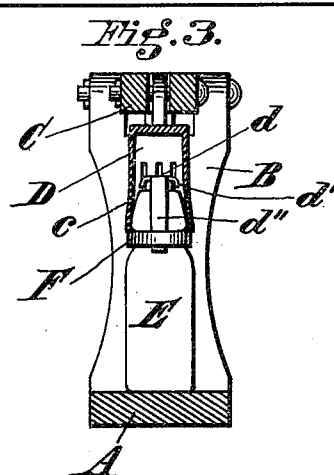
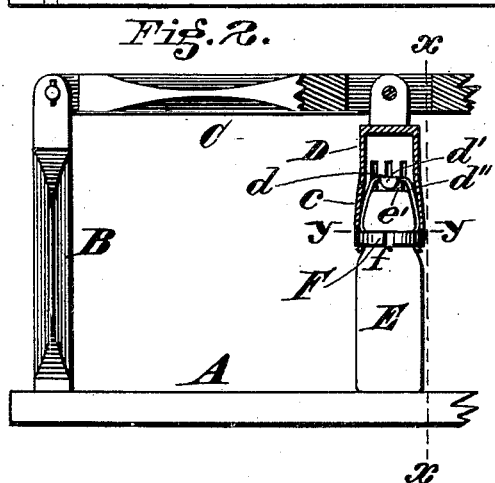
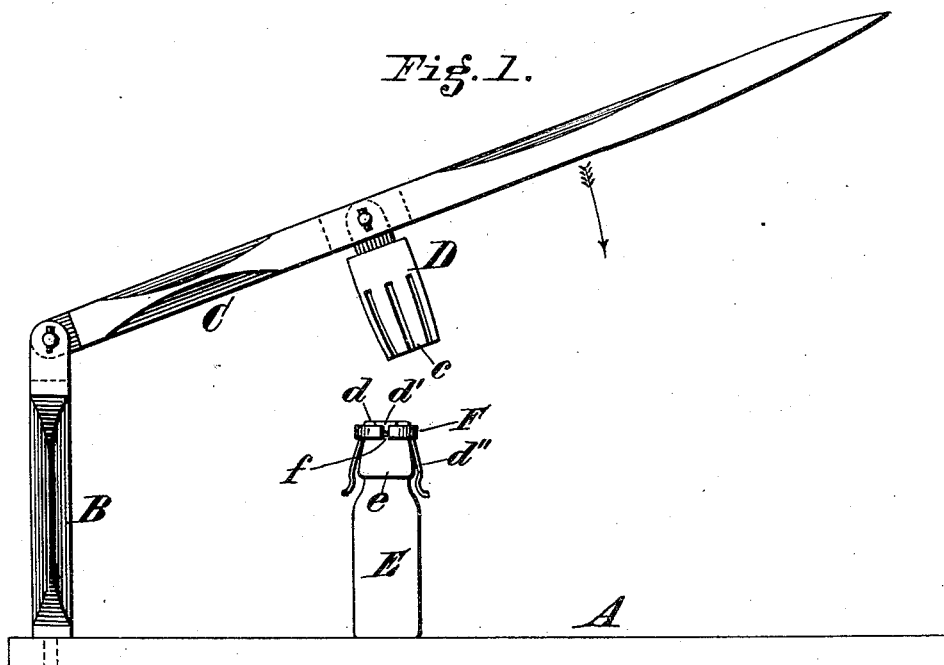


(No Model.)

F. W. FOLGER.  
BOTTLE STOPPER FASTENER.

No. 420,493.

Patented Feb. 4, 1890.

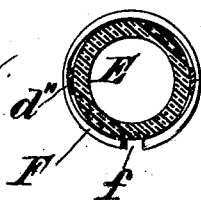


*Attest*

*C. B. Donaldson.*

*L. H. Jones.*

*Fig. 4.*



*Inventor*  
*Francis W. Folger,*  
*by John E. Jones,*  
*his attorney.*

# UNITED STATES PATENT OFFICE.

FRANCIS W. FOLGER, OF NICHOLASVILLE, KENTUCKY.

