Feb. 26, 1929. 1,703,759

L. C. AMENT

BOTTLE CAP AND OPENER

Filed Aug. 12, 1927

Fig. 1.

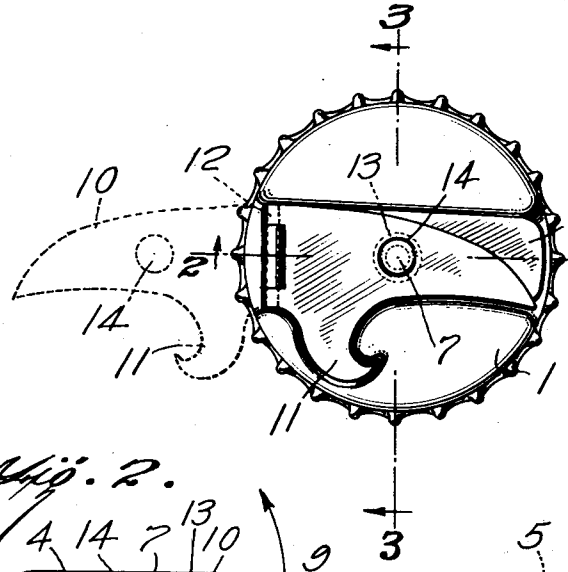


Fig. 7.

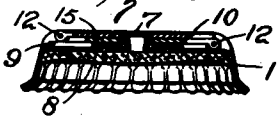


Fig. 2.

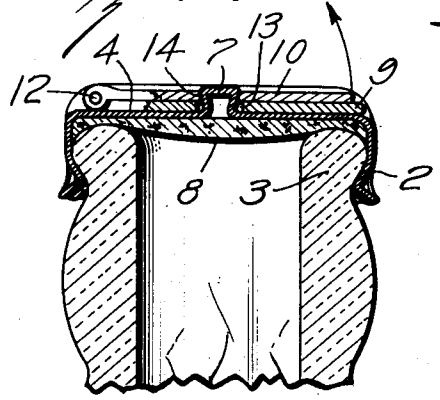


Fig. 3.

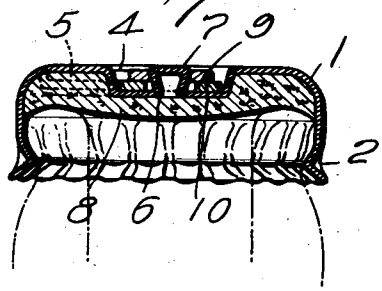


Fig. 4.

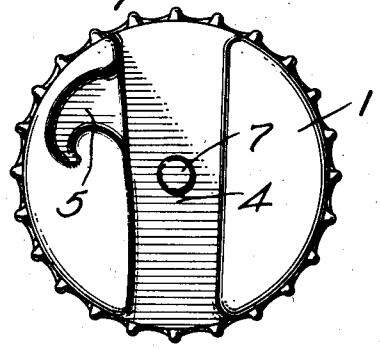


Fig. 6.

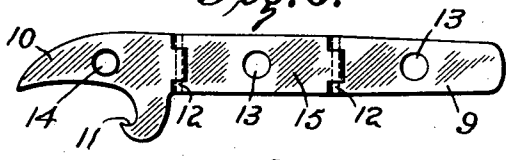
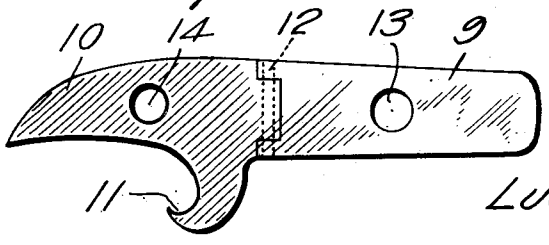


Fig. 5.



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UNITED STATES PATENT OFFICE.

LUCY COTTON AMENT, OF NEW YORK, N. Y.

BOTTLE CAP AND OPENER.

Application filed August 12, 1927. Serial No. 212,581.

This invention relates to a bottle cap adapted to receive and contain a bottle opener.

The principal objects of the invention are to provide a cap of the shape and size usually employed with a recess or depression in which a small but efficient cap opener may be detachably secured, and all without necessitating any change in the machinery now employed for crimping the cap to the bottle.

To this end the invention consists in providing a bottle cap of the crimped type with a depression in its top, and a folded small sized cap opened in the depression and held therein in a removable manner, the cap with opener attached being smooth on top and of dimensions making it capable of being handled by the ordinary cap applying machinery now used.

