H. HUNT AND R. SCHAAB.

BOTTLE OPENER AND CLOSER.

APPLICATION FILED DEC. 6, 1919.

1,338,224. **Patented Apr. 27, 1920.**

Fig. 1

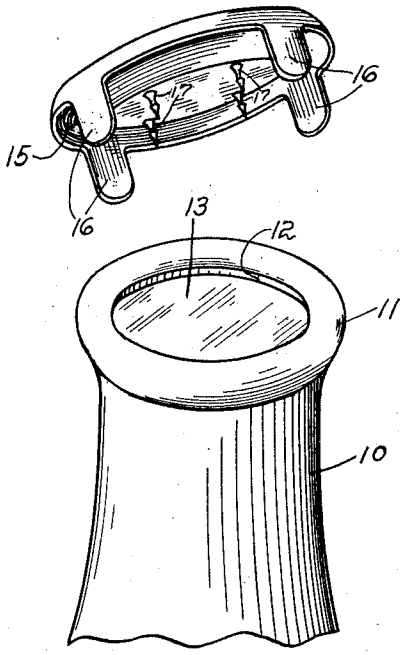


Fig. 2

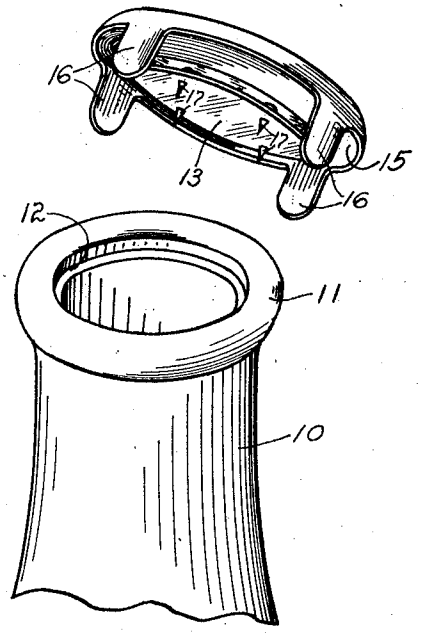
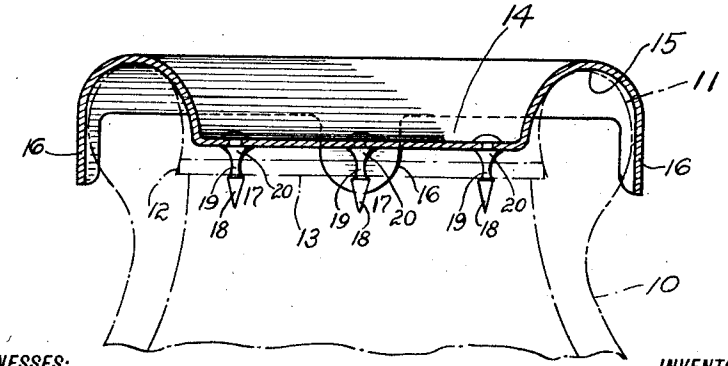


Fig. 3



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HENRY HUNT, OF DEVON, AND RICHARD SCHAAB, OF BRIDGEPORT, CONNECTICUT, ASSIGNORS OF ONE-THIRD TO PAUL F. ZEIDLER, OF BRIDGEPORT, CONNECTICUT.

BOTTLE OPENER AND CLOSER.

1,338,224. Specification of Letters Patent. Patented Apr. 27, 1920.

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To all whom it may concern:

Be it known that we, (1) HENRY HUNT and (2) RICHARD SCHAAB, citizens of the United States, residing at (1) 549 Berwin St., Devon, Connecticut, (2) 593 Brooks St., Bridgeport, Connecticut, (1) county of New Haven, (2) county of Fairfield, have invented an Improvement in Bottle Openers and Closers, of which the following is a specification.

