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Webster

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[54] **LIPSTICK CONTAINERS**

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[73] Assignee: **Sebec Societe d'Exploitation de Brevets d'Emballage Cosmetique S.A.,** Fribourg, Switzerland

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[21] Appl. No.: **293,370**

[30] **Foreign Application Priority Data**

Oct. 1, 1971 Great Britain 45692/71

[52] **U.S. Cl.** **401/78**

[51] **Int. Cl.** **A45d 39/10**

[58] **Field of Search** 401/68, 75–78, 401/87, 88

[56] **References Cited**

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3,706,354 12/1972 Gruska 401/78

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Primary Examiner—Lawrence Charles

Attorney, Agent, or Firm—Dressler, Goldsmith, Clement & Gordon, Ltd.

[57] **ABSTRACT**

Tubular lipstick container sleeve having a longitudinal slot and being in slidably relationship with a coaxial external housing sleeve having a helical slot and with an internal lipstick carrying cup a peg of which engages the slots. The body having at one end a base portion for facilitating its rotation has at its other end at least two inward deformations extending over a portion of the circumferential extent of that end releasably ejecting a protective lipstick sheet the first time the lipstick is operated and reducing the wobbling tendency of the lipstick.

10 Claims, 4 Drawing Figures

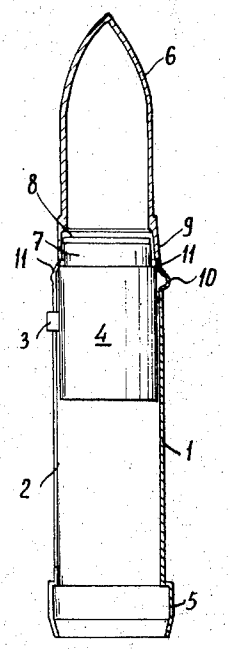


FIG.1

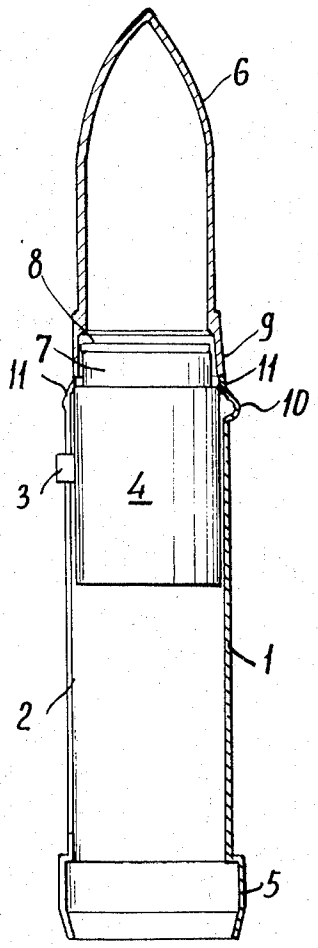
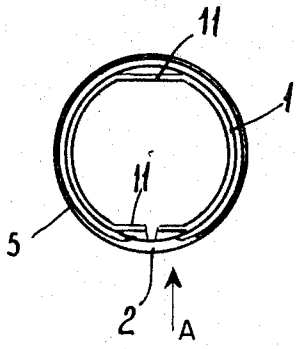


FIG.2



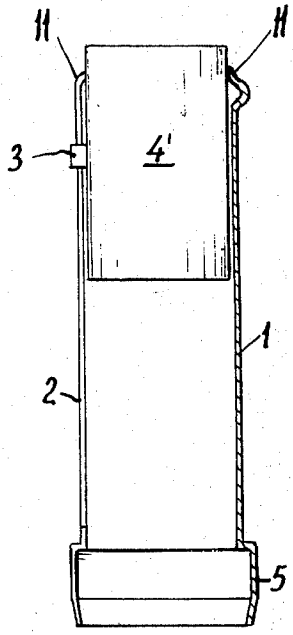
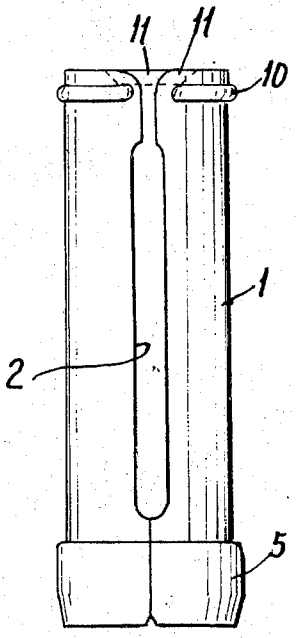


