G. F. OUTTEN
Bottle-Stopper Fastener.

No. 200,666. Patented Feb. 26, 1878.

Fig. 1.

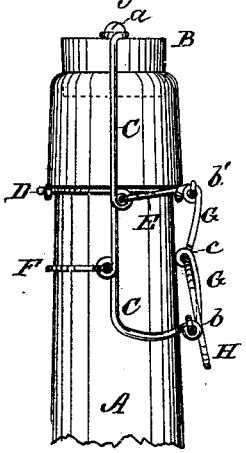


Fig. 2.

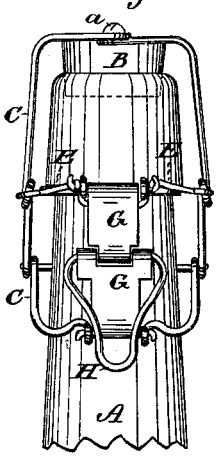
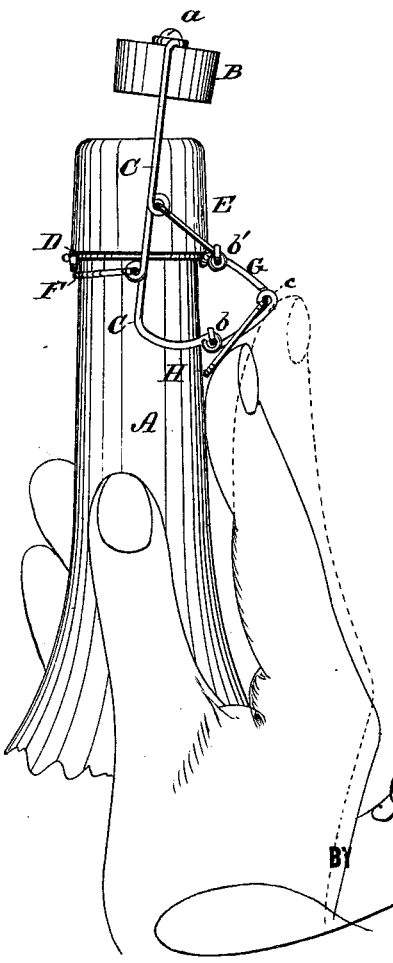


Fig. 3.



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GEORGE F. OUTTEN, OF NORFOLK, VIRGINIA.

IMPROVEMENT IN BOTTLE-STOPPER FASTENERS.

Specification forming part of Letters Patent No. **200,666**, dated February 26, 1878; application filed February 1, 1878.

To all whom it may concern:

Be it known that I, GEO. FRANKLIN OUTTEN, of the city and county of Norfolk, and State of Virginia, have invented a new and Improved Bottle-Stopper Fastener; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a side, and Fig. 2 a front, view of the device with the stopper locked in position. Fig. 3 is a side view, showing the application of the finger for removing the stopper.

My invention relates to an improved bottle-stopper fastening designed for bottles that are to contain aerated or effervescing drinks, such as ale, beer, porter, soda-water, &c., but applicable also to general use. In most fastenings in use for this purpose the stopper is so rigidly locked in the mouth of the bottle that it takes both hands and a considerable application of force to disengage it, and when disengaged the stopper is likely to fall into the path of the outpouring fluid and cause the same to spatter over the glass, while if the contents be under heavy pressure, the effervescence causes the bottle to run over before the glass can be placed to catch it.

The object of my invention is to provide a bottle-stopper fastening which may be conveniently operated by the one hand holding the bottle, either to disengage the stopper or lock the same in position again when the desired quantity has been poured out, thus permitting the glass to be held in one hand ready to catch the contents, and permitting also the bottle to be quickly closed when only a portion of the contents is needed, and it is desired to prevent deterioration resulting from exposure to the air.

In accomplishing the desired result the stopper is stiffly fastened to a sliding bail, and the lower end of said bail is connected with a stationary collar about the neck of the bottle by a pair of toggle-arms, whose middle joint is thrown in to lock the stopper down, or out to allow the bail to be slid up to disengage the stopper, a lever-latch being employed to throw the toggle out, and guide-links being employed, in connection with the bail, to cause the latter to move to its proper position when the stopper is removed, all as hereinafter more fully described.

In the drawing, A represents a portion of a bottle to which my device is shown applied. B is the stopper, which may be made, in whole or part, of cork, rubber, or any other suitable material. Said stopper is rigidly fastened to the bail C by means of a screw, *a*, passing through an eye formed in the bail. Around the neck of the bottle, and below the flange, is arranged the fixed yoke or collar D, to which the bail is loosely connected by the links E. Below this point the bail is provided with a loosely-connected guide and stop loop, F, extending half-way around the bottle, and a little lower down is bent around upon the opposite side of the neck. At this lower extremity the bail is connected with the stationary collar D by means of the flat toggle-arms G, which toggle-arms are thrown outwardly by the lever loop or latch H.

In using my improved bottle-stopper fastening, the bottle with its fastening, being placed as in Figs. 1 and 2, is grasped with the forefinger resting on the lower end of the lever loop or latch H. Now, by pressing upon the said latch it is made to fulcrum upon the lower toggle-joint *b*, which throws the middle toggle-joint *c* out from between its terminal joints *b b'*, when, by a further movement of the forefinger, the bail is pushed up and the stopper removed, as shown in Fig. 3. In this movement of the bail it will be seen that the links E, moving radially about the center *b'*, cause the stopper to be thrown to one side and out of the range of the outpouring liquid, while the loop F serves to guide the bail and limit its movement by striking against the under side of the stationary collar or flange of the bottle. To replace the stopper in the mouth of the bottle, the forefinger is placed upon the central toggle-joint, as shown in dotted lines in Fig. 3, and the said joint pressed inwardly. Now, the collar to which the upper ends of the toggle-arms are connected being fixed and stationary, the lower extremity of the toggle-arms responds by moving downwardly, carrying with it the bail and forcing the stopper into the mouth of the bottle again, and as soon as the middle toggle-joint passes the ver-

tical line of the two terminal joints, it strikes the neck of the bottle, and thus locks the stopper securely in place, as seen in Figs. 1 and 2.

If the stopper should become worn, and fails to close tightly, the screw *a* may be loosened, and a small washer inserted between the stopper and the eye of the bail, and there held by the screw. This causes the stopper to be forced more tightly down into the bottle.

As will be seen, my fastening may be applied to any ordinary form of bottle, and if the bottle becomes broken the fixed collar D may be readily removed and the devices applied to another bottle.

Having thus described my invention, what I claim as new is—

1. A pair of toggle-arms having its upper end connected with a fixed collar, and its lower end connected to and combined with a sliding bail carrying the stopper, substantially as and for the purpose described.

2. A pair of toggle-arms having its upper end attached to a fixed collar, and its lower end attached to a sliding bail carrying the stopper, in combination with the said bail and the links E, connecting the bail to the said collar, as and for the purpose set forth.

3. The guide and stop loop F, combined with the sliding bail carrying the stopper, and the links E, connecting said bail with the stationary collar, substantially as and for the purpose set forth.

4. The lever loop or latch H, pivoted to the middle joint of the toggle-arms, and arranged to fulcrum on the lower joint, in combination with said toggle-arms and the bail carrying the stopper, as set forth.

The above specification of my invention signed by me this 31st day of January, 1878.

GEORGE FRANKLIN OUTTEN.

Witnesses:
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