F. G. SMITH.

BOTTLE CAP AND OPENER.

APPLICATION FILED OCT. 6, 1914.

1,155,285. Patented Sept. 28, 1915.

Fig. 1

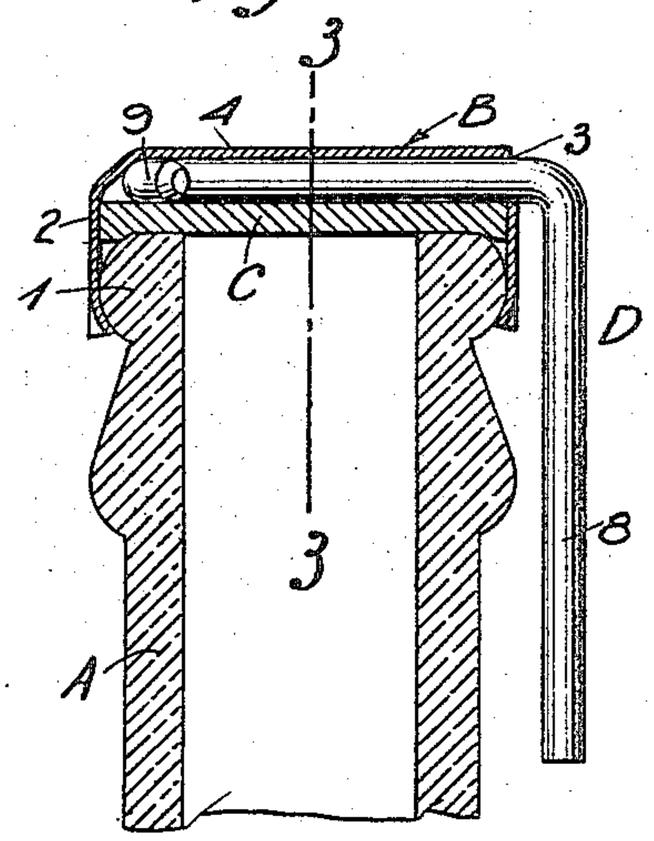


Fig. 2

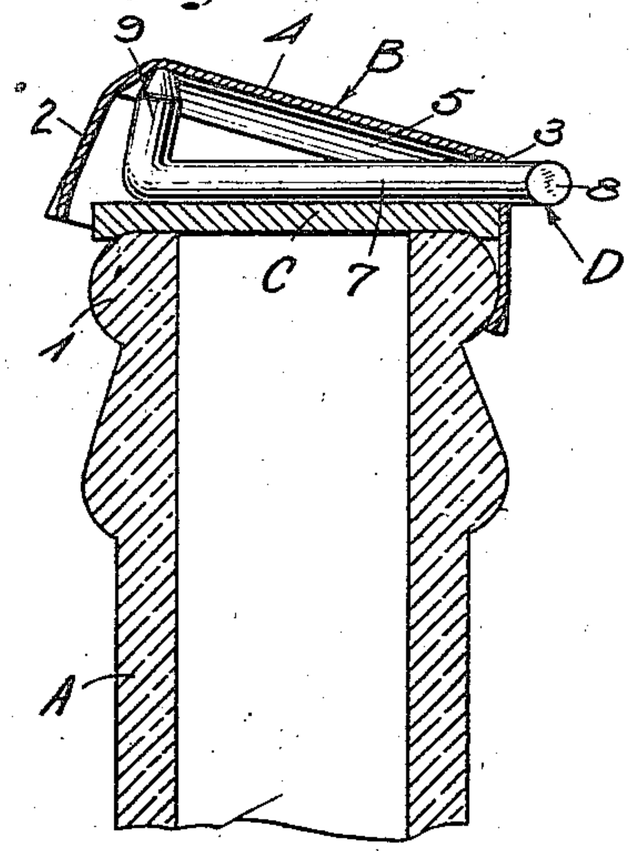


Fig. 3.

