

May 22, 1928.

1,671,015

H. F. DENY

BOTTLE CAP

Filed Feb. 26, 1926

Fig. 1.

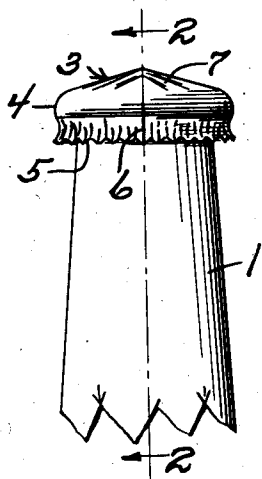


Fig. 3.

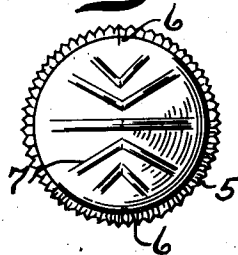


Fig. 4.

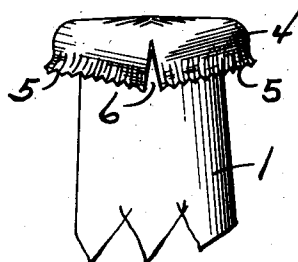


Fig. 2.

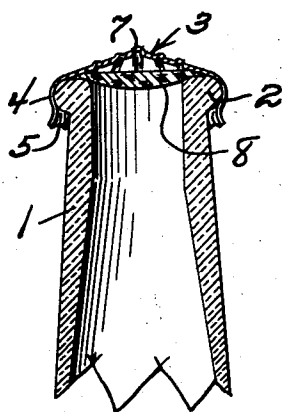
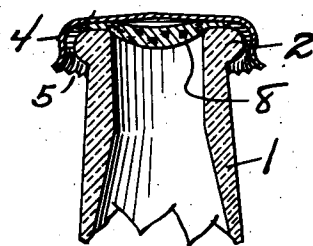


Fig. 5.



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WITNESS: *John Donovan*

UNITED STATES PATENT OFFICE.

HENRY F. DENY, OF MARYDEL, MARYLAND.

BOTTLE CAP.

Application filed February 26, 1926. Serial No. 90,863.

My present invention has reference to metal caps adapted for use to close or seal bottles, and the construction is of the type which is generally known as the "crown" seals.

An object is the provision of a bottle cap of this type which can be readily arranged on the beaded mouth of a bottle to effectively seal the bottle, but which has its sides slitted at diametrically opposite points and which is formed with a substantially conical top or crown that is radially ribbed to reinforce and strengthen the cap, but which when subjected to compression, will spread the flange or skirt of the cap, so that a bottle may be opened without the employment of ordinary devices for this purpose.

To the attainment of the foregoing the invention consists in the improvement as hereinafter described and definitely claimed.

In the drawings:

Figure 1 is a side elevation of the neck portion of a bottle sealed in accordance with this invention.

Figure 2 is a sectional view on the line 2-2 of Figure 1.

Figure 3 is a top plan view of the cap.

Figure 4 is a side elevation showing the top of the cap compressed to spread the flange side or skirt thereof to permit the removal of the cap of the bottle.

Figure 5 is a sectional view through the construction disclosed in Figure 4.

The neck 1 of a bottle is provided with the usual outstanding bead 2, and the mouth of the bottle neck is designed to be closed by a cap or seal in accordance with this invention.

The bottle cap is constructed of metal and is of the type, commonly known as the crown seal. The cap is of course round in plan, and has its top dome or cone-shaped, as at 3. The side or skirt 4 of the cap is rounded outwardly and from thence in-

wardly and the lower portion of the skirt is crimped, as at 5, to add to the resiliency of the gripping effect of the skirt on the bead 2. The skirt has its sides at diametrically opposite points slitted transversely, as at 6, and the conical top of the cap is formed with radial ribs 7 which materially reinforce not only the top but the whole of the cap and sustain the concaved upper portion of the skirt in tight gripping engagement with the bead 2 of the bottle neck 1. The cap carries an inner disc 8 of cork or similar compressible material to insure an air tight joint between the cap and the mouth of the bottle.

My improvement may be applied on a bottle with the usual capping machine, but a pressure by the hand of an operator may be found sufficient to apply the cap to effectively seal the bottle. A direct pressure upon the apex of the top 3 will compress the top and consequently expand the skirt portion of the cap and the expansion of the latter being materially aided by slitting the skirt, so that the cap may be easily and quickly removed from the bottle neck without the employment of the ordinary tools for this purpose.

Having described the invention, I claim:

A bottle closure or seal comprising a thin metal cap having a locking skirt adapted to engage the beaded mouth of a receptacle, the top of the cap being conical and the said top being formed with radially arranged reinforcing ribs, a compressible sealing disc in each cap, and the skirt of the cap being slitted at diametrically opposite points, said ribs being connected in pairs, the elements of one of said pairs being in alignment, the elements of the other pair extending radially at angles to each other and to said first mentioned pairs.

In testimony whereof I affix my signature.

HENRY F. DENY.