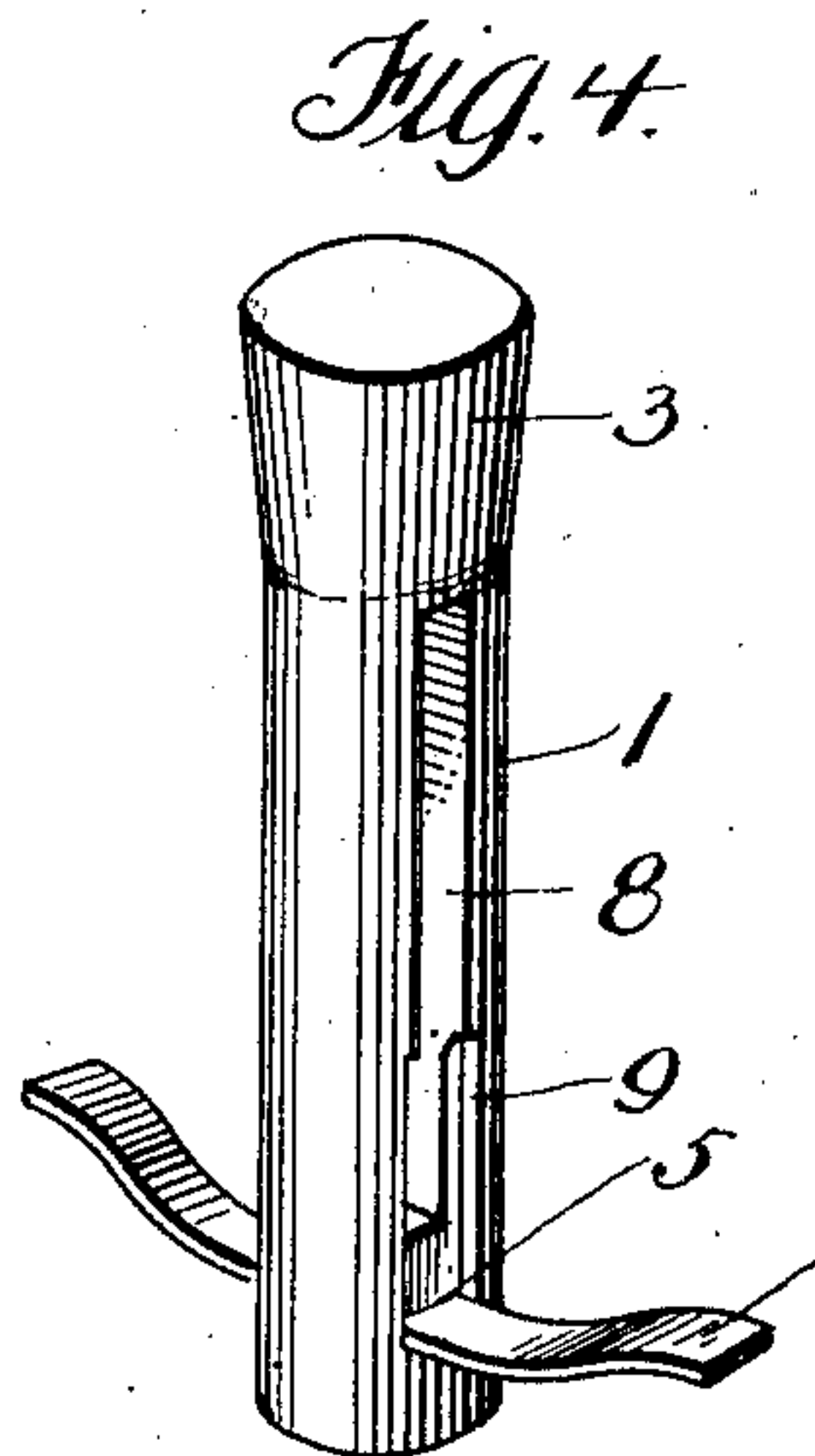