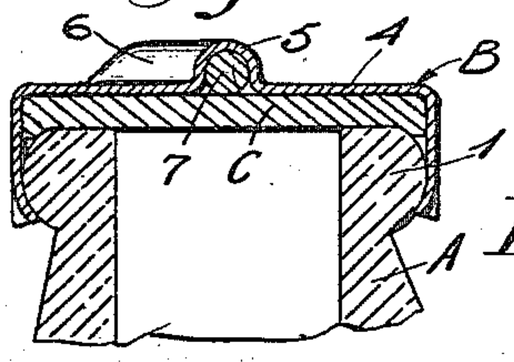


Fig. 4

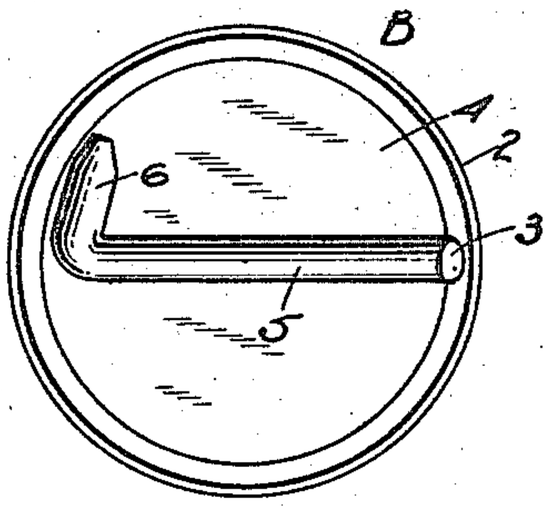
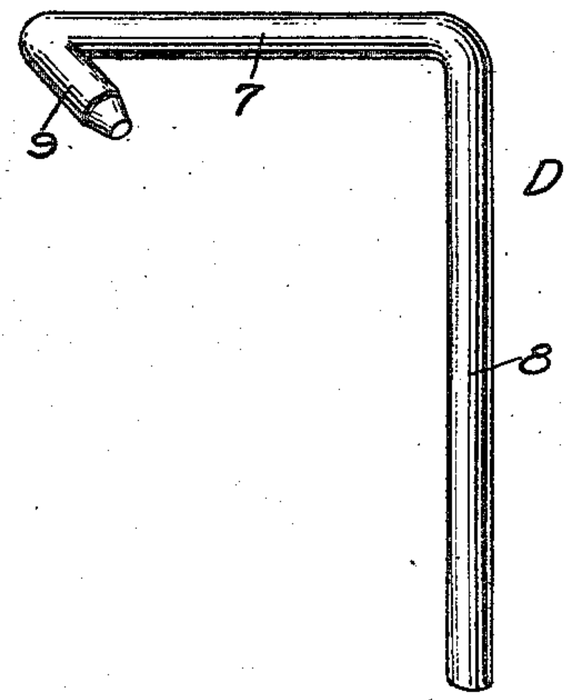


Fig. 5



WITNESSES

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BOTTLE-CAP AND OPENER.

1,155,285. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed October 6, 1914. Serial No. 865,279.

To all whom it may concern:

Be it known that I, FREDERICK G. SMITH, a citizen of the United States, and a resident of New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and Improved Bottle-Cap and Opener, of which the following is a full, clear, and exact description.

This invention relates to a bottle cap, and more particularly to a cap of that type having means applied thereto whereby the cap can be easily and conveniently opened without the agency of a separate instrumentality.

The invention has for its general objects to improve and simplify the construction of devices of the character referred to so as to be reliable and efficient in use, comparatively inexpensive to manufacture and so designed that the cap can be easily and quickly taken off the bottle or other container to which it has been applied.

A more specific object of the invention is the provision of a sheet metal or other cap which has applied thereto a cap remover in the nature of an angular wire, one arm of which extends into the cap through an opening and has a finger on the inner end which normally lies parallel with the top of the cap when the outer arm of the opener extends downwardly parallel with the bottle neck, whereby the turning of the outer arm will cause the finger to be thrown upwardly and thereby pull the cap out of engagement with the bead or other cap-retaining surface of the bottle neck.

With such objects in view, and others which will appear as the description proceeds, the invention comprises various novel features of construction and arrangement of parts which will be set forth with particularity in the following description and claims appended hereto.

In the accompanying drawing, which illustrates one embodiment of the invention, and wherein similar characters of reference indicate corresponding parts in all the views, Figure 1 is a central vertical section of the neck of a bottle and cap applied thereto, the cap opener being shown in normal position; Fig. 2 is a similar view showing the cap opener moved to detach the cap; Fig. 3 is a sectional view on the line 3—3, Fig. 1; Fig. 4 is a bottom plan view of the cap before the remover is applied thereto; and Fig. 5 is a perspective view of the cap remover.

Referring to the drawing, A designates the neck of a bottle or other container which has formed around its upper portion a cap-holding bead 1. The bottle is adapted to be sealed by a stopper or cap B which may be made of sheet metal or other suitable material, and within the same is arranged a sealing disk C which is compressed against the upper edge of the bottle neck when the bottom edge of the flange 2 of the cap is crimped under the bead 1, as shown in Figs. 1 and 3. The flange 2 of the cap has at one side an opening 3, and extending from this opening is pressed out in the flat top 4 of the cap a diametrical channel or groove 5 which terminates at its ends remote from the opening 3 in a bend or offset 6. The channel is pressed upwardly from the top of the cap and is adapted to accommodate the arm 7 of the cap opener D, which opener is formed from a piece of wire or other stock of suitable stiffness and bent to form the arm 7 and the handle or operating arm 8 at approximately right-angles to the arm 7. The inner end of the arm 7 has a finger or pry element 9 which is adapted to normally lie in the offset portion 6 of the channel 5 in the cap. In other words this pry element 9 is parallel with the top surface of the cap and with the sealing disk C, and when the finger is in this position the operating arm 8 projects downwardly along one side of the bottle neck, parallel with and in close proximity thereto. When it is desired to tear off the cap it is merely necessary to swing the operating arm 8 about the arm 7 as an axis, whereby the finger 9 is thrown upwardly to the position shown in Fig. 2, and consequently the cap is pried open so that it can be readily taken off.

From the foregoing description taken in connection with the accompanying drawing, the advantages of the construction and method of operation will be readily understood by those skilled in the art to which the invention appertains, and while I have described the principle of operation, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is

merely illustrative and that such changes may be made when desired as are within the scope of the appended claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. The combination of a bottle cap having an opening at one side and formed with a channel in its top extending from said opening, said channel having at its inner end an offset and a single-piece cap opener having an inner and an outer arm, the inner arm extending into the opening and lying in the channel and provided with a pry finger at its inner end lying in the offset of the channel, the outer arm serving as a handle for operating the opener.

2. The combination of a container, a sealing cap therefor, said cap having an opening at one side and a channel extending inwardly from the opening and terminating in a bend, a rotary element extending into the cap through the said opening and lying in the channel and having a pry finger in the offset of the latter, and means on the outer end of the element for turning the same for prying open the cap.

3. A bottle sealing cap opener comprising a wire bent into two members at right-angles to each other and one member having its extremity bent into a finger disposed in a plane at substantially right-angles to a plane in which the said members lie.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK G. SMITH.

Witnesses:

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