Oct. 9, 1956 C. J. DAVIS 2,765,944

BOTTLE CAP AND SEAL CUTTER

Filed Feb. 7, 1955

Fig. 1

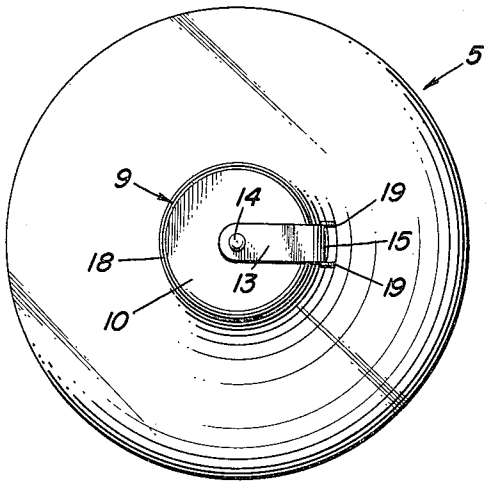


Fig. 2

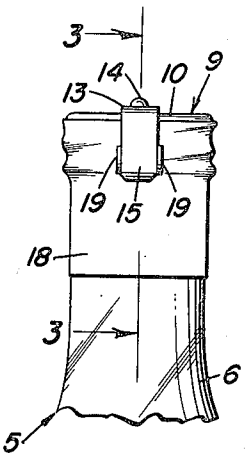


Fig. 3

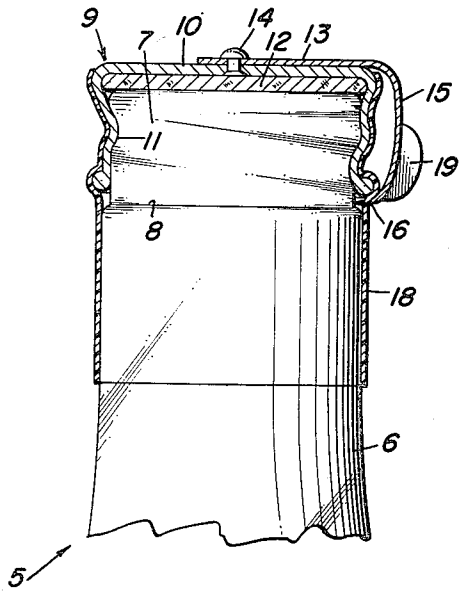
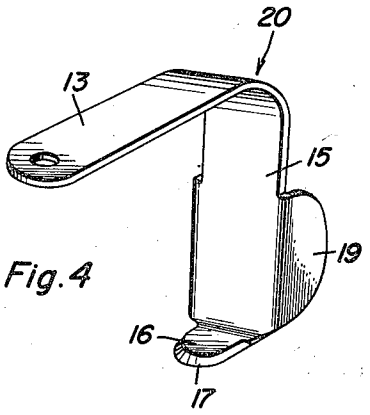


Fig. 4



Clenon J. Davis
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

United States Patent Office

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BOTTLE CAP AND SEAL CUTTER

Clenon J. Davis, Wilson, N. C.

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1 Claim. (Cl. 215—46)

The present invention relates to new and useful improvements in bottle caps and has for its primary object to provide, in a manner as hereinafter set forth, a closure of this character comprising novel means for expeditiously and safely cutting, at a point immediately below the cap, the usual plastic seal used on many bottles.

Other objects of the invention are to provide a bottle cap of the aforementioned character which will be comparatively simple in construction, durable, compact and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a top plan view, showing a bottle cap embodying the present invention mounted on a bottle;

Figure 2 is an elevational view thereof;

Figure 3 is a vertical sectional view, taken substantially on the line 3—3 of Figure 2; and

Figure 4 is a perspective view of the seal cutter.

Referring now to the drawing in detail, it will be seen that reference character 5 designates generally a conventional bottle. The bottle 5 includes a neck 6 provided with the usual threaded upper end portion 7 beneath which is a bead or shoulder 8.

The embodiment of the invention which has been illustrated comprises a cap of suitable material which is designated generally by reference character 9. The cap 9 includes a substantially flat top 10 and a depending threaded skirt 11 adapted to be screwed on the portion 7 of the bottle 5. Mounted in the cap 9 beneath the top 10 thereof is a sealing disk or gasket 12.

An arm 13 of metal, plastic or other suitable material is pivotally secured centrally on the top 10 of the cap 9, as at 14, for swinging movement in a horizontal plane

on said cap. The arm 13 includes a downturned free or outer end portion 15 which is adapted to travel in a circle around the skirt 11 in spaced relation thereto and which terminates, at its lower end, in an integral, inturned blade 16. The blade 16 includes a cutting edge 17 which is formed to penetrate and then cut the usual plastic seal 18 which encircles the skirt 11 of the cap 9 and the adjacent portion of the neck 6 of the bottle 5. Projecting outwardly from the portion 15 of the arm 13, adjacent the blade 16, is a pair of grips 19 to facilitate actuating the cutter. In Figure 4 of the drawing, the cutter is designated generally by reference character 20.

It is thought that the manner in which the invention is used will be readily apparent from a consideration of the foregoing. Briefly, to cut the seal 18 preparatory to removing the cap 9, the blade 16 is forced through said seal, the arm 13 being sufficiently resilient to permit this. As shown to advantage in Figure 3 of the drawing, the blade 16 penetrates the seal 18 at a point between the bottom of the cap 9 and the shoulder 8 of the bottle. The arm 13 is then swung in either direction on its pivot 14 for causing the blade 16 to cut the seal 18 circumferentially in an obvious manner immediately below the cap 9.

It is believed that the many advantages of a bottle cap embodying the present invention will be readily understood and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of construction may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

The combination with a bottle comprising a threaded neck including a shoulder, a screw cap comprising a skirt threaded on the neck and spaced from the shoulder, and a severable seal bridging the shoulder and the skirt, of a cutter comprising a horizontal arm pivotally secured centrally on the cap and including a resilient, depending free end portion operable about the skirt and terminating in an inturned blade insertable between the shoulder and the skirt for penetrating and cutting the seal, and a pair of spaced, opposed grips projecting from said depending end portion of said arm for actuating the cutter.

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