



# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. 200,991, dated March 5, 1878; application filed August 23, 1877.

*To all whom it may concern:*

Be it known that I, ALANSON F. DIETZ, of Guilderland Centre, in the county of Albany and State of New York, have invented a new and useful Improvement in Bottle-Stoppers for Soda-Water or other effervescing liquids, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a view of my invention as applied to a mineral-water bottle. Fig. 2 is a central vertical section of the same; and Fig. 3, a detail view of the cap and sleeve, with beads *b b'* to keep the sleeve in place.

The object of my invention is to secure the cork or stopper to the bottle after it is filled.

My invention consists of a metal cap, C, of a diameter a little larger than that of the bottle upon which it is proposed to use it, provided with a band or sleeve, B, in combination with hooks, hinged at their lower ends to the neck of the bottle, both so constructed and arranged as to adapt themselves to the variations in size of the bottles or the corks, or both, as found in actual practice.

*B'* is the bottle; C, the cap, which is cylindrical, and closed at one end. At two opposite sides it has a long rectangular slot, *s*, extending nearly from top to bottom, as shown in Fig. 2, and on each side of said long slot are notches or side slots *s'*. (Shown in Fig. 1.) Said slots *s s'* are for the reception of the heads of hooks H.

Fitting loosely upon the cylindrical portion of cap C is a band or sleeve, B, provided at two diametrically-opposite points with semi-quadrangular openings, the oblique side of which is indented, as shown at D D in Fig. 1.

Sleeve B is held in place upon cap C by means of projecting rim *c'* at the top, and a similar, but smaller, one at the bottom; or it may be held in place by swaging a single bead upon one or both ends of the sleeve and corresponding ones upon the cap, as shown at *b b'* in Fig. 3, or in any other well-known manner.

H is the hook, the body or shank being straight, and need not be very large. The

bottom part of the hook is hinged to a support, A, which is secured to the bottle-neck by a metal band, in such a manner as to hold the hook always at the same distance from the top of the bottle-neck.

The top portion of hook H is depressed below the line of the back of the hook, as shown at *a*, Fig. 2, so that, when in the position shown in Fig. 2, one of the indentations D D of sleeve B may pass freely over the top part of the hook and prevent it from disengagement with cap C.

It will be seen from the above that to use my invention the hooks H are first secured by means of a metal band around the neck of the bottle, and having a cap of suitable diameter for the bottle. We may now proceed to fill the bottle with any of the effervescing liquids—such as soda-water, mineral waters, champagne, or any of the aerated tonic beers or medicinal preparations.

The bottle may be filled and corked either by hand or machine, and as soon as corked the cap C is applied over the top of the cork, pressed down upon it, and the hooks H turned up to engagement in one of the notches *s'*, and then the sleeve B is turned around until one of its edges D D passes over the top portion of hook H, as shown in Figs. 1 and 2. When in this position the cork cannot fly out or be extracted from the bottle.

Whether the corks all fit to just the same depth in the bottle or at various depths is immaterial, as the notches *s s'* and sleeve B will engage with hook H at various points, thus producing a useful device for the purposes herein mentioned.

Having clearly described my invention and its mode of operation, what I claim as new, and desire to secure by Letters Patent, is—

The cap C, provided with slots *s s'* and band or sleeve B, in combination with hooks H and supports A, combined and arranged on a bottle, to operate as herein shown.

ALANSON F. DIETZ.

Witnesses:

FREDK. KERNHOLTS,  
HIRAM GRIGGS.