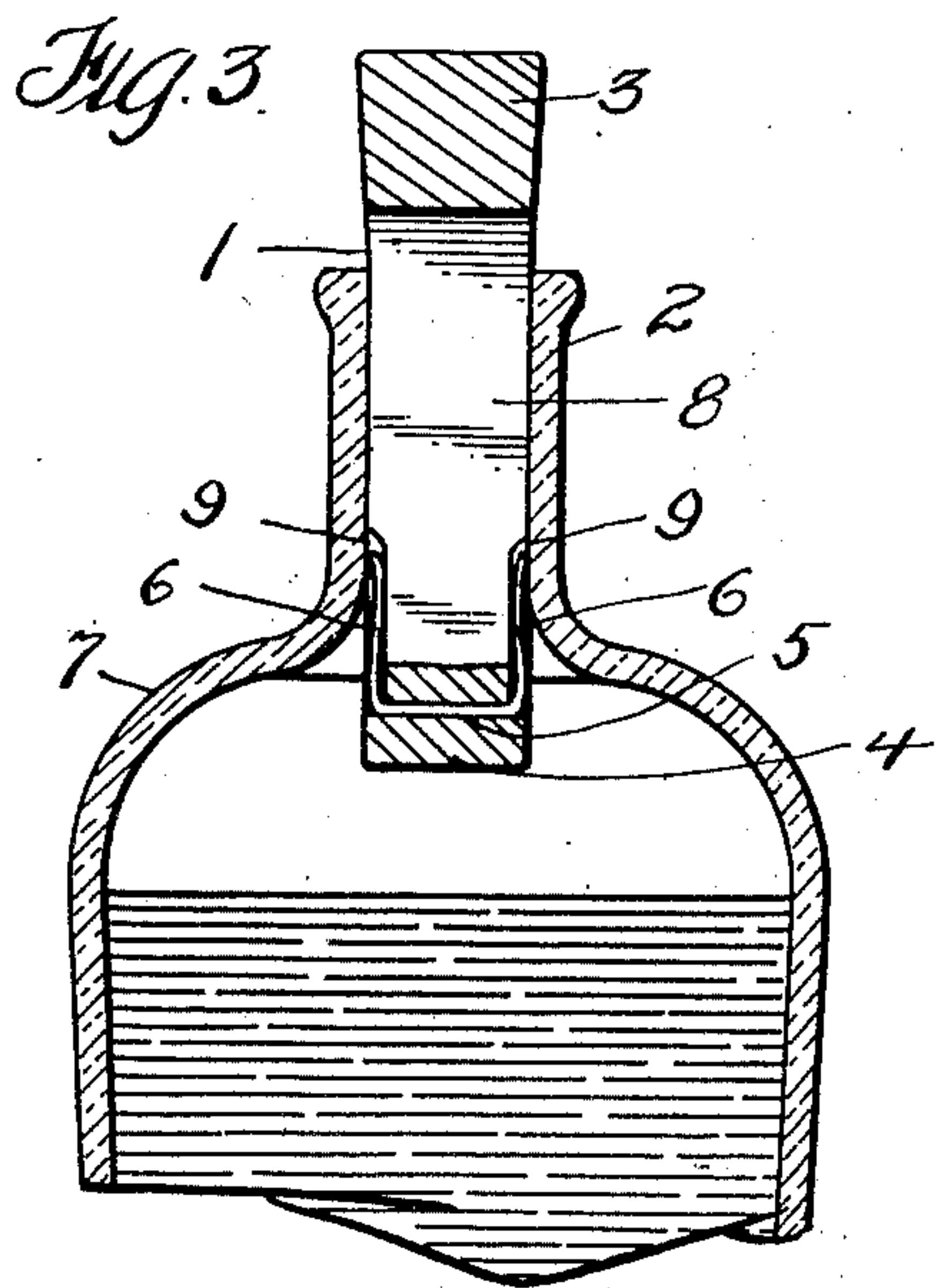
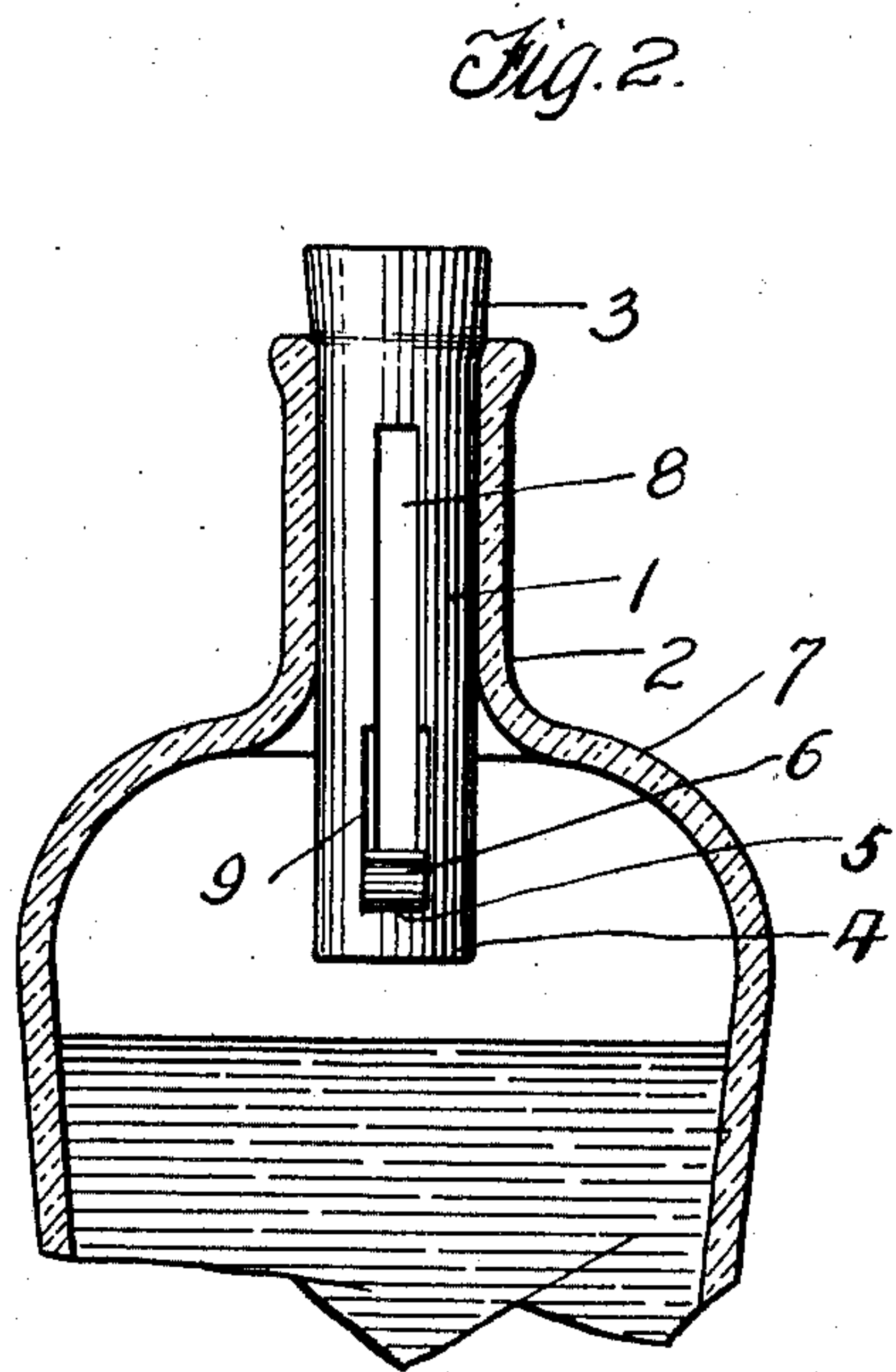
