Sept. 19, 1939. W. LÜCKEL 2,173,787

CAP FOR TUBES, CONTAINERS, OR THE LIKE

Filed June 24, 1938

Fig. 1.

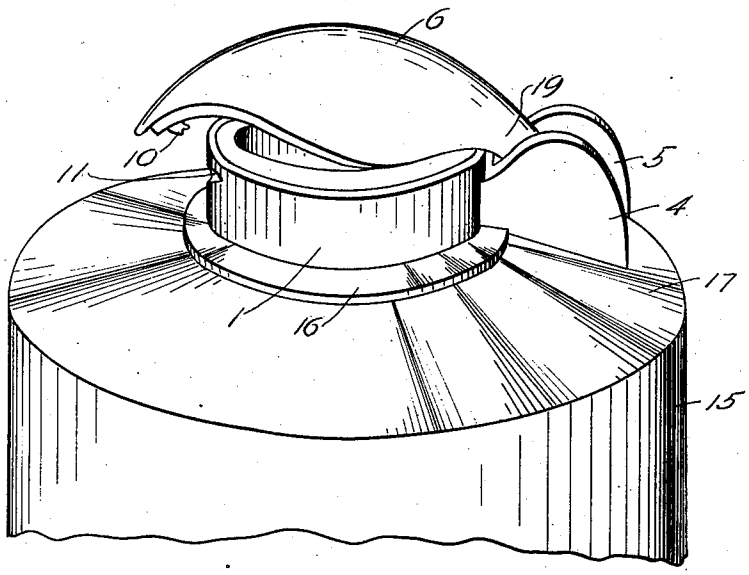


Fig. 2.

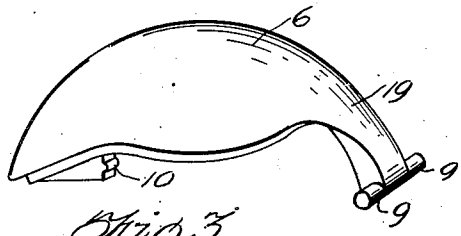


Fig. 4.

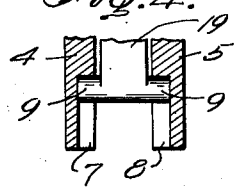
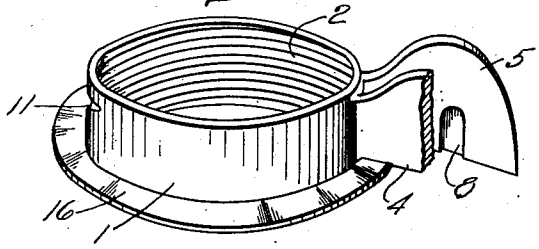


Fig. 3.



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Patented Sept. 19, 1939

2,173,787

UNITED STATES PATENT OFFICE

2,173,787

CAP FOR TUBES, CONTAINERS, OR THE LIKE

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Application June 24, 1938, Serial No. 215,691
In Germany June 25, 1937

3 Claims. (Cl. 221—60)

The invention concerns a screw cap of artificial pressed material for tubes, containers or the like. The main characteristic of the invention consists in the fact that the cap consists of an under part to be screwed on the neck of the tube and a swinging lid which covers the same and which is mounted swingably by means of a T-shaped end on lateral lobes of the said underpart, which has for this purpose grooves on its inner side, in which the T-shaped end of the swinging lid is inserted from below. A further characteristic of the invention consists in the fact that the underpart of the cap has a slanting flange on its lower edge which sets on the conical tube surface and which closes the seat for the axis of rotation.

The advantages are that the new cap is entirely made of artificial pressed material, and can be pressed in few operations, without the need for additional metal pins. The lock can in a simple manner be operated with one hand. A loss of the lid need not be feared, since through the screwing on of the under part in cooperation with the conical part of the tube casing a closed seat for the rotating axis is formed. In addition, by reason of the fact that the transverse section of the lobes is elongated rearwardly, unhindered movement of the lid is obtained, which progresses by advancing closing action and causes the lid to spring automatically into the locking notch. The lateral flange not only seals the under part of the tube against the cap, but the seat lobes are protected against the screwing action and possible breakage.

The drawing shows an embodiment on an enlarged scale, as follows:

Fig. 1 shows a screw cap fastened on the upper part of a tube.

Fig. 2 shows the upper portion of the cap.

Fig. 3 shows the under portion of the cap, partly sectional.

Figure 4 is a transverse section through the hinge element of the invention.

The cap consists of an under part 1, with internal threads 2, so that it can be screw on the threaded neck of tube 15. The shell shaped cap part 1 has on its lower edge a slanting flange 16, which when the part 1 is screwed on rests against the conical part 17 of the tube casing. In addition the under part 1 is provided with lateral stops or lobes 4, 5. These serve to support the axle and for guiding of lid 6. On its innerside the parts 4 and 5 have grooves 7, 8, in which the T-shaped end 19 of the cap which is provided with axially extending appendages 9 rest. The depth of these grooves 7, 8 is such that the axially extending arms 9 are easily guided and that they can be inserted at the same time from below. The transverse section of the axial arms 9 are shaped in such manner that lid 6 cannot fall out. In this manner any metallic parts are eliminated. The transverse section of the lobes 4, 5 widens downwardly which facilitates the movement of the lid extension 19, the further it is closed.

The lower edges of the lobes 4, 5 do not extend horizontally on the under side, but are slanting so that when the cap is screwed on the tube neck they lie close to the tube 17. As can be seen from the drawing, lid 6 is provided at its forward part with a lip 10 which grips in a notch 11 at the upper edge of the under part 1 and which locks the lid 6 in the closing position.

I claim:

1. In a cap for collapsible tubes provided with externally screw threaded nozzles, a cylindrical hollow body having an internal screw engageable on the nozzle of the collapsible tube, a frusto-conical flange on the lower end of the body conforming in inclination to the top of the collapsible tube and adapted to seat thereon, a pair of ears projecting from said body and having their lower edges conforming in inclination to the flange and extending therefrom to lie close to the top of the collapsible tube, said ears having confronting faces provided with oppositely disposed grooves opening downwardly at the lower edges of said ears, a lid adapted to close over the top of said body and provided with an arm extending between said ears, and stub axles projecting from said arm at the end thereof and engaging in said grooves.

2. The cap of claim 1, characterized by being made throughout of molded artificial material.

3. The cap of claim 1, characterized by having the inner faces of the ears converging from the outer to the inner ends of the ears and the arm.

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