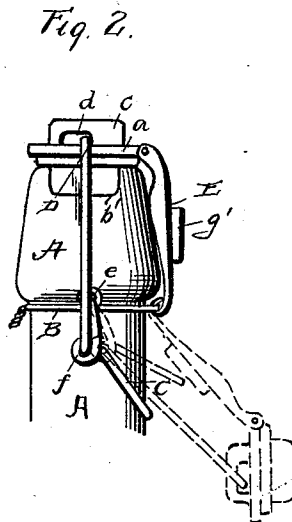
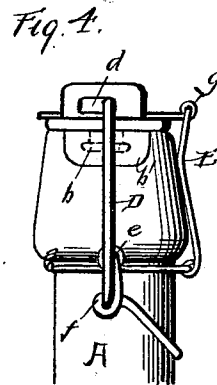
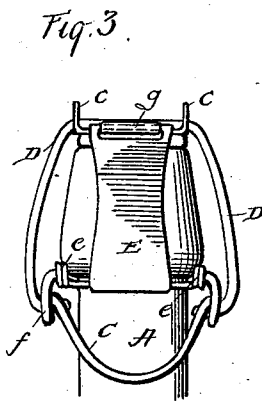
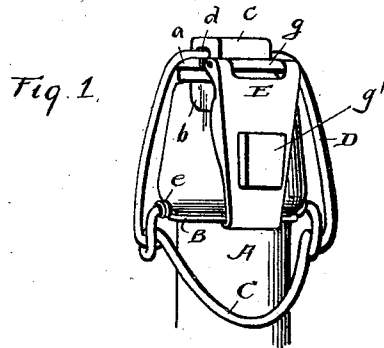


(No Model.)

E. W. MANNING.
BOTTLE STOPPER.

No. 561,013

Patented May 26, 1896.



WITNESSES

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UNITED STATES PATENT OFFICE.

ELWIN W. MANNING, OF WAVERLY, NEW YORK.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 561,013, dated May 26, 1896.

Application filed January 30, 1896. Serial No. 577,376. (No model.)

To all whom it may concern:

Be it known that I, ELWIN W. MANNING, a citizen of the United States, and a resident of Waverly, in the county of Tioga and State of New York, 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 letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a perspective view of stopper as in application. Fig. 2 is a side view of same, lowered position in dotted lines. Fig. 3 is a front view of stopper having parts struck from sheet metal. Fig. 4 is a side view of same.

The object of this invention is to provide a bottle-stopper and fastening of improved character; and the invention consists in the novel construction and combination of parts, all as hereinafter described, and pointed out in the appended claims.

Referring to the accompanying drawings, the letter A designates the neck and mouth portion of a bottle, to which I have shown my improved stopper and fastening applied. The stopper preferably consists of a metal plate or disk *a*, having on its inner face a headed projection *b*, over which is expanded a rubber gasket *b'*. Said gasket forms a stopper proper, its upper portion being flanged to seat between the marginal portion of the disk or plate *b*² and the edge of the bottle and its lower portion shaped to fit closely the orifice of the bottle. I do not, however, make any special claim or limit myself to this portion of the stopper. The upper face of the disk or plate *a* has thereon a boss or projection *c*, through which from side to side is formed an oblong slot *d*, which should not extend back beyond the center of the stopper. If the disk or plate is stamped or struck from sheet metal, it should preferably have two of these slotted bosses or projections *c*, as indicated in Fig. 3.

B designates a wire which is secured around the neck of the bottle, and which is provided at opposite points with bearings *e* for the respective arms of the bent or loop lever C.

These bearings are usually formed by bending small open coils in the wire B, as shown. The end portions of the said lever are bent upwardly and are inturned to engage these bearings.

D designates a bail whose transverse arm loosely engages the slot *d* of the stopper and whose respective ends are bent into engagement with eyes *f* of the lever C and underneath the said arm.

E designates a broad flat arm whose lower end is pivotally engaged with the wire B upon the same side of the bottle as the lever C and whose upper end is pivotally engaged with a marginal projection *g* of the plate or disk *a*. *g'* is a projection on the arm E, which prevents the lever C from coming too closely against said arm. To close the stopper, it is swung up on the bail D and arm E over the orifice of the bottle, the lever C being turned up against the said arm. Said lever is then pressed down against the neck of the bottle, taking a bearing upon the inturned end portions of the bail and drawing the transverse arm of the bail against the rear wall of the slot *d*. As the lever passes its bearings at *e* the bail commences to force the stopper to its seat, said stopper moving on its hinge or pivot at *g*. When the lever is brought down against the neck of the bottle, the bearings at *f* are carried past the bearings at *e*, forming a lock for said lever.

To remove the stopper, the lever is turned up against the arm E, causing the bail to take a bearing against the upper wall of the slot *d* and lift the stopper on its hinge at *g*. The stopper, bail, lever, and arm may then be swung down and back, as shown in Fig. 4 in dotted lines.

The arm E not only forms a hinge or pivot for the stopper, but it also assists in seating it, owing to the fact that when the arm E is moved to locking position the effect on the wire B is such as to slightly raise that portion thereof to which said arm is pivoted, causing a slight upward thrust of the said arm. This action moves the stopper to increase the bearing of the bail against the rear wall of the slot *d*.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a bottle-stopper having a boss or projection on its upper face, said boss or projection having an oblong slot there-through, a wire secured around the neck of the bottle, and having bearings at opposite
5 points, a lever having its end portions loosely engaged with said bearings, a bail whose transverse arm loosely engages the slot of the stopper, and whose intumed end portions
10 loosely engage bearings of the said lever, and an arm pivotally connected to said stopper and to the wire which surrounds the neck of the bottle, substantially as specified.

2. In a bottle-stopper fastening, the com-

bination with the stopper having the oblong 15 slot or slots, the bail loosely engaging said slot or slots, the lever engaging said bail, and the wire on the neck of the bottle having bearings engaged by the said lever, of an arm pivotally engaging said wire at its lower end and 20 hinged or pivoted to the cover at its upper end, substantially as specified.

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

ELWIN W. MANNING.

Witnesses:

C. O. HOAGLAND,

C. C. BROOKS.