

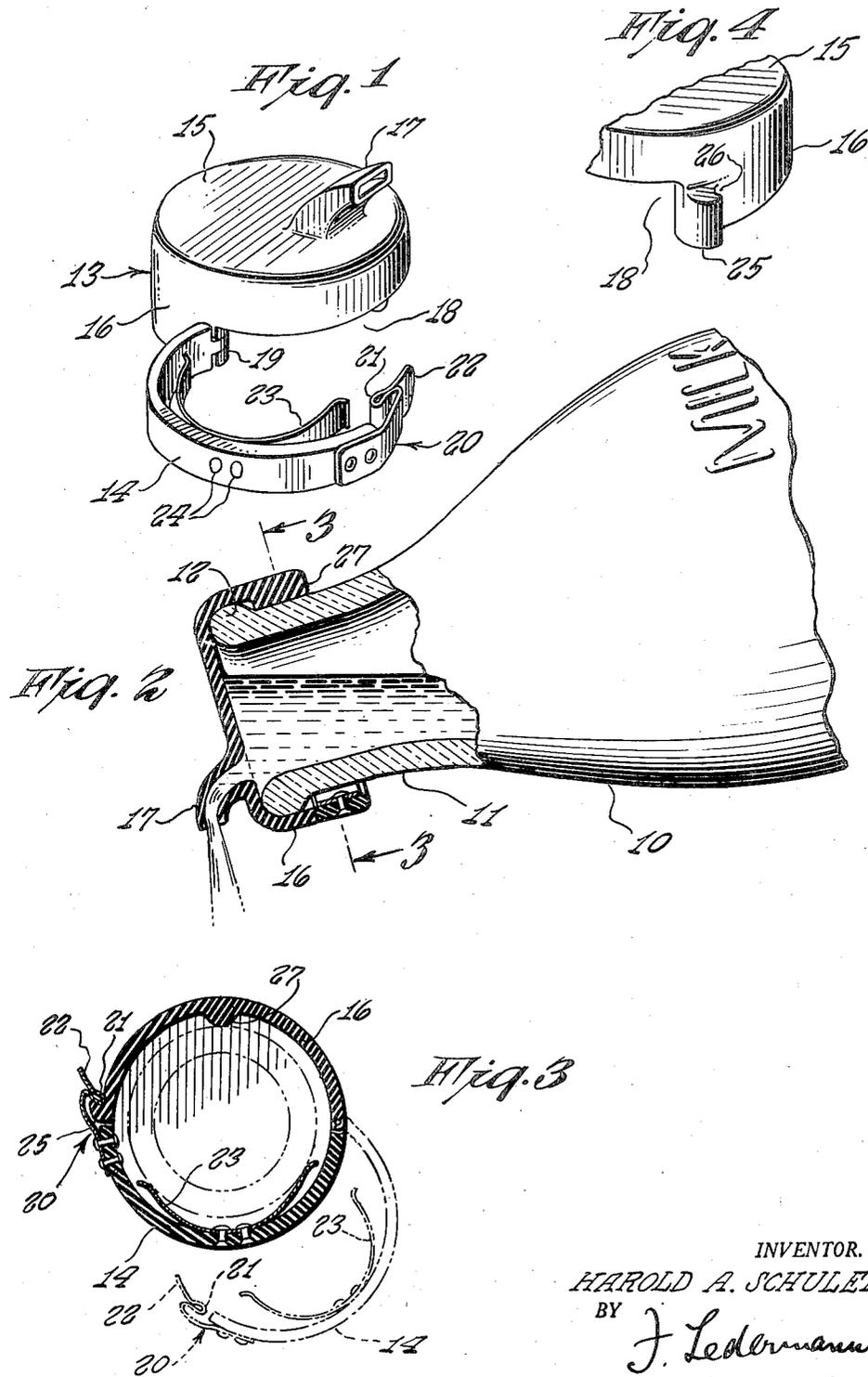
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BOTTLE CAP

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## BOTTLE CAP

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3 Claims. (Cl. 215-73)

1

This invention relates to milk bottles, although it may obviously be applied to bottles adapted to contain other substances, and the main object thereof is the provision of a readily removable or attachable cover or cap whereby the milk may be poured from the bottle without requiring the removal of the cap.

The above broad as well as additional and more specific objects will be clarified in the following description wherein characters of reference refer to like-numbered parts in the accompanying drawing. It is to be noted that the drawing is intended solely for the purpose of illustration and that it is therefore neither desired nor intended to limit the invention to any or all of the exact details of construction shown except insofar as they may be deemed essential to the invention.

Referring briefly to the drawing, Fig. 1 is a perspective view of the bottle cap of this invention, per se, in detached position and ready to be applied to a milk bottle.