FIG.4

FIG. 3



LIPSTICK CONTAINERS

This invention relates to containers for lipstick, salves and other similar cosmetic materials, commonly known as lipstick containers, and primarily to those of the kind in which there are two coaxial sleeves, known as the body and spiral, one having a longitudinal slot and the other a helical slot, and a cup or godet carrying the lipstick itself, the cup or godet having a peg engaging the slots so that by relative rotation of the body and the spiral the user can project or retract the lipstick. We will refer to these as lipstick containers, although it is to be understood that salves and cosmetics other than lipstick may be used in them.

It has been proposed to enclose the lipstick in a sheath of transparent plastics which fits onto the cup, in fact to cast the lipstick into the sheath by inverting the container and pouring the molten lipstick through a hole in the bottom of the cup. The sheath remains in place until the user first projects the lipstick to a level at which the sheath is substantially wholly clear of the body and spiral, whereupon subsequent retraction of the lipstick causes the lower end of the sheath to catch on the upper end of the body or spiral (or the inturned flange of a sleeve that fits over them), so that the sheath is not retracted but is pushed off the lipstick and falls clear. This is known as the Ejectoret process. Because of the difficulties with tolerances in the components (especially where the body and spiral are moulded in plastics) and friction or adhesion between the lipstick and sheath, trouble can be experienced in ensuring releasable ejection of the sheath the first time the lipstick container is operated, and various proposals have been made for modifying the form of the skirt of the sheath or the upper end of the body-spiral-sleeve assembly with the aim of elimination the trouble.

An aim of the invention, where it is applied to lipstick containers employing an ejectable sheath, is to overcome this trouble.

In lipstick containers of the general kind employing a cup that is movable within a tubular body it is sometimes found that the cup, when in the fully projected position, has a certain amount of freedom to tilt or wobble with respect to the body and this makes it difficult for the user to hold the lipstick steady when applying it. A further aim of the invention is to reduce this tendency to wobble.

According to the invention there is now proposed a tubular body for a lipstick container comprising a sheet metal tube provided with an elongated slot in its wall capable of receiving and guiding a peg projecting from a cup slidable in the body, a base portion at one end for facilitating rotation of the body, and at its other end at least two inward deformations such as flats over only a portion of the circumferential extent of that end.

Preferably there are just two inward deformations arranged diametrically opposite each other, but there could be three, four or more, preferably evenly spaced around the rim. The deformations can be in the form of simple flats, defining chords to the circle that forms the inner diameter of the associated end of the body. Where this body is used in conjunction with Ejectoret system, employing a sheath over the lipstick, the sheath is pushed upwards past these flats the first time the lipstick is fully projected, and then when it is retracted the lover edge of the sheath engages the upper edges of the flats and is pushed off. The sheath can be of simple

shape, free from ridges, pips or slots. The resilience of the sheet metal of the body ensures that it imposes no serious restraint on the initial projection of the lipstick whilsts its sharp edge ensures reliable ejection of the sheath by the flats when the lipstick is retracted.

Even where there is no sheath the flats have a beneficial effect in that they resiliently and firmly but gently grip the sides of the cup when the cup is in its fully projected position, opposing any tendency of the cup to wobble or tilt.

The invention will now be further described by way of example with reference to the accompanying drawings, in which:

FIG. 1 shows the body of a lipstick container according to the invention, with a cup and sheath in the fully projected position;

FIG. 2 is a plan view of the body alone, looking from above;

FIG. 3 is an outside elevation of the body alone, looking in the direction of the arrow A in FIG. 2; and

FIG. 4 shows how the body co-operates with the cup in a version that does not use a sheath.

