Feb. 7, 1928. 1,658,396

R. SATO

BOTTLE CAP OPENER

Filed March 17, 1927

Fig. 1.

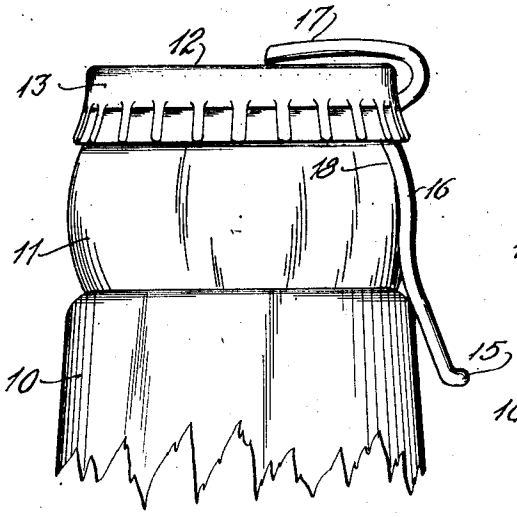


Fig. 2.

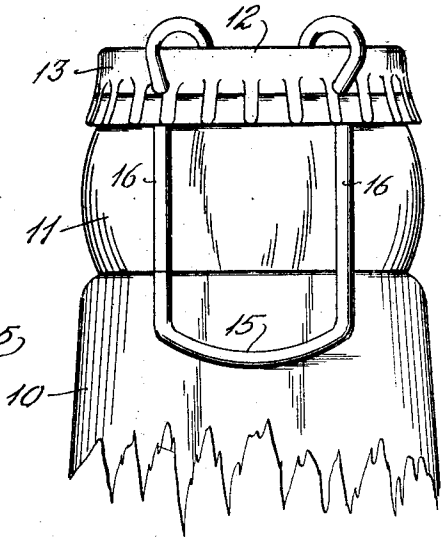


Fig. 3.

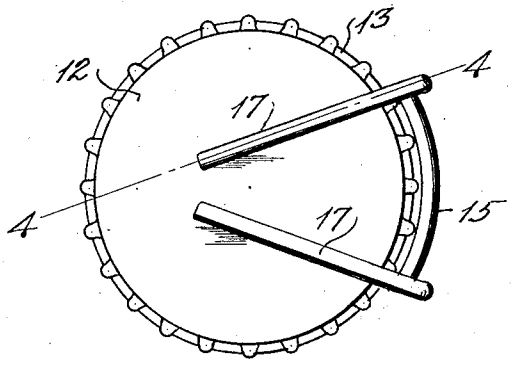
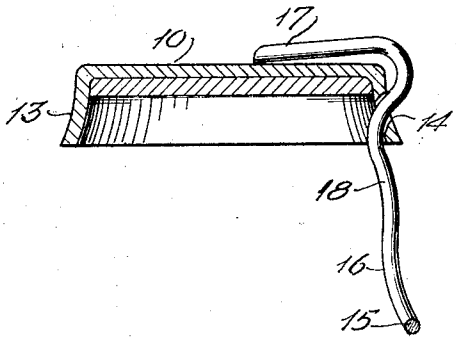


Fig. 4.



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UNITED STATES PATENT OFFICE.

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BOTTLE-CAP OPENER.

Application filed March 17, 1927. Serial No. 176,152.

This invention relates to closers for bottles and has special reference to a bottle cap remover.

More particularly the invention relates to a permanently attached remover for bottle caps of the type commonly known as "crown" caps.

One object of the invention is to provide a simple and improved device of high efficiency and ease of operation by which the common crown cap can be readily removed without the use of any tools.

A second object of the invention is to provide a wire attachment for such bottle caps in the form of an improved remover wherein the ends of the attachment will engage the top of the cap when removing the same so that a strong leverage is provided.

A third object of the invention is to provide a remover of this kind so formed as to neatly fit within the skirt or depending flange of the cap where it flares outwardly from around the mouth of the bottle.

A fourth object of the invention is to provide an attachment of this character wherein the wire used is of a novel construction conforming to the mouth and side parts of the bottle.

With the above and other objects in view as will be hereinafter apparent, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings and specifically claimed.

In the accompanying drawings like characters of reference indicate like parts in the several views, and:

Figure 1 is a side view of the upper part of a bottle showing the cap and remover in position.

Figure 2 is a similar view at right angles to Figure 1.

Figure 3 is a plan view of the cap and remover.

Figure 4 is a section on the line 4—4 of Figure 3.

In the present embodiment of the invention there is disclosed the upper part of a bottle 10 having a bulge 11 just below its lip whereon is mounted the cap which is of the ordinary "crown" type having a top portion 12 and a depending flange or skirt 13. Through this skirt extends a pair of spaced openings 14.

The remover consists of a single length of wire bent intermediate its ends to provide a finger engaging portion or bight 15 from which extends upwardly a pair of legs 16 which pass through the openings 14 from the inside of the flange outwardly and are then curved or bent first outwardly and then inwardly to provide ends 17 which engage the top 12 of the cap so that forcing the part 15 outwardly and upwardly readily lifts the cap off. Below the skirt the legs 16 are bowed outwardly as at 18 to conform to the bulge 11 and the bight 13 is transversely curved to substantially conform to the cross sectional curvature of the bottle neck.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

It is obvious that minor changes may be made in the form and construction of the invention without departing from the material spirit thereof. It is not, therefore, desired to confine the invention to the exact form herein shown and described, but it is desired to include all such as properly come within the scope claimed.

Having thus described the invention, what is claimed as new, is:

1. In combination, a bottle cap having a depending peripheral flange provided with a pair of spaced openings, and an opener attachment consisting of a length of wire bent intermediate its ends to provide a pair of legs, said legs extending through said openings from the inside of the flange outwardly and having their terminal portions bent inwardly over the top of the cap to engage the upper surface of the same, the bent portion connecting the legs extending downwardly below the cap to provide a finger grip.

2. In combination, a bottle cap having a depending peripheral flange provided with a pair of spaced openings, and an opener attachment consisting of a length of wire bent intermediate its ends to provide a pair of legs, said legs extending through said openings from the inside of the flange outwardly and having their terminal portions bent inwardly over the top of the cap to engage the upper surface of the same, the bent portion connecting the legs extending downwardly below the cap to provide a finger grip, said last mentioned portion being curved transversely to conform to the cross-sectional curvature of the bottle neck.

3. In combination, a bottle cap having a

depending peripheral flange provided with a pair of spaced openings, and an opener attachment consisting of a length of wire bent intermediate its ends to provide a pair of legs, said legs extending through said openings from the inside of the flange outwardly and having their terminal portions bent inwardly over the top of the cap to engage the upper surface of the same, the bent portion connecting the legs extending downwardly below the cap to provide a finger grip, said last mentioned portion being curved transversely to conform to the cross-sectional curvature of the bottle neck, and the legs immediately above said last portion being bowed outwardly to conform to the bulge of the bottle mouth.

In testimony whereof I affix my signature.

RYUJI SATO.