Fig. 2 is a fragmentary longitudinal sectional view through a milk bottle having the cover of this invention mounted thereon and illustrating the manner in which the contents may be poured from the bottle without removing the cap.

Fig. 3 is a sectional view taken on the line 3-3 of Fig. 2.

Fig. 4 is a fragmentary perspective view of the body of the bottle cap, showing a detail thereof.

Referring in detail to the drawing, the numeral 10 indicates a common type of milk bottle having the neck 11 and the circumferential rounded lip 12 extending diametrically beyond the neck 11.

The cap of this invention is composed of two parts, the body 13 and the hinged releasable locking member 14, and both are preferably made of a suitable plastic material which may be a plastic such as, for example, polystyrene. The body 13 includes the roof 15 and the circumferential apron or flange 16 extending downward therefrom. Formed integrally with the roof 15 is a pouring spout 17, the plane of the mouth of the spout preferably being parallel with the axis of the bottle or cap.

Throughout the greater portion or approximately one-half but preferably not less, of the circumference of the apron 16 the latter extends from the roof 15 to such a depth, as shown in Fig. 2, that when applied to the bottle the apron extends well beyond the lip 12. A cutout 18 is provided which extends circumferentially in the apron 16 through about one-half the circumferential length of the apron, as above stated, through the lower edge of the apron and upward a distance of

2

approximately one-half the depth of the apron. An arcuate locking member, of substantially the same radius of curvature as the apron 16 and of substantially the same dimensions as the cut-out 18, shown at 14, is hinged at one end 19 to one edge of the apron adjacent the cut-out 18. The member 14 is provided at its other end with a deformed spring catch 20, which may be riveted to the member 14 and which includes the tooth-like tongue 21 and the free extension useful as a finger grip 22. An arcuate leaf spring 23, of normally smaller radius of curvature than the member 14 is riveted at 24 intermediate its length to the member 14 on the inside of the latter also intermediate the length of the latter. The apron 16, on the other end of the cut-out 18, is provided with an outwardly projecting nose 25 having that side thereof opposite the cut-out 18 concavely rounded to form a rounded notch 26.

It is apparent that in applying the cap of Fig. 1 to the bottle 10, the upper half of the apron 16 will snugly engage the bottle lip 12. Then the locking member 14 is swung on its hinge 19 against the neck of the bottle until the tongue 21 engages the nose 25 by snapping into the notch 26. The spring 23 has its ends spread during the latter operation, by contact with the bottle neck, as shown in Fig. 3. In the closure position of the member 14, as shown in Fig. 3, the finger grip 22, owing to the resiliency of the spring metal catch 20 and engagement of the tongue 21 in the notch 26 of the nose 25, stands out away from the bottle neck convenient to be gripped or snapped free by the tip of a finger of the user. Thus the locking member may be readily released to permit the spring 23 to swing it away from the bottle neck so that the cap may be easily lifted from the bottle.

The paper cap with which a fresh bottle of milk is usually supplied, is removed prior to use of the milk, and the cap herein disclosed is placed on the bottle in its place. After a portion of the milk has been poured from the full bottle, the bottle is simply stored to the refrigerator, and the cap of this invention is not again removed until the bottle has been emptied, when the cap may be washed and held ready to apply to the next fresh bottle of milk. One or more filler projections 27 are preferably provided to extend inwardly from the lower portion of the apron 16 opposite the cut-out 18, to prevent deformation of that portion of the apron when the member 14 is locked in position.

Obviously, modifications in form or structure

may be made without departing from the spirit or scope of the invention.

I claim:

1. A bottle cap comprising a body including a roof and a flange-like apron depending from the circumferential edge of the roof, said apron having a cut-out therein extending through the lower circumferential edge thereof upward toward said roof to a distance of about one-half the depth of said apron and extending arcuately a distance of approximately one-half the circumferential length of the apron, a locking member having substantially the same arcuate length and width as the length and depth respectively of said cut-out, said member having one end thereof hinged to said apron at one end of said cut-out and having a deformed spring clip secured to the other end of said member, said clip including an inwardly projecting tongue, said apron having an outwardly projecting nose thereon at the other end of said cut-out, said tongue being registrable in said nose when said member is swung into

alignment with said cut-out thereby releasably locking said member in the latter position, said roof having a pouring spout extending therefrom, the radius of curvature of said member substantially equalling the radius of curvature of said apron.

2. The bottle cap set forth in claim 1, an arched spring leaf normally having a radius of curvature less than that of said member secured to said member on the inside of said member intermediate the lengths of said spring leaf and said member.

3. The bottle cap set forth in claim 1, said clip having a finger grip extending from said tongue adapted when said member is in said latter position to have the tip of a finger of the user inserted thereunder to snap said tongue out of engagement with said nose.

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No references cited.