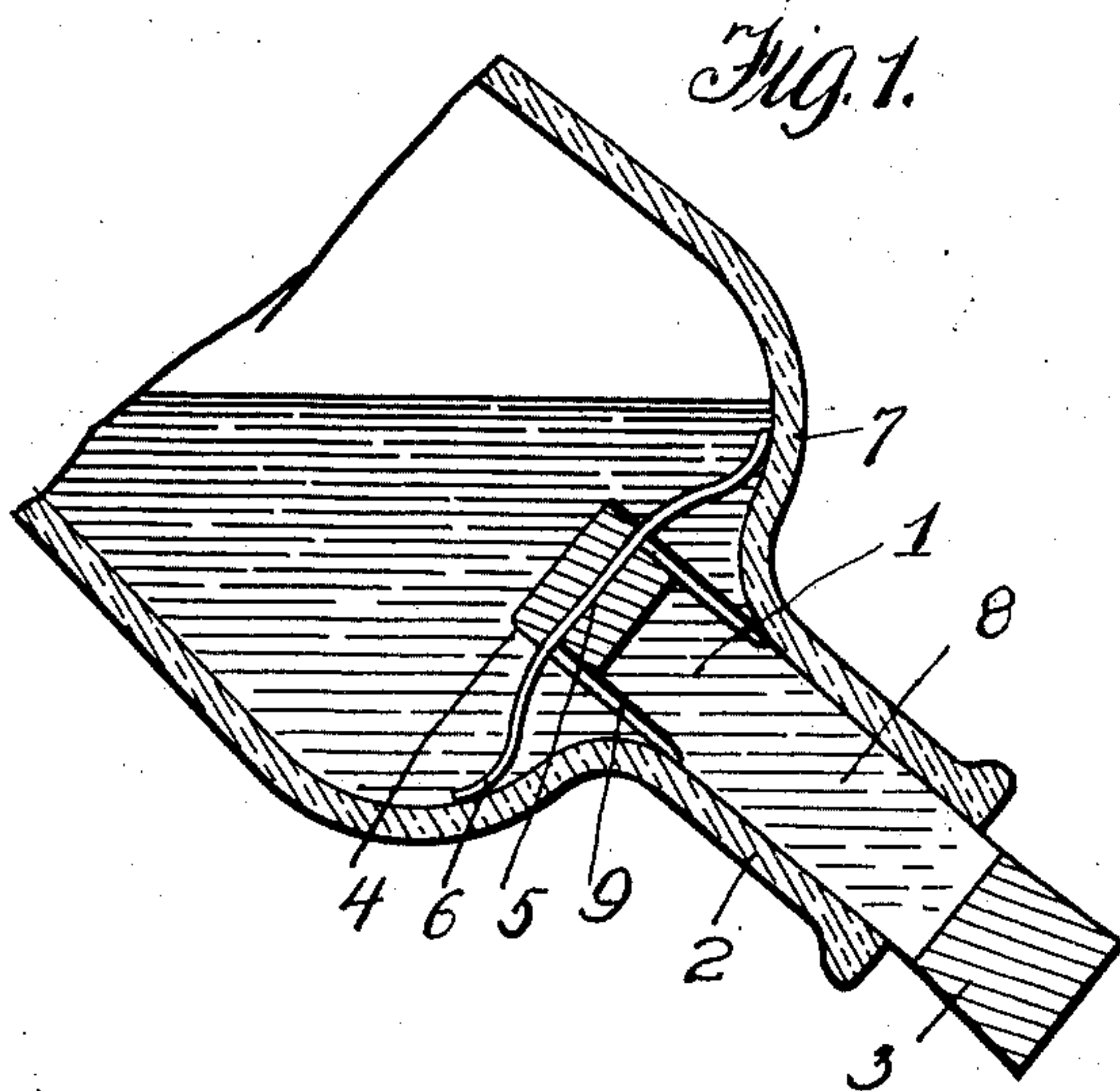


