D. G. HUBBARD.
BOTTLE-STOPPERS.

No. 193,610. Patented July 31, 1877.

Fig 1.

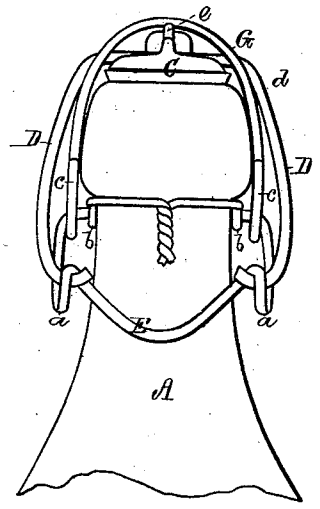


Fig 2.

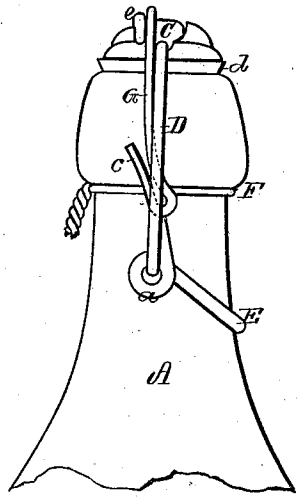


Fig 3.

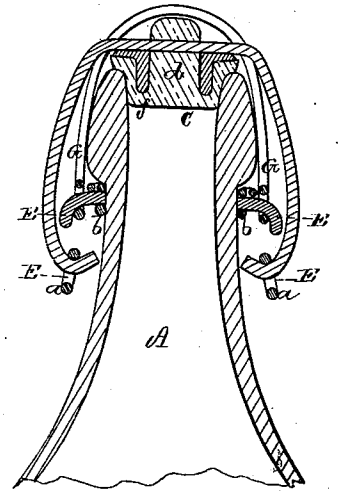
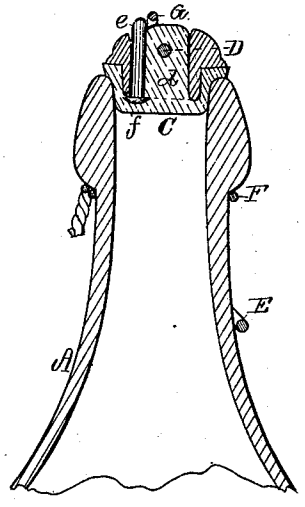


Fig 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

DAVID G. HUBBARD, OF EAST BRIDGEWATER, MASSACHUSETTS.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **193,610**, dated July 31, 1877; application filed June 23, 1877.

To all whom it may concern:

Be it known that I, DAVID G. HUBBARD, of East Bridgewater, of the county of Plymouth, of the State of Massachusetts, have made a new and useful invention having reference to Bottle-Stoppers; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figures 1 and 2 are side elevations, and Figs. 3 and 4 transverse sections, of a bottle-neck, and my invention applied to the stopper and its lock.

In carrying out my invention I have combined with the stopper-lock, composed of the stopper-carrier, toggle-yoke, and the pivotal supporter of the latter, a yoke-trigger, to enable a person to readily actuate the stopper-lock, so as to unlock it or the stopper. I have also combined with such stopper-lock and yoke-trigger a device for holding the yoke-trigger up or spanning the stopper.

In the drawings, A denotes a bottle-neck, and C the stopper thereof. This stopper is pivoted to a yoke, D, at the crown of its arch. Such yoke, near its two ends, is bent inward into and extended through eyes *a a* of a toggle-yoke, E, formed of wire, in manner as shown, and pivoted in eyes *b b* of a wire, F, extending around the bottle-neck, as represented. On turning the toggle-yoke down against the neck of the bottle, the stopper will be drawn and locked upon the mouth of the neck. The construction of stopper and the lock therefor, as represented in the drawings, and thus described, is well known and in common use. Though an excellent lock, it frequently happens that it is very difficult to unlock it.

In carrying out my invention, I pivot upon the pivots of the toggle-yoke E a trigger or yoke, G, made of wire, and formed as shown, such yoke having projections or bent hooks *c c*, to rest against the pivots of the stopper-carrying yoke D, and to engage such trigger G with the pivots of the toggle-yoke, all being as represented. By pressing the trigger toward the bottle-neck the lock may be readily unlocked, so as to set the stopper free, the elastic or india-rubber portion *d* of the stopper serving, by its expansive power, to facilitate the unlocking of the stopper.

A small headed pin or catch, *e*, arranged in or applied to the stopper, as shown, serves to hold the trigger up in a position spanning the stopper. When so across the stopper the trigger will hold it in place, should the lock become accidentally unlocked. In this case the catch is a pin extending upward through the metallic head *e'* of the stopper, and against the neck *f* of the india-rubber portion *d*. The head of the pin rests on the rubber, which serves as a spring to the pin, while it admits of it being readily depressed to free the trigger.

I claim—

1. The combination of the trigger, as described, with the bottle-stopper and its lock, substantially as set forth.

2. The combination of the trigger and catch, essentially as explained, with the bottle-stopper and its lock, substantially as described.

3. The catch or pin extended up through the metallic head of the stopper, and having its head resting on the rubber or elastic portion of the said stopper, all as represented.

DAVID G. HUBBARD.

Witnesses:

R. H. EDDY,

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