D. E. STEVENS.
Bottle-Stopper.

No. 221,001. Patented Oct. 28, 1879.

Fig: 1

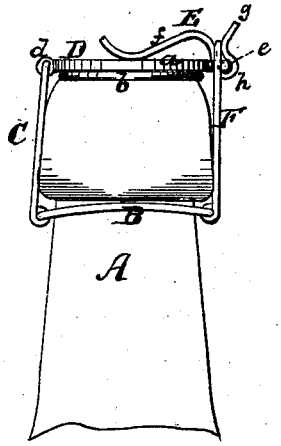


Fig: 2

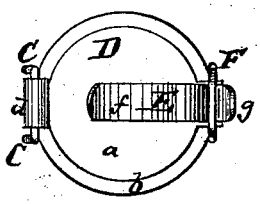


Fig: 5

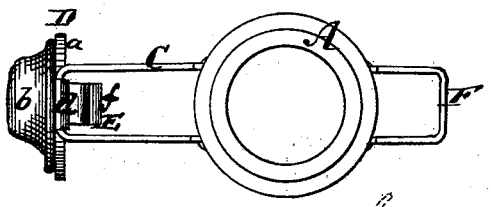


Fig: 3

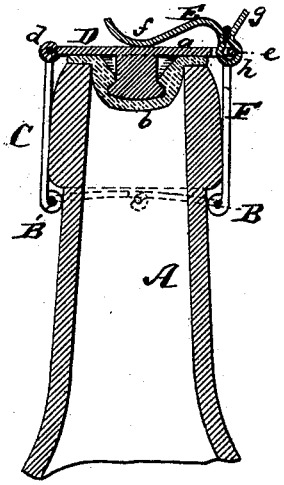


Fig: 6

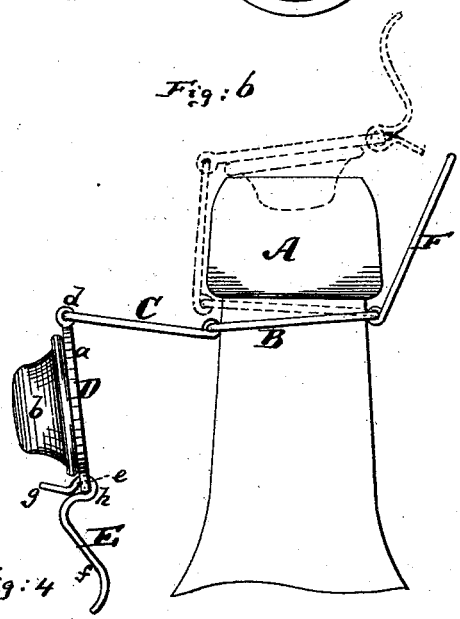
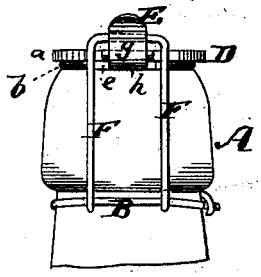


Fig: 4



Witnesses
A. V. Briesen
J. Tuck

Inventor:
David E. Stevens
by his attorney
A. V. Briesen

UNITED STATES PATENT OFFICE.

DAVID E. STEVENS, OF COLUMBUS, OHIO, ASSIGNOR TO HENRY W. PUTNAM, OF BENNINGTON, VERMONT.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **221,001**, dated October 28, 1879; application filed August 25, 1879.

To all whom it may concern:

Be it known that I, DAVID E. STEVENS, formerly of Newark, Ohio, now of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Bottle-Stopper, of which the following is a specification.

Figure 1 is a side view of my improved bottle-stopper; Fig. 2, a top view of the same; Fig. 3, a vertical central section of the same; Fig. 4, a front view of the same; Fig. 5, a top view of the same, showing it swung open; Fig. 6, a side view of the same swung open.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new means of holding a compound stopper—that is, one made of metal and rubber—firmly down upon the mouth of the bottle, at the same time permitting the bottle to be readily opened.

The stopper of my invention relates to the class of permanent attachments to the bottles.

My invention consists in a new combination of a locking-lever, which is pivotally connected with the stopper, said lever having two arms with a link suspended from the neck-band and with means for pivotally connecting the stopper to the vessel, and also in the new combination of said lever, which is pivoted to a stopper hinged to a standard with said swinging link, that is applied to the neck-wire of the bottle, all as hereinafter more fully described.

A in the drawings is the bottle; B, the neck-wire, fitted around the neck of the bottle in the usual or suitable manner. C is a standard, rigidly or flexibly attached to the neck-wire at one side of the bottle, and extending upward to a distance somewhat above the plane of the bottle-mouth or thereabout.

D is the compound stopper. It consists of a metal top plate or cap, *a*, and of a rubber base-piece, *b*, connected in suitable manner.

The cap *a* has an eye, *d*, at one side, and another eye, *e*, diametrically opposite the eye *d*, as shown. The eye *d* serves to hinge the cap *a* to the standard C.

E is the locking-lever, made somewhat in shape of the script letter L. It is preferably made of sheet metal, and is made to form a long arm, *f*, a short arm, *g*, and an intermediate loop, *h*. At its loop part the lever E is hinged to the eye *e* of the cap *a* in such manner that the long or handle part *f* will, when the bottle is closed, rest on the stopper, while the short or catch part *g*, in that position, projects slightly upward.

The arms *f* and *g* of the lever are (directly above the eye *e* in the position last mentioned) brought together to form a convenient rest or seat for the locking-link hereinafter described.

F is the locking-link, being a rectangular, oval, or other shaped link of wire or other material. It is hinged to the neck-wire B opposite to the standard C, as shown, and of such length that it can be caught in the fork of the lever E in manner shown in Fig. 1.

In order to close the bottle the stopper is swung over the mouth of the bottle, and the handle part of the lever swung into an upright position, as indicated by dotted lines in Fig. 6. The link F is now swung over the catch part *g* of the lever, and thereupon the handle of the latter is turned down, thereby carrying the top of the link above and inward of the pivot of the lever, as in Fig. 1, and firmly closing the bottle.

In order to open the bottle it is only necessary to raise the handle *f* of the lever, and thereby allow the disengagement of the link F from the said lever.

I claim—

1. In a bottle-stopper, the combination of the pivoted link F with the lever E, which is hinged to the compound stopper, and formed into the arms *f* and *g* and intermediate loop, and with means for pivotally connecting said link and stopper to the vessel for operation, substantially as herein shown and described.

2. The combination of the neck-wire B and standard C with the compound stopper D, hinged to said standard, with the lever E, hinged to said stopper, and with the link F, hinged to said neck-wire, substantially as herein shown and described.

DAVID E. STEVENS.

Witnesses:
P. M. WAGENHALS,
JNO. G. REINHARD.