This invention has for its object to provide a simple and inexpensive implement for opening and closing milk and cream bottles of the class which are closed by flexible caps ordinarily made of paper, the purposes accomplished by our novel implement being the quick and convenient removal of the cap without danger of soiling the hands, or of spilling or disturbing in any way the contents of the bottle, and without injuring or in any way impairing the edge of the cap, so that where the contents of the bottle are only partly used the implement with the cap remaining securely attached thereto may be placed over the mouth of the bottle and the closure be effected as tightly as before the cap was removed, the implement being so simple and inexpensive to produce that it may be sold at a minimum price, will be strong and durable and always ready for use, and so simple in operation that an unskilled person may use it in either opening or closing a bottle.

With these and other objects in view we have devised the simple and novel bottle opener and closer which we will now describe referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is a perspective view showing the neck of a milk or cream bottle with the cap in place and the implement about to be used as an opener;

Fig. 2 a similar view, the bottle having been opened, the cap being held by the implement and the implement and cap being in position just after removal or as when the cap is about to be replaced to close the bottle again, and

Fig. 3 is a view on an enlarged scale, a bottle neck with the cap in place being indicated by dotted lines and the implement being shown in section as when placed in position for removal of the cap, or after the cap has been replaced to close the bottle after it has been opened and a portion of the contents removed.

10 denotes the neck of an ordinary milk or cream bottle, the mouth of which is provided with a rounded flange 11 below which on the inner side of the neck is a circular groove 12 in which the cap 13 is seated. The cap, which is ordinarily made of paper, is flexible, is made moisture proof, and is thick enough to provide an effective closure for the bottle, so that it may be laid upon its side but is preferably retained in an upright position. The cap is made of slightly greater diameter than the groove which receives it so that when set to place the edge of the cap will tightly engage the wall of the groove and thus effect an air and moisture proof closure.

Our novel implement is blanked out and formed from sheet metal, preferably aluminum, or from celluloid or similar material. The plate or body is pressed to shape at a single operation and comprises a central depression 14, outside of which the metal is curved upward, over and downward forming a circular groove 15 in the under side which is adapted to receive the mouth of a bottle. In order to provide means for accurately centering the implement and also to provide a tolerance for variations in bottle necks of supposedly the same size, we provide a plurality, in the present instance four, of resilient tongues 16 which depend from the edge of the outer wall of the groove.

As a means of removing the cap from a bottle neck and also retaining it in position upon the implement so that the bottle may be closed tightly again after the cap has been removed and will remain air tight, we provide a plurality of prongs 17, in the present instance four, which extend downward from the central depression. These prongs are preferably, although not necessarily, made round. At the outer end of each prong is a barb 18, above the barb a neck 19, and above the neck a shank 20 which tapers outward and swells into a diameter greater than that of the barb. The upper end of the shank is shouldered, is passed through a hole in the plate and is riveted securely in place.

The operation will be readily understood

from the drawing, see especially Fig. 3. In removing a cap the implement is placed over the mouth of the bottle, the resilient tongues yielding slightly to compensate for variations in the bottle necks and centering the implement with practical accuracy, and the implement is pressed downward until the barbs pass through the cap. The implement is then removed from the bottle neck taking the cap with it. If the bottle is emptied the cap is removed and the implement is ready for use again. If the bottle is not emptied the implement with the cap still carried thereby is again placed over the bottle neck and pressed downward seating the cap in the groove in the bottle neck as before. The enlarged diameters of the shanks of the studs now pass into the holes in the cap made by the barbs and plug them tightly so that the closure of the bottle is just as air tight as it was before the cap was removed.

Having thus described our invention, we claim:

An implement of the character described, comprising a plate shaped to form a central depression and having a groove to receive the mouth of a bottle and resilient tongues extending below the outer wall of the groove, whereby the implement is centered on a bottle neck, and prongs depending from the central depression and adapted to be passed through a bottle closure, each prong consisting of a barb and a tapering shank, said barb and shank being connected by a neck having a reduced diameter, whereby the barbs can be easily passed through the closure of a bottle, and the shanks can pass into the holes in said closure made by said barbs and plug them tightly.

In testimony whereof we affix our signatures.

HENRY HUNT.
RICHARD SCHAAB.