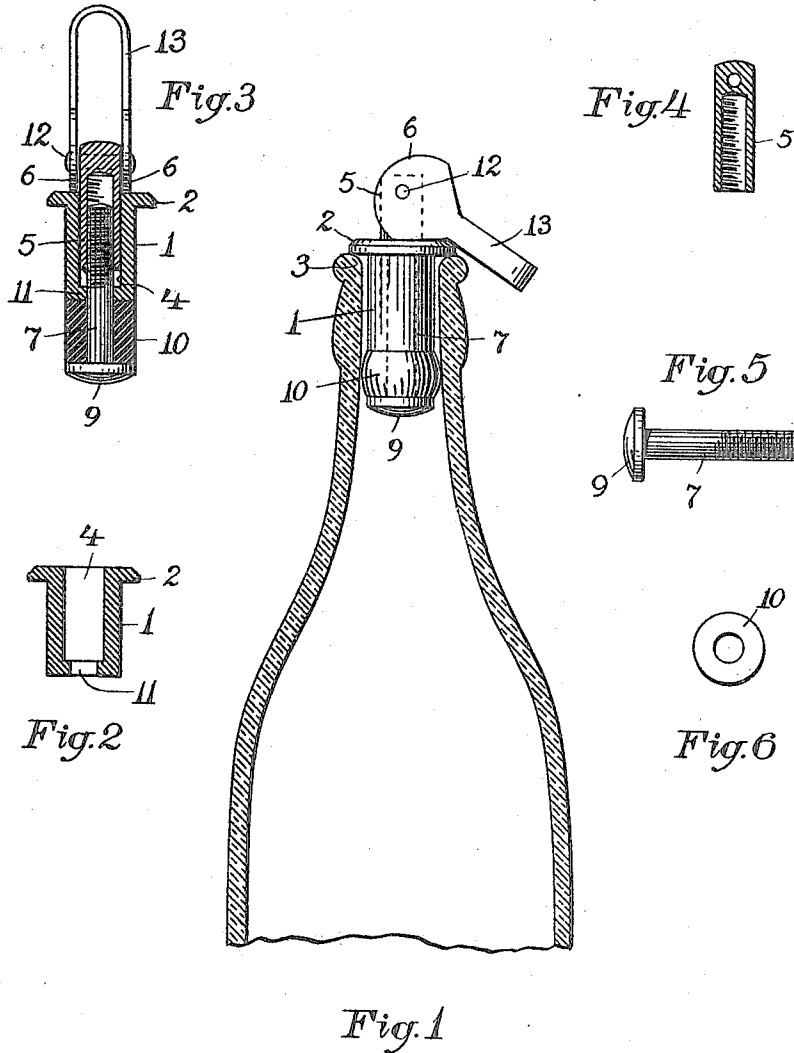


L. G. ABBOTT.  
BOTTLE STOPPER.  
APPLICATION FILED OCT. 11, 1916.

1,212,871.

Patented Jan. 16, 1917.



Inventor,  
Leonard G. Abbott;  
By  
A. B. Ephraim,  
Attorney

# UNITED STATES PATENT OFFICE.

LEONARD G. ABBOTT, OF BOSTON, MASSACHUSETTS.

## BOTTLE-STOPPER.

1,212,871.

Specification of Letters Patent.

Patented Jan. 16, 1917.

Application filed October 11, 1916. Serial No. 124,943.

REISSUED

*To all whom it may concern:*

Be it known that I, LEONARD G. ABBOTT, a citizen of the United States, and a resident of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a full, clear, and exact specification.

This invention relates to means for tightly closing a bottle after it has been opened and its contents partially poured out; and the invention has for its object the construction of such a temporary stopper as shall be capable of quick adjustment for fitting it to bottles of a wide range of sizes.

Referring to the drawings forming part of this specification, Figure 1 is a sectional elevation of the upper part of a bottle, showing my stopper applied thereto. Fig. 2 is a central longitudinal section of the part of the device termed the thimble. Fig. 3 is a similar section of the entire device. Fig. 4 is a similar section of the internally threaded sleeve. Fig. 5 is a side view of the adjusting screw. Fig. 6 is an end view of the expansible plug.

The thimble 1 is made of a diameter to enter the mouth of the smallest of the bottles for which a temporary stopper is desired, and has at its upper end a shoulder 2 for resting upon the edge or rim of the bottle mouth 3. Loosely slidable in the bore 4 of the thimble is an internally threaded sleeve 5 to whose upper and closed end is pivoted the cam 6. A screw 7 having a head 9 whose diameter is substantially that of the thimble 1, is adapted to enter the sleeve 5 and to carry a rubber plug 10 between its head 9 and the end of the thimble 1. The lower end of the bore 4 of the thimble is contracted to nearly the diameter of the screw 7, as at 11, for two purposes; one is to enable the screw to be held in the thimble more steadily, especially when the sleeve 5 is unscrewed to its farthest limit; and the other to prevent the rubber composing the yielding plug 10 from being forced in between the screw and the walls of the bore 4, as would be the case did said bore extend entirely through the thimble, when the plug is longitudinally compressed in order to expand it into contact with the surface of the bottle neck.

As shown in Fig. 3, the cam 6 at each side of the sleeve 5 is pivoted thereto, preferably by a rivet 12, and the two parts compos-

ing the cam are preferably integral with each other through the operating handle 13; said parts being stamped from sheet metal.

In using this temporary stopper, the same is introduced into the bottle mouth with the cam handle vertical and the rubber plug normal. If a lateral swing of the cam handle fails to sufficiently expand the plug to tightly close the bottle, the cam is given one or two rotations to draw the screw farther up into the sleeve. If this adjustment is enough, the swing of the cam handle will expand the rubber plug into firm engagement with the surrounding surface, and effectually prevent the stopper from being forced out by any accumulation of gas within the bottle.

I prefer to have the sleeve 5 solid at its upper end in order to give a more secure hold to the rivet 12, and also to present a more finished appearance thereto.

What I claim is:

1. A bottle stopper including a thimble having an annular flange at its outer end and an inwardly directed flange at its inner end whereby the base of the thimble is reduced, a hollow sleeve closed at its outer end and internally threaded slidably received in said thimble, a U-shaped cam member straddling the outer end of the sleeve and pivotally connected thereto, the cam spacing the inner end of the sleeve from the inner thimble flange at all times, a screw passed through the inner end of the thimble and threaded into the sleeve, a head formed on the inner end of the screw, and a rubber plug mounted on the screw and engaged at its ends by the screw head and thimble, the cam adapted to forcibly engage the thimble to expand the rubber plug laterally of the thimble and screw head.

2. A bottle stopper comprising a shouldered thimble, an internally threaded sleeve slidable in the upper part of the thimble, a cam pivoted to the upper end of the sleeve, a screw entering the lower end of the thimble and engaging the sleeve, a head formed integral with the screw and a rubber plug surrounding the screw between its head and the thimble, the lower end of the bore in the thimble being contracted to nearly the diameter of the screw whereby undue lateral movements of the screw are obviated.

3. A bottle stopper comprising a shouldered thimble, a sleeve slidable within the thimble having an internally threaded hole

reaching nearly to its upper end, a cam consisting of two cam-members at opposite sides of the upper end of the sleeve, a rivet passing through the two cam-members and the solid end of the sleeve, a headed screw entering the lower end of the thimble and engaging the sleeve, and a rubber plug on the screw between its head and thimble the

sleeve and screw being relatively adjustable to vary the expansive force of the rubber plug. 10

In testimony that I claim the foregoing invention, I have hereunto set my hand this 7th day of October, 1916.

LEONARD G. ABBOTT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."