The invention further consists in the novel arrangement, combination and construction of parts shown and described.

In the drawings I have illustrated one embodiment of the invention, in which

Fig. 1 is a plan view of a cap and opener, showing in dotted lines the opener partially opened.

Fig. 2 is a sectional elevation along the line 2—2 of Fig. 1.

Fig. 3 is a sectional elevation along the line 3—3 of Fig. 1.

Fig. 4 is a plan view of the cap with opener removed.

Fig. 5 is a detail of the opener.

Fig. 6 is a plan view of an opener having three folds.

Fig. 7 is a sectional elevation similar to Fig. 2 showing a three fold opener in place in a cap.

In the drawings, I have indicated a metal cap 1 having the usual crimped edge 2 adapted to receive the flanged mouth of a bottle 3. The cap is provided with a depression or recess 4 in the top and extending from side to side and having a side stepped recess 5 adjacent the recess 4.

Located centrally of the recess 4 is a spring stud 6 having overhanging shoulders 7, one of which may be formed at the time of manufacturing the cap proper.

A gasket 8 of cork or other material is provided within the crimped edge of the cap and directly overlies the bottle mouth and prevents leakage of the bottle contents, all of which is well known. It may be that due to the irregular under surface of the cap, a gasket of slightly greater thickness than heretofore used, will be necessary in some instances to satisfactorily seal the bottle mouth, but this will not interfere in any way either with the function of the cap or the machinery handling it.

I provide a cap opener comprising a handle 9 and a head 10 having a spur 11 for engagement under the crimped edge 2 of the cap. As shown in Fig. 5, the head 10 and handle 9 are hinged together by pintle 12. Obviously the opener may be made of very thin gauge metal while maintaining sufficient strength to lift the cap from the bottle.

In practice, the opener is folded and laid within the recess in the cap, so that the doubled thickness of the opener lies in the recess 4 and the spur 11 in the recess 5, the entire opener being substantially flush with the cap top.

In order to retain the opener in the recess, I provide apertures 13 and 14 in the handle and head respectively, the former opening freely passing over the spring stud 6, the latter snapping over the overhanging shoulders 7 thereof. In this manner, the opener is held in its recess against accidental displacement, yet one may readily remove it therefrom by inserting the finger nail between the opener and the recess floor.

It will be readily seen that I have provided a cap which accommodates an opener therein, without interfering in any way with the function of the cap or the machinery handling the same.

The upper fold of the opener, comprising the head, holds the under portion securely in place without making it too difficult to remove the opener from its recess.

As a modified form, shown in Figs. 6 and 7, the opener is made with three folds, the handle 9 being supplemented by an intermediate portion 15. When this form of opener is used, obviously it will be necessary to either make the recess in the cap correspondingly deeper or else make the opener of thinner material so that it may be contained within the same depth of recess as in the case of the two fold form.

By providing a three fold opener I am able to get a greater leverage on the cap in opening so that the cap may be more readily removed.

I claim:

1. In combination, a bottle cap having a recess in its top, an opener comprising a handle and a head hinged together about a pintle,

held in said recess, said pintle being parallel to the plane of the cap top, a stud rising from the bottom of the recess in the bottle cap, the opener having an aperture through which the stud projects.

2. In combination, a bottle cap having a recess in its top, a spring stud rising from the bottom of said recess, an opener held in said recess and having an aperture therein through which the stud projects, the top of the stud slightly overlying the upper surface of the opener.

3. In combination, a bottle cap having a stepped recess in its top, an opener of flat metal folded upon itself and held in said recess, a spring stud rising from the bottom of said recess and projecting through both thicknesses of said opener, the bottom thickness clearing said stud, the top thickness being engaged and held by said stud.

4. In combination, a bottle cap having an open ended recess in its top, an opener entirely held in said recess, and means to prevent longitudinal movement of the opener in said recess.

5. In combination, a bottle cap, a main recess in the top thereof extending the full width of the cap top, a side recess in the cap top extending from the main recess, an opener comprising a head and a handle, said handle lying in the main recess, said head lying in the main and side recesses.

6. In combination, a bottle cap, a main recess in the top thereof of the full width of the cap top, a side recess in the cap top and extending from the main recess, an opener for the cap comprising a head and a handle, said handle lying in the main recess, said head having an opening spur lying in the side recess.

In testimony whereof I affix my signature.

LUCY COTTON AMENT.