## BOTTLE-STOPPER FASTENER.

SPECIFICATION forming part of Letters Patent No. 420,493, dated February 4, 1890.

Application filed June 29, 1889. Serial No. 316,081. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS W. FOLGER, a citizen of the United States, residing at Nicholasville, in the county of Jessamine and State of Kentucky, have invented certain new and useful Improvements in Bottle-Stopper Fasteners, of which the following is a specification.

My invention relates to improvements in fasteners for bottle-stoppers, all of which will be fully described hereinafter, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a longitudinal elevation of my improved bottle-stopper fastener, showing it in position in a suitable machine for applying it, said machine having its operating-lever and plunger in position for a downward stroke upon the open resilient ring of the stopper-fastener, which ring forms an important feature of my invention, and is shown encompassing the top of the fastener-prongs and ready to be forced downward into locking engagement; Fig. 2, a broken longitudinal elevation, partly in section; showing my improved fastener and the said applying device, the lever of said applying device being down at the completion of its stroke, with the plunger in engagement with the top of the bottle and stopper-fastener ring, which latter it has delivered into proper locking position; Fig. 3, a transverse sectional elevation of the said machine on line *x x* of Fig. 2, showing that side of the fastener which is at right angles to the one shown in Fig. 2; and Fig. 4, a sectional plan of the bottle and stopper-fastener ring on line *y y* of Fig. 2.

In connection with the description of my improved bottle-stopper fastener, I shall describe the machine or device I prefer to use in applying it, as it is fully shown in connection therewith in the accompanying drawings, just described. Said machine forms part of an application for Letters Patent of the United States, filed by me October 7, 1889, Serial No. 326,261, and allowed January 2, 1890.

A represents the base or bed plate of the machine, which is of any suitable construction; B, an upright or standard at one end

thereof; and C, a lever, hinged at one end to the top of the said standard.

D represents a pendent plunger or cup, pivotally connected at its upper end to the lever C, near the rear end thereof, and having its lower end or mouth slitted upwardly to form the jaws *c*, which are suitably tempered for the purpose hereinafter mentioned.

E represents an ordinary bottle having the customary shouldered neck *e* and cork or stopper *e'*.

The cork-retaining device to which my improved ring-fastener is particularly adapted to secure it in place on the bottle is composed of a central disk or top plate *d*, fitting upon the cork and having turned-down sides or lugs *d' d'* at opposite edges for preventing lateral movement, and downwardly-projecting prongs or arms *d''*, lying at right angles to said lugs, and whose inwardly-bent lower ends engage the shouldered neck of the bottle and receive the open fastening-ring F, for effectually locking the entire device in place on the bottle. Ring F is made of spring metal, with an opening or space *f* between its opposite ends, whereby it may be expanded or spread open to pass over the large portion of the cork-retaining device, as clearly shown in Figs. 1 and 2, and readily close again upon the lower ends of prongs *d''*.

In the operation of my machine the lever is raised, as shown in Fig. 1, with the bottle in proper position on base A, so that when the plunger descends its open spring-jaws *c* shall encompass the top of said bottle and engage the open resilient fastening-ring F, which has been just previously set upon the upper ends of the prongs *d''*. The lower ends or tips of the spring-jaws *c* of the plunger, on the further lowering of the lever, press upon the said ring and cause it to descend until it reaches the inwardly-bent lower ends of prongs *d''* and the shoulder *e*, where its resiliency causes it to contract and automatically close upon said prongs and shoulder, thereby firmly securing said cork-retainer in place.

In practice it is not necessary to raise the lever as high as shown in Fig. 1, as the opera-

tion can be fully performed by merely elevat-  
ing it, so that the lower end of the plunger  
clears the top of the bottle sufficiently to place  
the ring thereon in the position shown in said  
5 figure.

I claim—

The combination, with a shouldered-neck  
bottle provided with a stopper-fastener hav-  
ing pendent attaching-prongs, of the open

resilient ring F f, substantially as and for the 10  
purpose specified.

In testimony of which invention I have  
hereunto set my hand.

FRANCIS W. FOLGER.

Witnesses:

B. A. CRUTCHER,  
L. SAUNDERS.