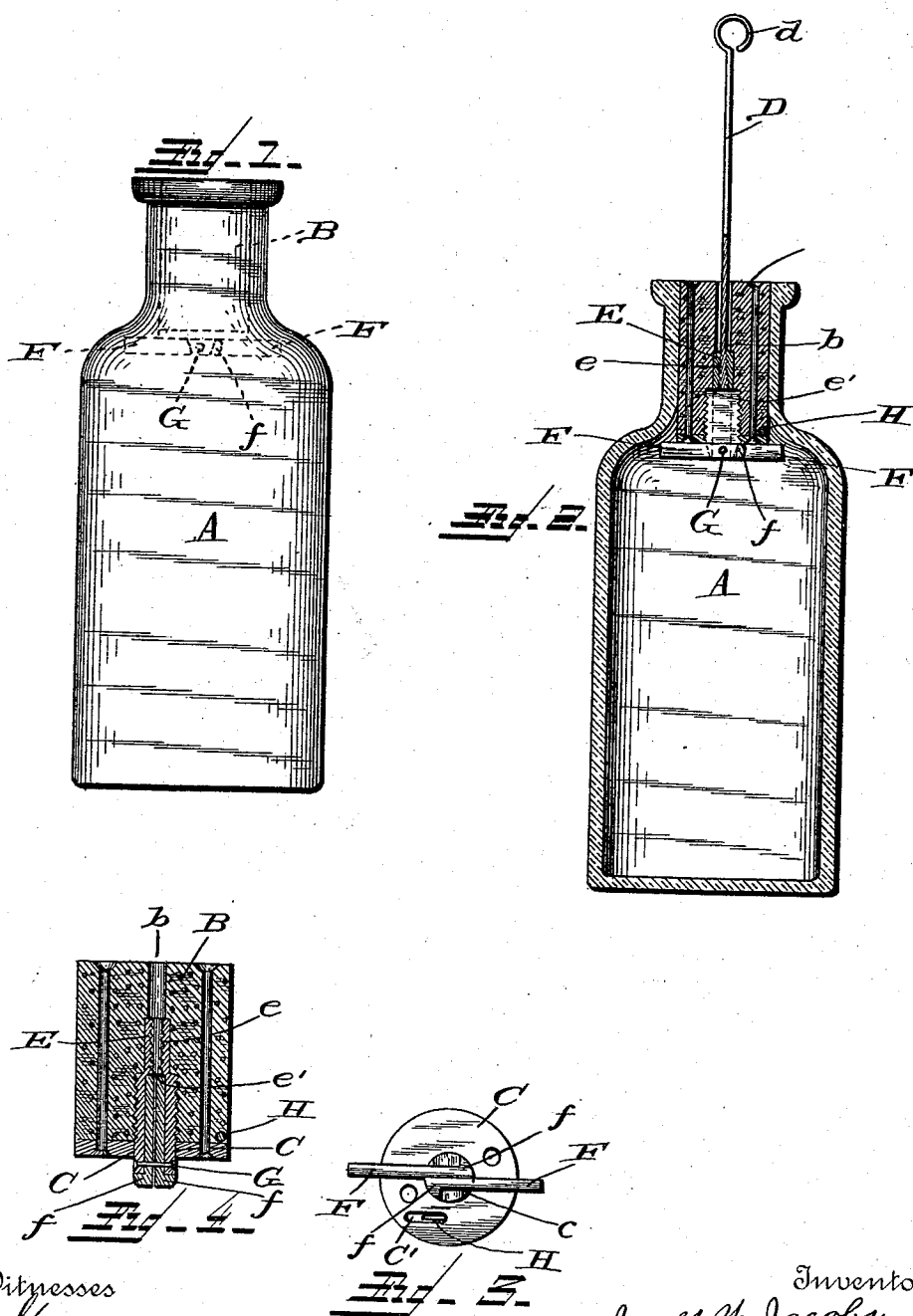


(No Model.)

J. W. JACOBS.
LOCK BOTTLE STOPPER.

No. 572,758.

Patented Dec. 8, 1896.



Witnesses
Jos. Gregory
A. C. Hall

Inventor
James W. Jacobs
By *John Stedderburn*
his Attorney

UNITED STATES PATENT OFFICE.

