(No Model.)

F. SCHENKER.

BOTTLE STOPPER.

No. 579,013. Patented Mar. 16, 1897.

Fig. 1.

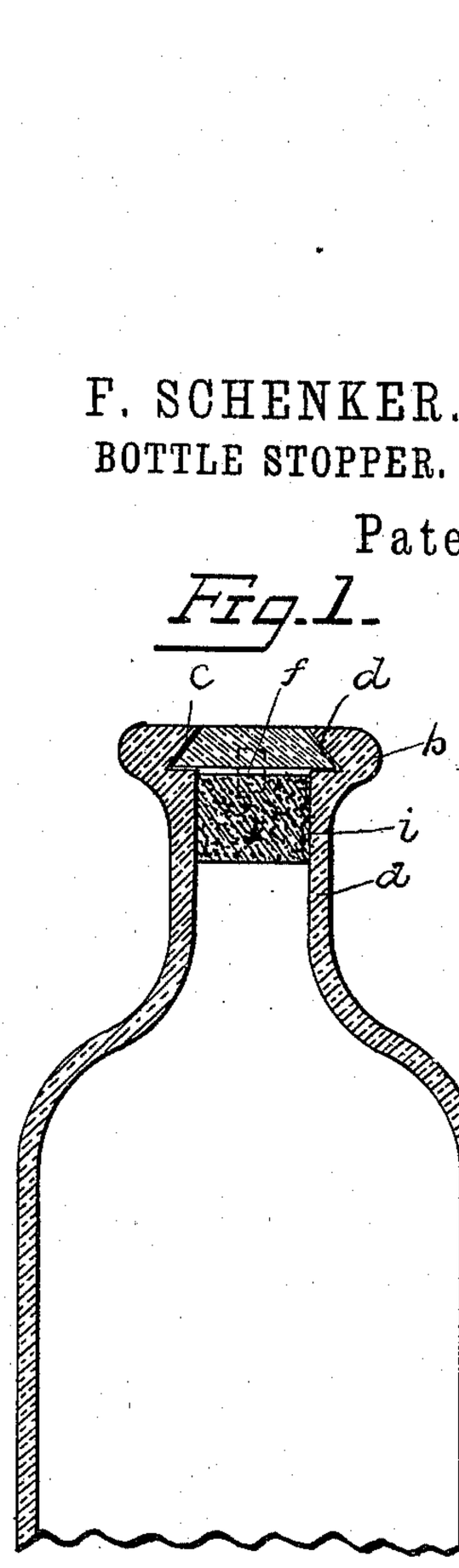


Fig. 2.

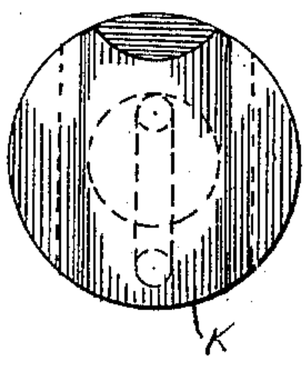


Fig. 3.

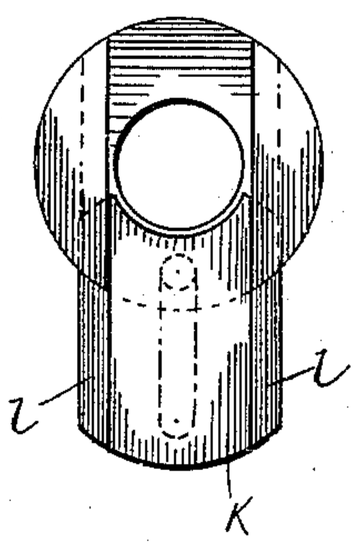


Fig. 4.

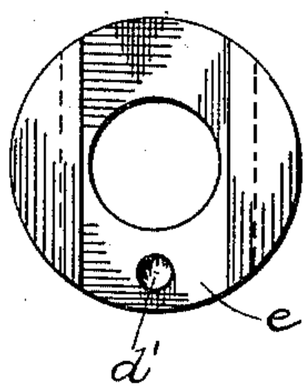


Fig. 5.

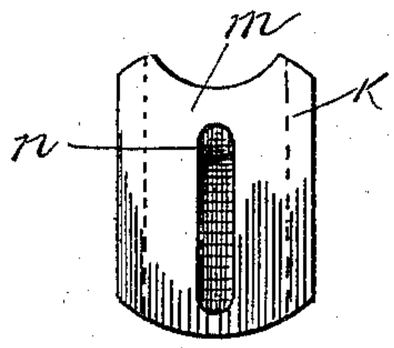


Fig. 6.

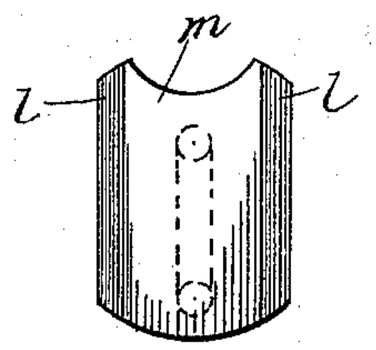


Fig. 7.

