or cap-piece for bottle-stoppers, consisting of a single casting having upwardly-projecting pivot-lugs and a downwardly-projecting cylinder having prongs, the lugs and prongs being capable of being bent, substantially as specified.

3. The combination of the bail C, pivotally secured to the bottle, the lever D, having the lugs D⁵, the cast-metal cap-piece E, comprising a cylinder having the bent prongs E⁶, and the rubber stopper F, substantially as shown and described.

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

EDWIN HAAS.

Witnesses:

J. F. TURNER,
THEO. H. McCALLA.