Feb. 14, 1933. E. H. COOK 1,897,890

COVERING FOR CONTAINER OPENINGS

Filed March 23, 1931

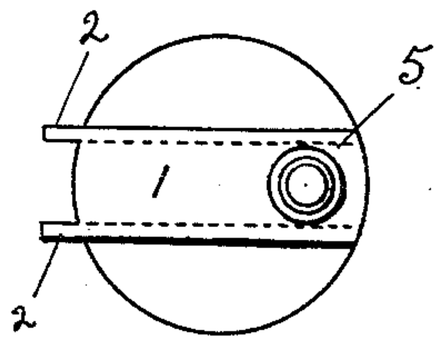


Fig. 1

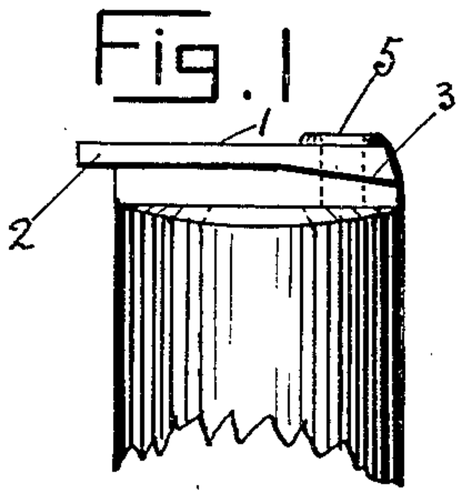


Fig. 2

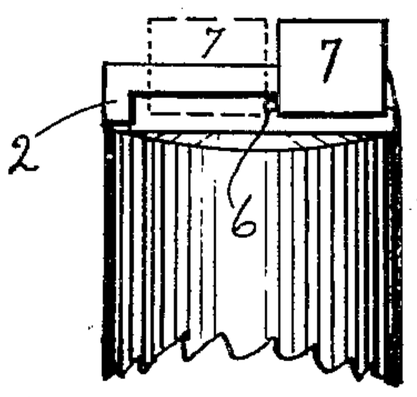


Fig. 4

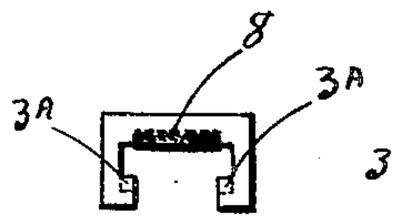


Fig. 3

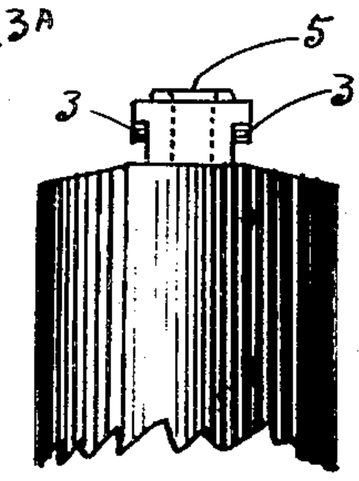


Fig. 5

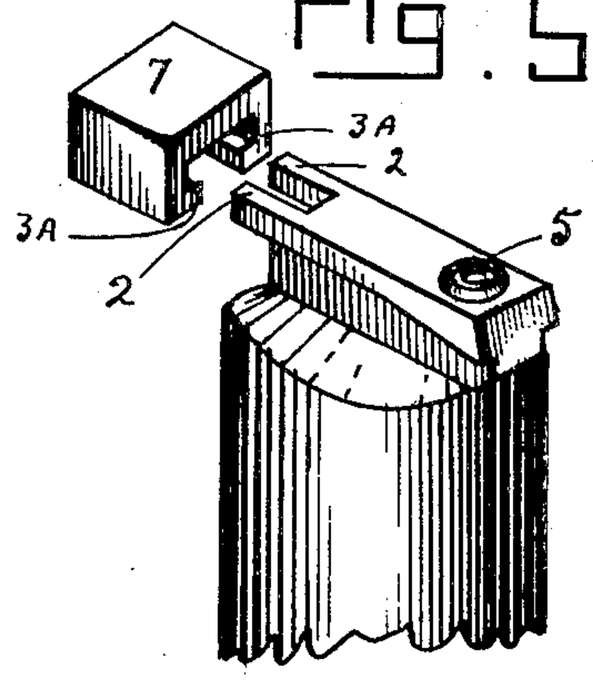


Fig. 6

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# UNITED STATES PATENT OFFICE

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## COVERING FOR CONTAINER OPENINGS

Application filed March 23, 1931. Serial No. 524,685.

My invention relates to improvements in coverings for container openings. The objects of my invention are to secure a covering for an opening in a container, such as for example, in toothpaste or shaving cream tubes, and the like, bottles, jars or cans, which covering is adjustable, easily, quickly and simply removed and replaced; cheap, efficient and that cannot be jarred loose from the container or lost.

