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RECLOSURE CAPS
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This is a continuation-in-part application of my co-pending application Serial No. 260,236 filed February 21, 1963, and now Patent No. 3,176,867.

This invention relates to novel reclosure caps for bottles, and in particular, to a reclosure cap which includes locating means for positioning a bottle lip in a body of the reclosure cap in a manner which prevents radial forces from dislodging the cap from a bottle, and including a recess portion for receiving deformable material of a resilient gasket upon the application of the reclosure cap to the bottle.

An object of this invention is to provide a novel reclosure cap including a cap body having an end wall and a depending peripheral skirt, the peripheral skirt having an inner wall defining an internal cavity adapted to temporarily receive therein a bottle lip during the attachment of the reclosure cap to a bottle lip, a relatively non-resilient but readily deformable inwardly directed peripheral locking rib for securing the cap to the bottle lip against the forces of a gasket loaded in shear and a shoulder for locating the bottle lip relative to the cap to facilitate sealing between the bottle lip and the gasket and preclude inadvertent or accidental removal of the reclosure cap from the bottle lip which might otherwise occur due to side or radial forces acting against the reclosure cap.

Still another object of this invention is to provide a novel bottle reclosure cap including a cap body having an end wall and a depending peripheral skirt, the peripheral skirt having an inner wall defining an internal cavity adapted to temporarily receive therein a bottle lip, an inwardly directed peripheral locking rib carried by the skirt in spaced relationship to the end wall, a gasket in the cap body positioned in space relationship to the locking rib, a recess in the end wall above the cavity opening toward the cavity and defining a chamber in which the gasket is temporarily deformed upon the application of the cap to a bottle, and a peripheral shoulder above the locking rib having a diameter greater than the diameter of the locking rib but less than the diameter of the inner wall to locate and accurately seat the closure cap upon the bottle lip.

A further object of this invention is the provision of a novel reclosure cap constructed in accordance with the object immediately above, and in addition, to load the gasket in shear and form the locking rib which is relatively non-resilient but readily deformable and of a diameter less than outside diameter of the bottle lip.

A further object of this invention is to provide a novel reclosure cap which includes locating means for positioning a bottle lip in a body of the reclosure cap in a manner which prevents radial forces from dislodging the cap from a bottle, and the cap including a resilient gasket including means for allowing the gasket to deform in shear upon the application of the cap to a bottle and means for effecting an increase in the forces holding the cap upon a bottle in proportion to variations in internal pressure of the bottle.

Still another object of this invention is to provide a

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novel reclosure cap of the type just described and additionally including a relatively non-resilient but readily deformable sheet material locking rib press-fit into an internal groove of a peripheral skirt of the reclosure cap.

5 With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawing:

10 In the drawing:

FIGURE 1 is a fragmentary top perspective view of a reclosure cap constructed in accordance with this invention, and illustrates the cap seated upon and sealing a bottle.

15 FIGURE 2 is a fragmentary enlarged sectional view taken along line 2-2 of FIGURE 1, and illustrates a gasket of the reclosure cap in sealing contact with a lip of the bottle.

FIGURE 3 is a fragmentary enlarged sectional side view of the bottle lip with the reclosure cap of FIGURE 2, showing the temporary deformation of the gasket during the application of the reclosure cap to the bottle lip.

FIGURE 4 is an exploded axial sectional view of another reclosure cap constructed in accordance with the invention, and illustrates a sheet metal locking ring and self-loading gasket thereof.

A reclosure cap constructed in accordance with this invention is illustrated in FIGURES 1-3 of the drawing and is generally designated by the reference numeral 5. The cap 5 includes a cap body 6 having an end wall 7 and a peripheral skirt 8. The end wall 7 and the peripheral skirt 8 are separately formed and joined together to form the reclosure cap 5. The peripheral skirt 8 is preferably constructed from polyethylene or similar plastic material while the end wall 7 is formed from metal.

The end wall 7 of the cap 5 includes a generally planar circular central section 10 which blends gradually into a shoulder 11 terminating in a free edge 12. The central portion 10 and the shoulder 11 of the end wall 7 defines a cavity or chamber 13 which is adapted to receive material of a gasket 14 housed in the reclosure cap 5 when the same is applied to the lip L of a bottle B in the manner best illustrated in FIGURE 3 of the drawing, as will more clearly appear hereafter.

The peripheral skirt 8 of the reclosure cap 5 terminates in an upper terminal edge portion 15 which has an upper surface 16 substantially flush with an upper surface (un-numbered) of the central portion 10 of the end wall 7. A radially inwardly opening groove 17 in the upper terminal edge portion 15 of the peripheral skirt 8 is defined by a peripheral sloping surface 18, an axially shallow circumferential surface 20 and an upwardly directed shoulder or surface 21 opposing the surface 18. The groove 17 receives and houses the free edge portion 12 of the end wall 7 in a manner clearly illustrated in the drawings.

The peripheral skirt 8 also includes an inner peripheral wall or surface 22 immediately beneath the shoulder 21 defining a cavity 23 into which the bottle lip L is received temporarily upon the application of the reclosure cap 5 to the bottle B in the manner shown in FIGURE 3 of the drawings.

The gasket 14 is received in the cavity 23 and fully housed therein, as is shown in FIGURE 2 of the drawing. In this semi-deformed position of the gasket 14 an upper

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