

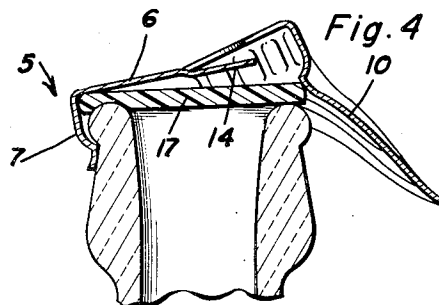
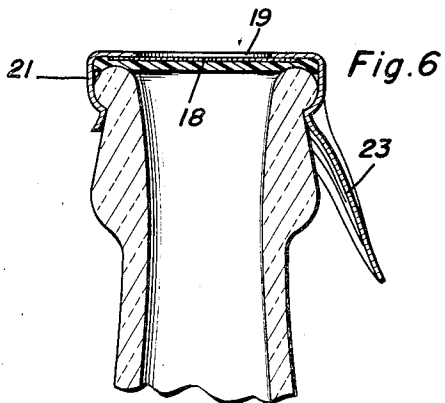
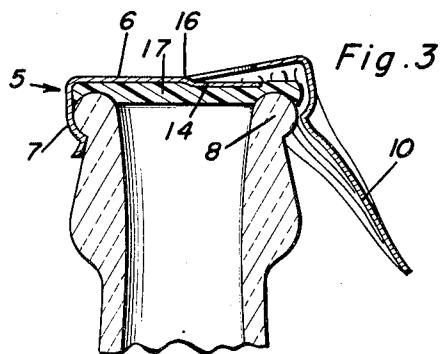
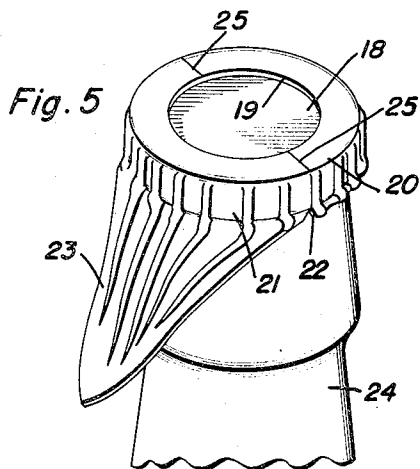
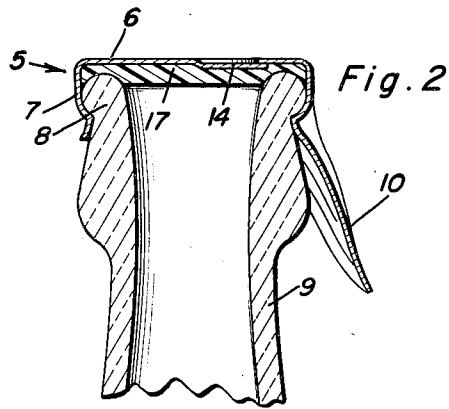
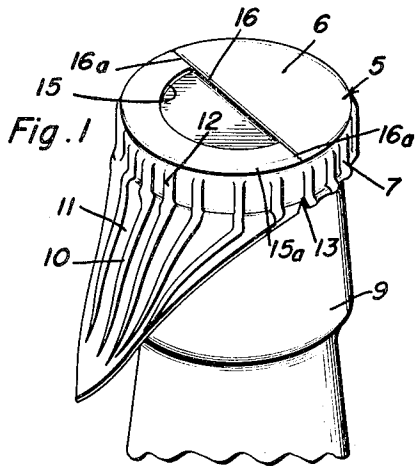
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R. C. HYDE, JR

2,778,520

BOTTLE CAP

Filed July 20, 1954



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2,778,520

BOTTLE CAP

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2 Claims. (Cl. 215—46)

The present invention relates to new and useful improvements in bottle caps commonly known as a crown cap, and the invention has for its primary object to construct the cap with a handle or lever to facilitate removal thereof from a bottle without requiring the use of tools of any character.

An important object of invention is to form the top of the cap with an opening as well as to form the crimped skirt portion of the cap with notches to weaken the cap at diametrically opposite portions to facilitate prying of the cap from the bottle.

