E. DREHER.

BOTTLE-STOPPER FASTENING.

No. 178,745. Patented June 13, 1876.

Fig. 1.

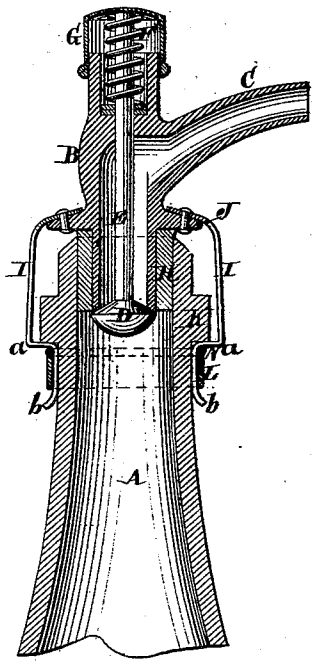


Fig. 2.

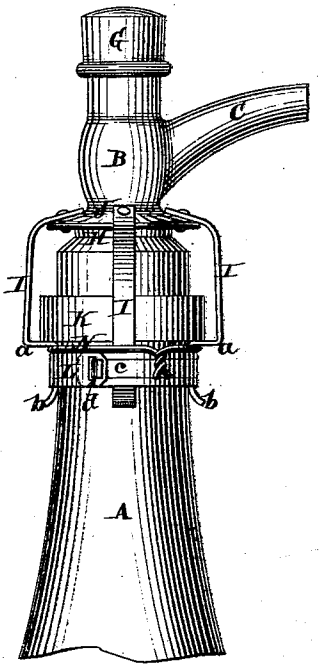
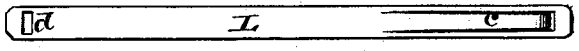


Fig. 3.



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UNITED STATES PATENT OFFICE.

ERNEST DREHER, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN BOTTLE-STOPPER FASTENINGS.

Specification forming part of Letters Patent No. **178,745**, dated June 13, 1876; application filed March 3, 1876.

To all whom it may concern:

Be it known that I, ERNEST DREHER, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Fastening for Bottle-Stoppers, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a vertical section of a bottle-stopper embracing my invention. Fig. 2 is a side elevation thereof. Fig. 3 shows a peculiar form of band for fastening the stopper.

Similar letters indicate corresponding parts.

My invention relates to a contrivance for fastening stoppers to bottles containing champagne and other effervescent liquids, my improvement being especially adapted to that class of stoppers composed of a hollow cap, which is provided with a spout and a self-closing valve.

A common method of fastening this class of stoppers consists in screwing the hollow cap on the mouth of a bottle, and my invention is intended to overcome the obvious disadvantage found in this form of fastening that the stopper can be used only on such bottles as have the necessary screw-thread.

To this end my invention consists in combining with the aforesaid stopper a series of depending arms, which are bent inward at a suitable point, so as to fit under the shoulder ordinarily formed near the mouth of a bottle, and bent outward at their lower extremities in such a manner that if the stopper is placed over the mouth of a bottle, and the depending arms are properly adjusted on its neck, the whole can be very firmly fastened to the bottle by means of a band passed around the neck, so as to embrace the arms between their bent parts, both the bent parts serving to assist in holding the arms in place, as hereinafter more fully explained.

In the drawing, the letter A designates the neck of a bottle, to which is applied a stopper, according to my invention. B is the hollow cap of the stopper, and C is its spout, while D is the valve. This valve D is attached to the lower end of a rod, E, passing vertically through the cap B, and which is subjected to the action of a spring, F, while to its upper end is attached a cup-shaped thumb-piece, G, which embraces and slides on the cap B.

In placing the stopper on a bottle I insert the lower end of the hollow cap B in its mouth, at the same time interposing between the cap and the bottle a packing-ring, H, of cork or other suitable material.

The hollow cap B is provided with a series of depending arms, I, which are secured to a plate, J, cast to the cap, the arms being riveted, soldered, cast, or otherwise secured. These arms I are bent inward, as shown at *a*, in such a manner as to fit under the shoulder commonly formed near the mouth of champagne and other bottles, the position of the bent part *a* being varied according to the position of this shoulder on different bottles.

The shoulder just referred to is shown at K in Figs. 1 and 2.

The arms I moreover are bent outward at their lower extremities, as seen at *b*.

When the lower part of the hollow cap B has been inserted in the mouth of a bottle, as before stated, the bent part *a* of the depending arms is adjusted under the shoulder K, and a band or wire is passed around and secured on the neck of the bottle, so as to embrace the arms below the point *a*, or, in other words, between the bent parts *a* and *b*. The bent part *a* thus abuts against the shoulder K, while the neck band or wire constitutes a stop for the bent ends *b*, and consequently the stopper is very firmly held in place.

The opposite ends of the band L are connected together by means of a tongue, *c*, formed near one end of the band, and which is passed through and around an opening, *d*, (see Fig. 2,) formed near its other end. The tongue *c* is formed by incising the band, as clearly seen in Fig. 3.

In this manner I obtain a fastening by which a stopper of the character described can be permanently secured to bottles of ordinary form without difficulty. Moreover, my fastening is exceedingly simple in its construction, and can be furnished at an extremely low cost.

It will be seen that, from the construction and combination of parts, my bottle-stopper can be applied to bottles which are not

provided with screw-thread, and which cannot be secured with the construction of stoppers having the self-closing valve, the advantages of which latter are manifest.

What I claim as new, and desire to secure by Letters Patent, is—

In combination with the stopper, provided with depending bent arms I, the band L incised as shown, forming the tongue *c*, which may be passed through the aperture *d*, and secured therein by bending its end backward, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 29th day of Febuary, 1876.

ERNEST DREHER. [L. S.]

Witnesses:

WILLIAM DREHER,
GEORGE W. STURR.