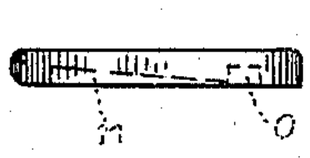
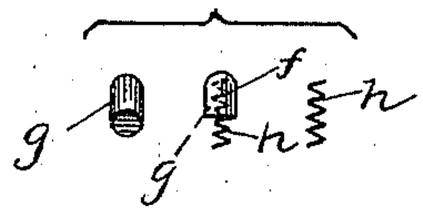


Fig. 8.



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UNITED STATES PATENT OFFICE.

FRANCIS SCHENKER, OF VINCENNES, INDIANA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 579,013, dated March 16, 1897.

Application filed August 27, 1896. Serial No. 604,108. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS SCHENKER, a citizen of the United States, residing at Vincennes, in the county of Knox, 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.

My invention relates to bottle-stoppers in general, and more particularly to that class in which when the stopper is removed such manipulation of the bottle is necessary as will show conclusively that the bottle has been opened, and thus the deception of refilling the bottle with a bogus substance is prevented.

In the drawings forming a portion of this specification, and in which like letters of reference indicate similar parts in the several views, Figure 1 is a longitudinal section of the upper portion of a bottle constructed in accordance with my invention. Fig. 2 is a top view of the neck of a bottle when closed. Fig. 3 is a top view of the neck of a bottle with the slide drawn. Fig. 4 is a top view of the neck of the bottle with the slide removed. Fig. 5 is a view showing the under side of the slide. Fig. 6 is a top view of the slide. Fig. 7 is a side view of the slide, and Fig. 8 is a view showing the spring-pin and its parts.

Referring now to the drawings, in constructing a device in accordance with my invention I employ a bottle having a neck *a*, provided with an annular flange *b* at its top somewhat broader than is customary, though this is not absolutely necessary. Transversely of the neck and within the flange *b* is formed a slot, the opposite walls *c* and *d* of which converge upwardly. In the floor *e* of this slot (see Fig. 4) is formed a depression *d'*, adapted to receive a spring-pin *f*, Figs. 1 and 8, comprising a shell *g*, provided with a helical spring *h*, extending therefrom, the outer end of said spring resting upon the bottom of the depression and adapted to hold the pin normally protruding therefrom, said depression being of sufficient depth to receive the pin entirely.

When sealing a bottle after the contents have been placed therein, the usual cork or other stopper *i* is forced into the neck, after which a slide *k*, whose sides *l* are slanted to correspond with the walls *c* and *d* of the slot in the slot in the neck, is slid into the slot. The front edge of the slide *k* is slanted somewhat in order that upon engagement with the pin *f* it may ride over and depress the latter, said pin being somewhat rounded on top to facilitate this action. In the under side of this slide *k* and in the path of the pin *g* is formed a groove *n*, the front edge of which is formed rather deep, said slot growing gradually shallower to a point near the opposite end of the slide, where a depression *o* is formed to receive permanently the pin *g*. In entering the slide in the slot the slanted end should be first inserted and at that end of the slot farthest from the depression *d'*, so that when the slide is pushed home, as shown in Fig. 2, the pin *g* will rest in the front end of the slot *n*, whereby said slide cannot be withdrawn.

It being now desired to remove the stopper *i* and the contents of the bottle, the slide *k* is pushed on through the slot until the pin *g* rises in the depression *o*, when said slide can be moved no farther, nor can it be returned to its former position. When the slide has been thus manipulated, the stopper *i* may be readily withdrawn, the rear edge *m* of the slide being cut away for this purpose.

Should the bottle be refilled, the slide could not be moved to cover the stopper placed in the neck, and thus will be shown conclusively that the bottle has been opened.

Arranged on the top of the bottle, partly on the flange *b* and partly on the slide *k*, is the advertisement of the firm to whom the original contents of the bottle belong, and when the slide is withdrawn, as above indicated, the continuity of the lettering is destroyed.

It will be readily understood that I may dispense with the locking device shown and that the slide may be employed in substitution of the ordinary wiring which is applied to a bottle containing effervescent liquid to prevent the cork blowing out. It will readily be seen that when the slide is pushed over the cork displacement of the latter is effectively prevented. Also, if desired, I may change the shape of the slot in the slide to a double incline terminating in a recess at each end, so

that the spring-latch will hold the slide against accidental displacement, but at the same time will not lock it permanently.

Having thus described my invention, what I claim is—

1. The combination with a bottle having an opening of a slot adjacent said opening, a slide adapted to move in the slot to cover and uncover the opening, an inclined slot in the slide terminating in a depression and a pin adapted to play in the slot in the slide and enter the depression of the latter to retain the slide in a fixed position.

2. The combination with a bottle having an opening of a slot adjacent said opening, a slide adapted to move in said slot to cover the opening and means for locking the slide in the unopened position.

3. The combination with a bottle having an opening, of a slot adjacent the opening, a slide adapted to move in the slot to cover and to uncover the opening and a spring-catch adapted to hold the slide in an uncovered position.

4. The combination with a bottle having an opening surrounded by a flange, of a transverse slot formed in the flange, a spring-pin arranged in said slot, a slide adapted to move in the slot in engagement with the pin and a depression in the slide adapted to receive the pin to lock the slide.

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

FRANCIS SCHENKER.

Witnesses:
EUGENE F. AUBRY,
LOUIS A. MEYER.