Another object is to provide a bottle cap of simple and practical construction, relatively inexpensive to manufacture and otherwise well adapted for the purpose for which the same is intended.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view;

Figure 2 is a vertical sectional view of Figure 1;

Figure 3 is a vertical sectional view similar to Figure 2 showing the initial opening position of the cap;

Figure 4 is a similar view to Figure 3 showing the completed opening position thereof;

Figure 5 is a perspective view of a modified construction; and

Figure 6 is a vertical sectional view of Figure 5.

Referring now to the drawing in detail and first with respect to the form of the invention illustrated in Figures 1 to 4 inclusive, the numeral 5 designates a crown bottle cap which includes the flat top portion 6 and crimped skirt portion 7 which is crimped under the beading 8 of the neck 9 of a bottle.

A handle or lever 10 extends downwardly from below a crimped skirted portion 7 of the bottle cap and the handle is formed with a plurality of longitudinally extending reinforcing ribs 11 which are formed as a continuation of the ribs 12 provided on the skirt portion 7 of the cap.

The lower edge of the skirt 7 is also formed with notches 13 substantially at diametrically opposite sides of the cap and at the junction of the side edges of the handle 10 with the skirt.

A tongue 14 of substantially semi-circular shape is partially cut along its arcuate edge 15 from the material of the top 6 of the cap to form a relatively narrow flange 15a and the tongue remains united with the top 6 along a straight transverse line 16 and which is aligned with the notches 13.

The tongue is pressed downwardly at its united portion below the plane of the top and the material of the tongue is compressed under sufficient pressure during manufacture of the cap to spread the arcuate edge of the tongue under the adjacent flange 15a to hold the tongue down while maintaining a sealing action at the severed arcuate edge of the tongue.

A cork or other suitable sealing disk 17 is positioned on top of the neck of the bottle under the cap 5 when the latter is sealed thereon.

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The notches 13 at the side edges of the skirt 7 of the cap serve to weaken the cap at substantially diametrically opposite sides so that when upward pressure is subjected to the handle 10 the portion of the skirt 7 of the cap immediately adjacent the handle will bend upwardly along the transverse line 16 and notches 13 and the flange 15a will bend along the transverse fold lines 16a to permit removal of the cap and without completely tearing the cap at its weakened portion. By retaining the cap intact the same may then be replaced on the bottle to preserve the contents thereof, if desired.

In the form of the invention illustrated in Figures 5 and 6 a disk 18 is completely cut from the top of the cap to form a central circular opening 19 to provide a relatively narrow ring or flange 20 at the edge portion of the cap. The skirt 21 of the cap is also formed at diametrically opposite edges with notches 22 and a handle 23 is integrally formed with the skirt 21 to extend downwardly at the side of the neck 24 of the bottle.

The provision of the relatively narrow ring or flange 20 on top of the cap serves to weaken the same sufficiently to permit bending of the cap along the fold lines 25 in the region of the notches 22 when upward pressure is subject to handle 23. The disk 18 is compressed to spread under the flange 20.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. A bottle cap including a top, a semi-circular tongue integrally formed with the top and united therewith along a transverse line, a crimped skirt portion at the perimeter of the cap and having notches aligned with said transverse line of the tongue to weaken the cap at diametrically opposite sides, and a handle integrally formed with the skirt and extending downwardly therefrom and adapted to bend the cap along said transverse line upon upward pressure subjected to the handle to pry the cap from a bottle.

2. A bottle cap including a top, a semi-circular tongue partly severed from the top along an arcuate line to form a relatively narrow arcuate flange at the adjacent perimeter of the top, said tongue being united with the top along a transverse line, said tongue being depressed below the plane of the top to underlie the flange at the arcuate edge of the tongue, said cap also including a crimped skirt for attaching the cap to a bottle and having notches in its edge portion in alignment with the transverse united line of the tongue, and a handle integrally formed with the skirt and extending downwardly therefrom and adapted to bend the cap at the notched portion thereof and along said transverse line upon upward pressure subjected to the handle to pry the cap from the bottle.

References Cited in the file of this patent

UNITED STATES PATENTS

775,652	Heath	Nov. 22, 1904
1,154,853	Freebey	Sept. 28, 1915
1,180,864	Mason et al.	Apr. 25, 1916
1,706,720	Wettstein	Mar. 26, 1929
1,715,882	Wygonik	June 4, 1929
2,030,884	Mason et al.	Feb. 18, 1936
2,156,258	Atwood	May 2, 1939
2,397,948	Conway	Apr. 9, 1946