I. L. LEASURE.  
BOTTLE STOPPER.  
APPLICATION FILED OCT. 24, 1910.

998,354.

Patented July 18, 1911.



Inventor

Witnesses

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# UNITED STATES PATENT OFFICE.

IRA L. LEASURE, OF PARNASSUS, PENNSYLVANIA.

## BOTTLE-STOPPER.

998,354.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed October 24, 1910. Serial No. 588,895.

*To all whom it may concern:*

Be it known that I, IRA L. LEASURE, a citizen of the United States of America, residing at Parnassus, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to bottle stoppers, and the invention has for its primary object the provision of positive and reliable means for closing a bottle, whereby said bottle cannot be re-corked without detection.

15 A further object of the invention is to provide a bottle with a cork or closure that can be easily and quickly manipulated to uncork the bottle or release the contents thereof; but cannot be replaced after once  
20 being placed in the bottle or receptacle.

I attain the above objects by a bottle closure that will be hereinafter described in detail and then claimed.

Referring now to the drawing forming a part of this specification wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof can be varied or changed without departing from the spirit  
30 of the invention.

In the drawings: Figure 1 is a longitudinal sectional view of a portion of a bottle constructed in accordance with my invention illustrating the bottle closure in an  
35 open position, Fig. 2 is a similar view showing the bottle closed, Fig. 3 is a similar view showing the manner of placing the stopper or closure therein, and Fig. 4 is a perspective view of a detached stopper or closure.