JAMES W. JACOBS, OF JEFFERSONVILLE, INDIANA.

LOCK BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 572,758, dated December 8, 1896.

Application filed March 17, 1896. Serial No. 583,554. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. JACOBS, a citizen of the United States, residing at Jeffersonville, in the county of Clark and State of Indiana, have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby 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.

This invention relates to certain new and useful improvements in bottle-stoppers; and it has for its objects, among others, to provide a simple and cheap construction of stopper by which the bottle when once used cannot be refilled and used without detection, thus preventing its being refilled with a spurious or inferior article. I provide a stopper having a plate upon its inner face and a rod or wire passed through the stopper and having pivoted arms or fins adapted to be spread so as to lie substantially at right angles to the wire or rod, and the shank to which the fins or arms are connected is exteriorly threaded to engage screw-threads within the cork. A spring pawl or latch is provided on the said plate, which prevents retrograde movement of the screw-threaded portion. When the bottle has been filled and the cork in place and the fins spread, the cork cannot be withdrawn, but must be forced into the bottle, where it serves to condemn the bottle. The bottle may be broken, the cork removed and cleansed, and then used again.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an elevation of a bottle provided with my improved stopper. Fig. 2 is a longitudinal section through the same. Fig. 3 is an end view of the stopper device removed. Fig. 4 is a vertical section through the stopper and its accessories.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the draw-

ings by letter, A designates the bottle, of any preferred form of construction.

B is a stopper, preferably of cork, fitted to the neck thereof and having secured to its under face the plate C, which has a central opening *c* coincident with the central opening *b* through the stopper and which is interiorly threaded, as shown.

D is a rod or wire constituting the key by which the wings soon to be described are locked. This rod or wire passes loosely through the central hole in the stopper and through the hole in the plate on the inner end thereof, and its outer end is preferably formed into an eye *d* or otherwise constructed or provided with a handle or other provision whereby it is prevented from passing entirely through the stopper. Its other end is screw-threaded to engage the threaded socket *e* in the shank E, which is exteriorly threaded, as shown, to engage the internal threads of the opening in the stopper, and this shank at its lower end is provided with a slot *e'*, in which are designed to close the wings F, which are pivoted on the pin or bolt G, held in the outer end of the shank, the wings near their pivot being formed with the lugs or shoulders *f*, which serve as stops to limit their outward movement.

H is a spring-wire held at one end between the plate C and the end of the cork or stopper and its other end working through a slot C' in the said plate and bent outward on an incline, as shown.

In practice to insert the cork the shank is engaged in the screw-threaded hole in the cork with the wings closed within the slot of the shank. The cork is then pressed in the required depth and then the rod screwed in until the wings are free to drop out of the slot and spread themselves at right angles to the rod or key. Then by turning the key so that the shank will be drawn into the stopper the wings will be drawn against the under or inner shoulders of the neck, as shown in Fig. 1, and as the shank is screwed in the arms or wings ride over the spring-wire pawl, which readily allows them to pass, but prevents their unscrewing or retrograde movement. The stopper is thus held against being pulled out, and when it is desired to remove the contents

of the bottle the cork is forced into the bottle. The only way the cork can be removed is by breaking the bottle. A wax or other seal may be placed over the outer end of the stopper, if desired.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is—

1. The combination with a stopper and a plate on the inner end thereof, of a rod, a threaded shank secured thereto and pivoted wings on the inner end of said shank, as set forth.

2. The combination with a stopper having a longitudinal opening screw-threaded, of a plate on the end of the stopper, a rod, a shank connected therewith, and having exterior threads, and pivoted wings on said shank, as set forth.

3. The combination with a stopper with

plate and threaded opening, of a rod carrying a screw-threaded portion provided with a pivoted wing, and a spring-pawl on said plate, as set forth.

4. The combination with the stopper having a plate on one end and a central screw-threaded opening, of a rod, a shank detachably connected therewith and having exterior screw-threads, and a slot, wings pivoted in said slot, and a spring-wire pawl on the end of the stopper and working through an opening in the plate, substantially as shown and described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAMES W. JACOBS.

Witnesses:

J. H. MCCOY,
FROMAN M. COOTS.