

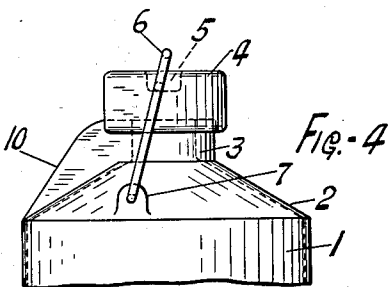
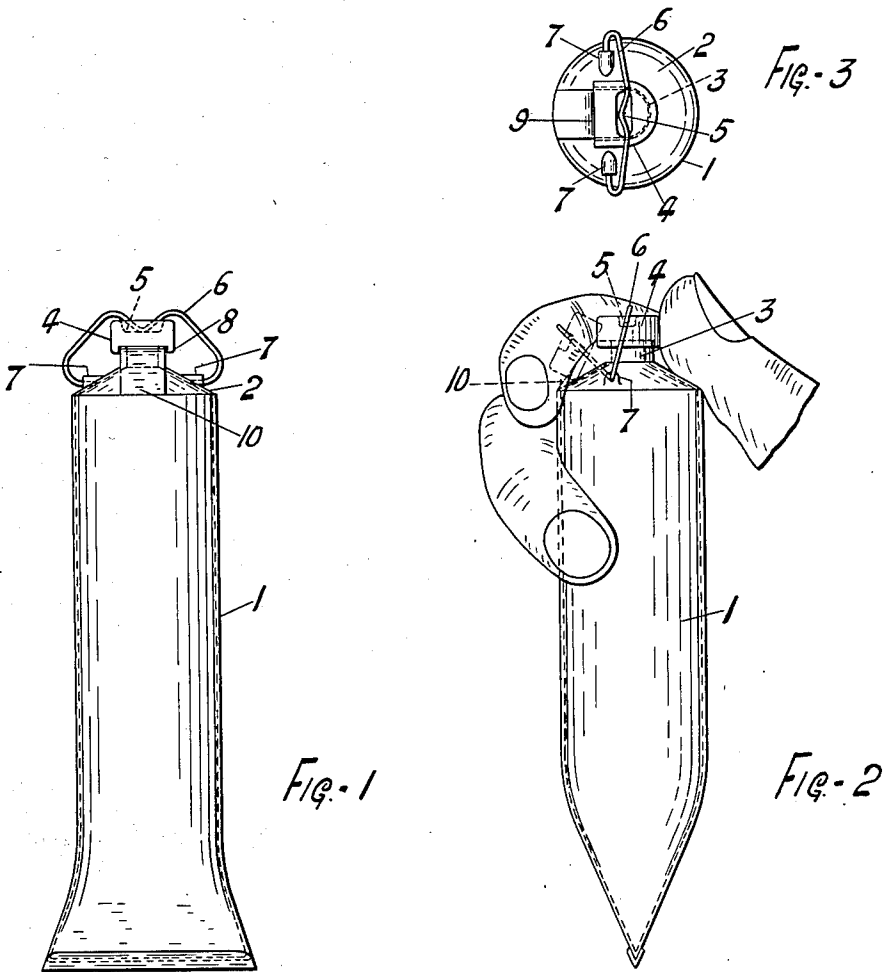
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1,979,230

RECEPTACLE CLOSURE

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1,979,230

RECEPTACLE CLOSURE

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17 Claims. (Cl. 221-60)

The present invention relates to receptacle closures or caps, and more particularly to sliding caps for tubular receptacles containing paste-like substances, such as tooth paste, shaving cream and the like.

An object of the invention is to provide a slidably mounted closure or cap for receptacles which may be readily moved to and from a tube-closing position. This feature presents a marked improvement over the screw type cap, as it results in a material saving of time and effort by being quickly snapped or manipulated to and from a tube-closing position by the simple operation of pushing a thumb or finger against the closure.

Another object is to provide a track or guiding means for such cap so that the cap will be guided in its movement from a non-tube-closing position to a tube-closing position along the guiding means and thereby assure the seating of the cap on the tube. While another object is to provide means for securely holding the cap in a tube-closing position and preventing accidental displacement of the cap, such construction providing a sealing means approximately as efficient as the screw type of cap closure, yet operated much more quickly and easily.