40 The bottle stopper or closure is made of a vitreous material, as glass, corresponding to the body of the bottle or receptacle in connection with which it is used. The stopper or closure comprises a cylindrical shaft 1, corresponding in diameter to the inner  
45 diameter of the bottle neck 2. The outer end of the shank 1 is flared or enlarged to provide a frusto-conical shaped end 3, serving functionally as a cork or stopper for closing  
50 the bottle neck 2. The opposite end of the shank 1 is provided with a transverse opening 4, for a strip of metal 5 having resilient curved ends 6, adapted to engage the inner sides of the breast 7 of the bottle.

55 The shank 1 intermediate the ends thereof is provided with a longitudinal slot 8, corre-

sponding in width to the diameter of the shank and of length approximately one-half of said shank. This slot constitutes an outlet for the contents of the bottle or receptacle, 60 and the discharge of the contents depends entirely upon the position of the closure or stopper as will hereinafter appear.

The shank 1 in proximity to its inner end and at each side thereof is cut away, as at 65 9, to provide a groove upon opposite sides of the shank 1, these grooves providing seats for the resilient ends 6 of the strip of metal 5, when the stopper or closure is placed in the bottle or receptacle. 70

As shown in Fig. 3 of the drawings, the stopper or closure is partially mounted in the bottle, and the resilient ends are within the seats of the shank 1. Immediately upon the stopper or closure being farther forced 75 into the bottle to seat the outer end thereof in the neck 2, the resilient ends 6 are released, and lock the stopper or closure within the bottle, whereby it cannot be easily removed without breaking the same. When 80 the stopper or closure is fully seated, as shown in Fig. 2 of the drawings, the strip of metal 5 is held out of engagement with the bottle, and it is only when the stopper or closure is moved to shift the outer end of 85 the slot 8 beyond the mouth of the bottle, that the ends of the strip 5 engage the breast of the bottle.

It is apparent that when the stopper or closure is in an open position that the contents 90 of the bottle can be completely drained, and through the medium of the slot 8, the flow of the fluid from the bottle can be easily controlled. This is an important characteristic of my invention, particularly when 95 used in connection with medicine bottles where it is often desired to obtain the contents drop by drop.

The strip of metal 5 can be made non-corrosive by applying a suitable composition, or it can be made of non-corrosive material, whereby the contents of the bottle will not be affected or ruined by contact with metal. 100

What I claim, is: 105

1. A bottle stopper comprising an elongated cylindrical shank having its outer end flared and its periphery in proximity to its inner end provided with a longitudinally-extending groove constituting a seat, the 110 flared end of said shank being of a length as to engage in and close the mouth of the bot-



tle and projecting above the top edge of the bottle neck, said shank furthermore provided with a transversely-extending opening at the lower end of said grooves, a resilient member extending through said opening and projecting from each side of the shank, the projecting ends of said member adapted to nest in said seats when positioning the shank in the bottle neck and further adapted to project outwardly to engage the breast of the bottle to prevent the shank from being removed when the inner terminus of the shank is positioned inwardly of the breast of the bottle, and said shank furthermore provided with an elongated longitudinally-extending rectangular slot disposed centrally with respect to the shank and extending from a point removed from the inner end of said grooves to a point in proximity to the flared outer end of the shank, said slot providing means for the discharge of the contents of the bottle when the shank is pulled outwardly and arrested by the projecting portions of said members engaging with the breast of the bottle.

2. A bottle stopper comprising an elon-

gated cylindrical shank provided with a longitudinally-extending opening disposed centrally thereof and of a length as to extend from a point in proximity to the inner end of the shank to a point in proximity to the outer end of the shank, said shank further provided at its inner end with a pair of longitudinally-extending grooves, said grooves being diametrically opposite each other, the inner ends of the grooves projecting inwardly of the inner wall of said opening, and a resilient member extending through said shank at the inner end of said grooves and of a length as to project from each of said grooves to provide retaining arms to prevent the withdrawal of the stopper, said grooves constituting seats for the reception of the retaining arms when the shank is positioned in the bottle neck.

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

IRA L. LEASURE.

Witnesses:

GILBERT HEYER,  
CONRAD J. HEYER.

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