I attain these objects by the mechanism illustrated in the accompanying drawing in which the said invention is shown being used in conjunction with an ordinary toothpaste tube upon which is formed my specially constructed track or rail which cooperates with the cover or cap shaped to slide thereon, in which drawing:

Fig. 1 shows the top of the tube with a track or rail with flanges projected into tips ready to receive the sliding cap or cover.

Fig. 2 is a side view of the tube or container.

Fig. 3 shows an end view of the sliding cap with pad inset to cover opening in container.

Fig. 4 shows covering cap in position over the container opening with projecting tops on end of track bent downward to form stops for cap.

Fig. 5 shows rear view of tube and track with detail of flanges thickening downwards as they approach the container opening extending through the track.

Fig. 6 shows in perspective the container, track, and covering cap.

Similar numerals refer to similar parts throughout the several views.

Referring to the drawing:—

A raised track or rail 1 with projecting tapered flanges 3, is formed by moulding, pressing or shaping the same upon the top of any ordinary container cover, whether it be for a tube, screw top can, jar, bottle, barrel or other container. Said track is provided on its upper side with an opening 5 extending into the interior of the container.

The thin ends of the said flanges 3 are built to project outwardly beyond the end of the body of the track (Figs. 1 and 2) so they may be bent downwardly, as when so bent to form stops preventing the cap sliding off the track at that end, (Fig. 4).

Tapered grooves (3—A) are formed by hollowing out the inside of the side walls of the sliding cap 7, (Fig. 3). These grooves fit over the flanges 3 of the track or rail 1 and are tapered to adjustment with the said flanges so that as the cap 7 is pushed forward on the track 1 the grooves therein will tighten up on the thickened portion of the tapered flanges 3. This process I have so adjusted that just as the cap 7 is in position to tightly shut off the opening 5, the grooves 3A lock firmly with the flanges 3, and hold the cap 7 snugly over the opening 5. As the cap 7 slides backward in the opposite direction on the track it slides loosely, but is prevented from sliding off the track by the tips 2 (Figs. 1 and 2) on the ends of the flanges 3 being bent downward as before set out (Fig. 4). The cap is thus locked to the track at both ends and cannot be lost.

Should a tendency develop for the cap to work loose on the track when the container is being jostled about or roughly handled, as it might be in a travelling bag or while being shipped, thus permitting the opening in the container to be uncovered and suffering the contents thereof to escape, a hole 6 may be made through the rail (Fig. 4) and a short piece of wire inserted through it to act as a lock, or if it should appear desirable to have an adjustable lock which would automatically keep the cap positioned firmly over the opening in the container, this can be done in many common and well known ways, as for example, by a wire spring attached to the top or side of the track which could be pressed down to release the cap and until so pressed would act as a lock to hold the cap 7 in covering position over the opening 5.

On the underside of the cap 7 is inset a piece of cork, rubber or other resilient padding material 8 (Fig. 3) which will, when the cap is in covering position over the opening 5, keep the contents of the container airtight. As this padding material should extend downward slightly below the remainder of the flat under surface of the cap in order to secure and regulate pressure over the open-

ing 5, and keep the air out of the container, it is desirable in order to lessen the friction and wear on the same, to round the edges of the opening 5.

In order further to increase and maintain the efficiency of said cap the surface of the top of the track or rail 1 surrounding the edge of the opening 5, should be slightly raised and rounded as indicated in (Figs. 1 and 2).

Where my invention is desired to be adopted for use in connection with containers, the tops of which are not moulded, as they are in the case of tooth paste and shaving cream tubes, and the like, it is suggested that metal covers adapted to screw over the portion of the container in which the opening thereof is located be provided, and a trackway similar to the track 1, for a sliding cap similar to the cap 7 be moulded or pressed on or into such screw cover. Such a device will make my invention usable in connection with any sort of container.

The material suggested for the cap 7 may be any metal such for example as is used in ordinary covers in common use for tooth-paste tubes. If it be desired to add a touch of color, celluloid or rubber composition of different colors may be used.

I am aware that prior to my invention sliding covers for containers have been in common use. I therefore do not claim such a combination broadly, but I claim:

1. The combination in a cover for an opening in a container of a flanged track or rail, an opening for said container extending outward through said track, rounded edges for said opening, a raised and rounded area surrounding said opening, tapers on the flanges of said track thickened toward the end adjacent to said opening, extensions of said flanges at the opposite end of said track into projecting tips.

2. In a covering for an opening in a container, the combination of a flanged track or rail, an opening for said container extending through said track, rounded edges for said opening, a raised and rounded area surrounding said opening, tapers on the flanges of said track thickened toward the end adjacent to said opening, a grooved cap adjusted to slide back and forth on said track or rail to and from covering position over said opening, grooves in said cap tapered reciprocally to fit over the tapered flanges of said track, a depression formed on the under side of said cap; a resilient cork or pad for insertion therein, stop means for said cap at either end of said track, locking means to hold said cap firmly in covering position over said opening.

City of Edmonton, March 2nd, 1931.

ERNEST HARWOOD COOK.