(No Model.)

W. J. EISENHARDT.

BOTTLE STOPPER FASTENING.

No. 576,101. Patented Feb. 2, 1897.

Fig. 1.

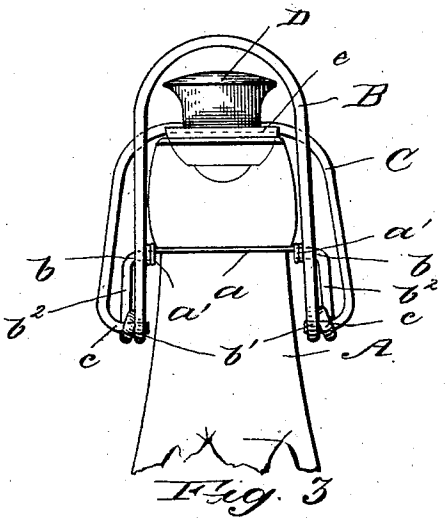


Fig. 2.

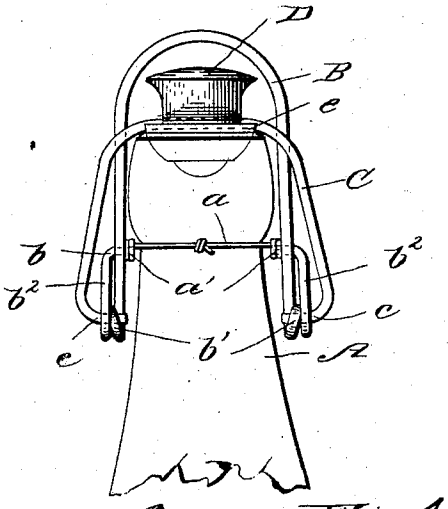


Fig. 3

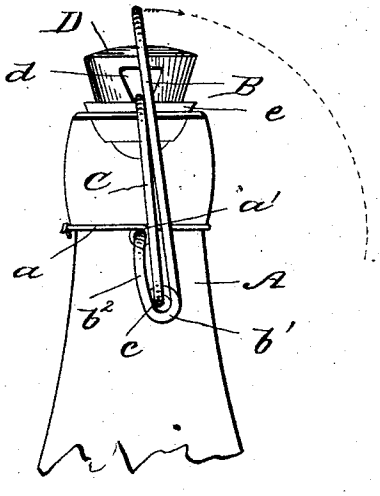
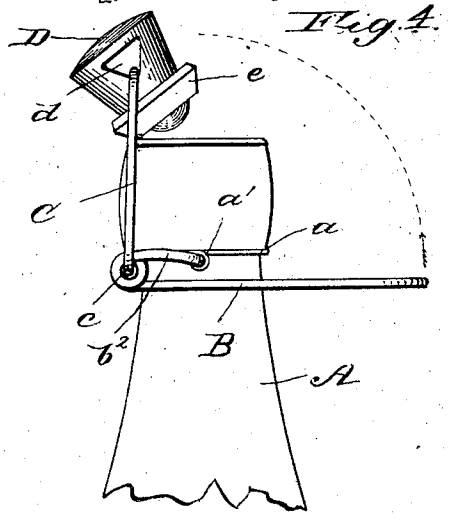


Fig. 4.



Witnesses:
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Inventor:
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Atty.

UNITED STATES PATENT OFFICE.

WILLIAM J. EISENHARDT, OF BALTIMORE, MARYLAND.

BOTTLE-STOPPER FASTENING.

SPECIFICATION forming part of Letters Patent No. 576,101, dated February 2, 1897.

Application filed April 22, 1896. Serial No. 588,630. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. EISENHARDT, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Bottle-Stopper Fastenings, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of swing-stopper-locking devices—such, for example, as is shown by United States Patent No. 158,406—in which the stopper is locked in its operative position by means of a lever connected with a pivoted yoke by which the stopper is carried; and the object of my invention is to provide a stopper-fastening device of the class referred to of such construction that while the stopper will be securely fastened when the bottle is to be closed the fastening device may be readily unlocked by knocking the locking-lever (which in its fastening position projects above the top of the stopper) against some object or by applying pressure thereto by hand.

In the accompanying drawings, Figures 1 and 2 are opposite side views illustrating my improved swing-stopper-locking device. Fig. 3 is an edge view at right angles to Figs. 1 and 2, showing the stopper in locked position; while Fig. 4 is a similar view showing the stopper unlocked.

A denotes the top of a bottle, around the neck of which is fastened a collar-wire *a*, coiled to form eyes *a'*, into which extend trunnions *b* of the locking-lever B, provided with coils or eyes *b'*, which are engaged by hooks or inturned portions *c* of the looped yoke or bail C, which passes through an opening *d* in the stopper D, said stopper being provided with the usual rubber gasket or packing *d'*. The locking-lever B is provided with return-arms b^2, which are parallel, or approximately so, with the body of the said lever, while the coils forming the eyes *b'*, and by which said arms are joined to the body of the said lever, are so arranged relative to the trunnions *b*, formed at the extremities of the said arms b^2, that when the said lever is held in its locked position (shown in Figs. 1, 2, and 3) the said eyes will be swung considerably past the pivotal point of said lever B at the said trunnions *b*, thereby causing the said lever to be held in locked position by a toggle action between the said lever and the yoke C, and owing to the elasticity of the gasket or packing *e*, which has a tendency to force the stopper D upward, thereby pulling upward on the said yoke, said lever will be securely retained in its locked position against said yoke, which latter, as shown by Figs. 1 and 2, is formed to extend outside of said lever and thus serve as a stop or bearing therefor. This result is partly due to the fact that the pivotal connection of the bail or yoke C with the lever B at the eyes *b'* is considerably offset from the trunnions *b*, forming the fulcrum or pivotal point of the said lever. Thus the said lever will be securely held against accidental displacement.

It will be observed that the lever B is made wide enough at its top so as to be entirely clear of the stopper D and so as to extend sufficiently far above the said stopper as to permit it to be abutted or engaged against any fixed object or to be pressed upon by the thumb and finger of a person to unlock the stopper. To effect this result, the said lever B is not only made wider than the stopper, but said lever from the eyes *b'* to its end is made longer than the stopper-holding yoke, so that when said lever is in its locked position it will, as above stated, project considerably above the top of the stopper.

I am aware that it is not broadly new to construct a bottle-stopper fastening with a locking-lever which is moved upward to fasten the stopper and which in its locked position extends above the top of the latter, and I do not therefore wish to be understood as claiming such a bottle-stopper fastening broadly; but

What I do claim, and desire to secure by Letters Patent, is—

In a bottle-stopper fastening, the combination with the collar-wire *a* provided with eyes *a'*, of the locking-lever B having the return-arms b^2 extending parallel, or approximately so, to the body of the said lever, said arms being provided with the inturned ends or trunnions *b*, and said lever, at the junction of the said arms with the body thereof, being coiled to form the eyes *b'* and the yoke or bail C carrying the stopper and consisting of a loop

which is wider than the loop of the said lever B, so as to serve as a stop for the said lever when the latter is in its locked position, said yoke being provided at its ends with inturned portions or hooks *c* engaging the said eyes *b'*, and the length of the said lever B, from the eyes *b'* to end of said lever, being greater than the length of the said yoke C; whereby when said lever is in its locked position it will project considerably above said stopper and will be securely retained in its locked position by toggle action, substantially as set forth.

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

WILLIAM J. EISENHARDT.

Witnesses:
HENRY CALVER,
NATHAN H. ROBBINS.