Still another object is to accomplish the above objects without substantially increasing the manufacturing cost of the cap over the screw cap type, yet at the same time presenting an attractive appearing tube closure means.

The form of the invention shown and described herein is a simple and inexpensive embodiment thereof, but it will be appreciated and understood that other forms and improvements thereon may be made without departing from the essential features of the invention as set forth in the claims hereof.

The present embodiment of my invention is shown in the drawing in which:

Figure 1 is a side elevation view of my invention applied to a collapsible tube;

Figure 2 is a similar view of the tube taken at right angles to Figure 1;

Figure 3 is a top plan view; and

Figure 4 is an enlarged view of the top of the tube showing the cap in tube closing position.

In the drawing a collapsible metal tube, of the type commonly used for tooth paste or shaving creams, is indicated by the numeral 1, the same having a sloping shoulder 2, and a narrow neck 3.

Fitting on the top of, and forming a closure for the neck 3, is a cap 4, which for certain uses may be provided with a cork on its lower surface, having a recess 5 in the top receiving a wire bail 6,

having its ends embedded in a pair of oppositely disposed lugs 7 formed on the shoulder 2, placed out of line with reference to the axis of the tube 1 and positioned on said shoulder on the side of the container opposite the closed side of the cap 4, for a purpose to be later disclosed. The bottom of the cap 4 is provided with a downwardly extending flange 8, substantially in the form of a horse shoe as shown in Figure 3, which leaves one side of the bottom of the cap open as indicated at 9.

A track flange 10, rectangular in cross section and of a width corresponding to the distance between the flange 8 at the open end 9 of the cap 4, extends from the top of the neck 3 along the shoulder 2, and serves as a seat for the cap 4 when it is in a non-tube closing position and as a guide in moving the cap 4 from or to a tube closing position.

Particular attention is called to the position of the lugs 7 receiving the ends of the wire bail 6 on the opposite side of the shoulder from the closed end of the cap 4. This feature assures the bail 6 of sufficient leverage to draw the inner end of the flange 8, at the closed end of the cap, tightly against the neck 3 of the tube 1, thereby preventing the accidental unseating of the cap 4, and at the same time firmly clamps and holds the cap 4 over the end of the neck 3, thus providing an effective sealing means which is easily released.

The manner of operating my invention is readily apparent and, as shown in Figure 2, the cap 4 may be conveniently operated by holding the tube in one hand and lifting the cap upwardly by a thumb or finger to unseat the flange at the closed end of the cap, and then pushing the cap away from the neck. The flange at the open end 9 of the cap rides on the track flange 10 and permits the resting of the cap at a point on the flange 10 from where it can easily be returned along the track flange 10 to a tube closing position by a movement of a thumb or finger in the opposite direction.

Various minor obvious mechanical changes may be made in the construction of my device without departing from the spirit of the invention. Among such changes would be included the substitution of an elastic bail in the place of the wire bail shown, and changing the materials and relative sizes of the parts to adapt the invention for use on various types of closures other than those specifically shown or mentioned herein; also changing the shape of the cap or the track flange, or eliminating the bail by using certain types of

flanges on the cap to cooperate with the track flange.

It therefore will be understood that the present embodiment of my invention is illustrative only, and that the embodiment of my invention may be changed, used or modified without departing from the spirit of my invention or sacrificing the advantages thereof.

What I claim is:

1. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a depending flange extending partially around the bottom of said cap for retaining said cap on the end of said neck, and a bail for securing said cap to said container said bail being secured to said shoulder in off-set relation to the axis of the container and at the side thereof away from the closed side of the cap.

2. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a depending flange extending partially around the bottom of said cap leaving the cap open at one side for seating said cap on the end of the neck, and a bail for securing said cap to said container, the bail being secured to said container in an offset position with reference to the axis of the container and on the side of the axis away from the closed side of the cap.

3. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a track on said shoulder extending from said neck, means for securing said cap to said container, and a depending flange extending partially around the bottom of said cap for seating said cap on the end of said neck, said securing means being fastened to said shoulder in off-set relation to the axis of said container and on the side thereof away from the closed side of said cap.

4. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a track on said shoulder extending from said neck, a bail secured to said container and said cap for holding said cap on said container, and a depending flange extending partially around the bottom of said cap for retaining said cap on the end of said tube, said flange at the open side of said cap being adapted to cooperate with said track for guiding said cap on said track.

5. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a track on said shoulder extending from said neck, a depending flange extending partially around the bottom of said cap leaving said cap open at one side for seating said cap on the end of said tube, said flange at the open side of said cap being adapted to cooperate with said track for guiding said cap on said track, and a bail for securing said cap to said container the bail being secured to said container on the side of the axis of said container away from the open side of the cap.

6. A closure means for a container comprising, a cap for closing the end of the container, a flange on the bottom of said cap extending partially therearound leaving an open side thereon, guide means associated with the top of the container, and resilient means for securing said cap to said container and permitting the cap to be moved

from a container closing position to a non-closing position along said guide means said resilient means being fastened to said container in an off-set relation to the axis of the container.

7. A closure means for a container comprising, a cap for closing the end of the container, a flange on the bottom of the cap extending partially therearound leaving an open side thereon for seating said cap on the top of the container, guide means associated with the top of the container, and resilient means for securing said cap to said container said means being secured to said container on the side of the medial line thereof away from the closed side of said cap and adapted to move the cap to and from a container closing position along said guide means and seat the cap in a container closing position.

8. A closure means for a container comprising, a cap for closing the end of the container, a flange on the bottom of the cap extending partially therearound leaving an open side thereon for seating said cap on the top of the container, guide means associated with the top of the container, and a wire bail operatively connected to said cap and secured to said container on the side of the medial line thereof away from the closed side of said cap, the open side of said cap being adapted to rest on and be guided along said guide means when the cap is in a non-closing position.

9. In a container having a neck, a cap having a depending flange extending partially around the under side thereof and leaving an open side permitting the cap to be slid onto said neck, and means for removably securing said cap to said container, said means being fastened to said container on the side thereof opposite the closed side of said cap.

10. In a container having a neck, a cap having a depending flange extending partially around the under side thereof and leaving an open side permitting the cap to be slid onto said neck, and resilient means for removably securing said cap to said container, said means being fastened to said container on the side thereof opposite the closed side of said cap.

11. In a container having a neck, a cap having a depending flange extending partially around the under side thereof and leaving an open side permitting the cap to be slid onto said neck, and a wire bail for removably securing said cap to said container, said wire bail being fastened to said container on the side thereof opposite the closed side of said cap.

12. In a container having a neck, a cap having a depending flange extending partially around the under side thereof and leaving an open side permitting the cap to be slid onto said neck, means for removably securing said cap to said container, said means being fastened to said container on the side thereof opposite the closed side of said cap, and guide means mounted on said container at the open side of said cap for guiding said cap by the cooperation of the open side of said cap on said guide means.

13. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a track on said shoulder extending from said neck, a bail secured to said container and said cap for holding said cap on said container, said bail being secured to said container in off-set relation to the longitudinal axis of said container on the side adjacent said track, and means for guiding said cap on said

track and seating said cap on the end of said neck.

14. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a track on said shoulder extending from said neck, a bail secured to said container and said cap for holding said cap on said container, said bail being secured to said container in off-set relation to the longitudinal axis of said container on the side adjacent said track, and means for guiding said cap on said track.

15. In a container having a main body, a neck, and a shoulder portion joining the body and neck thereof the combination of, a cap for closing the end of said neck, a track on said shoulder extending from said neck, a bail secured to said container and said cap for holding said cap on said container, said bail being secured to said container in off-set relation to the longitudinal axis of said container on the side adjacent said track, and flange means comprising a flange on

said cap for seating said cap on the end of said neck and for guiding said cap on said track.

16. A closure means for a container, comprising a cap for closing the end of the container having a depending flange which is open at one side, means for securing said cap to the container, and guide means associated with the end of the container permitting the flange on the open side of the cap to ride upon the guide means when the cap is in a non-closing position on the container.

17. A closure means for a container, comprising a cap for closing the end of the container having a depending flange which is open at one side, guide means associated with the end of the container, and means for securing said cap to the container and permitting the cap to be moved from a closing position to a non-closing position along the guide means by the cooperation of the flange on the open side of the cap and said guide means.

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