Referring first to FIGS. 1 to 3, a body 1 of sheet metal is in the form of a tube with a longitudinal slot 2 engaged by a radially extending peg 3 on a cup or godet 4 that carries the lipstick, salve or other cosmetic material. In the complete lipstick container the body 1 is enclosed in a so-called spiral, which is a cylindrical tube containing a helical slot also engaged by the peg 3, so that relative rotation of the body and spiral caused the cup 4 to be moved axially to project and retract the lipstick in a well-known manner. The lower end of the body 1 is enlarged at 5 to form a base that receives a base cap (not shown) to be grasped by the user's fingers for rotating the body.

In the version shown in FIG. 1 a sheath 6 of transparent moulded synthetic resin fits onto the upper end of the cup 4 and encloses the lipstick or salve. For this purpose the upper end of the cup has a portion 7 of reduce diameter, terminating in a bead 8. The sheath 6 has a flexible skirt 9 that fits over the bead 8.

In the retracted position of the cup 4 and sheath 6 the skirt lies inside the body 1, but when the cup is fully projected for the first time to the position shown in FIG. 1 the skirt 9 of the sheath springs clear of the body, so that on subsequent retraction of the cup, the skirt engages against the body and so the sheath remains stationary as the cup and lipstick are retracted, and the sheath can fall away. This is the known so-called Ejectoret process and is disclosed in certain British Patent Specifications such as No. 1,280,635 of Sebec S.A.

The body 1 is, as stated above, made of sheet metal and again is of basically known form, being formed from steel strip by a pressing operation that rolls it up to form a cylinder with a gap left to define the slot 2 and with the base 5 and a rib 10. Simultaneously with the pressing operation we form in the upper end of the body two diametrically opposed flats 11, formed by deflecting the upper rim of the blank inwards at these points.

These flats 11 reduce the effective diameter of the upper end of the body, not as a whole (as would be obtained for example by forming a continuous rolled-in rim or bead) but only in localised regions, in fact across a single diameter where there are only two opposed flats. As will be seen in FIG. 2, one of the flats straddles

the narrowed upper end of the slot 2 in the example shown. However there could be more than two flats, and they need not necessarily be at diametrically opposite points, although generally it will be preferably for them to be uniformly spaced around the circumference of the body.

As the cup 4, with the sheath 6 in it is fully projected the skirt 9 of the sheath is able to spring past the flats 11, being free to deflect into the reduced portion 7 of the cup and then spring out again when clear of the flats, then when the cup is subsequently retracted the lower edge of the skirt engages the flats and causes the sheath to be positively pushed off. Experience with this form of engagement has shown that it is possible to be much more confident of reliable and clean ejection of the sheath than with a body employing simply a continuous inturned rim or bead, and especially one of moulded synthetic resin.

In the preferred embodiment, where the inside diameter of the body is 0.518 inch and its wall thickness 0.010 inch, the flats are inclined inwards at between 13° and 20° to the axis of the body and the distance between them is 0.508 inch.

As indicated above, a body with flats 11 may also be used in normal lipstick containers having no sheath 6. As shown in FIG. 4, the cup 4' here is of plain cylindrical shape without the reduced portion 7, and it projects partially through the upper end of the body in the fully advanced position, so that the flats 11 bear lightly against its wall on opposite sides and assist in keeping the cup stable during use of the lipstick.

The flats 11 as shown define simple chords (looking axially) to a circle defined by the inner diameter of the associated end 7 of the body 1. However it will be understood that they may have a different shape in detail, even though flats are the simplest shape, and the preferred one.

Also the invention may be applied where the body 1 has a helical slot, and the tube outside it an axial one, the action being the same.

What is claimed is:

1. In an improved container for a lipstick or similar stick of pasty material, comprising a cylindrical cup adapted to hold said stick and provided with at least one radially and outwardly extending peg projecting through a longitudinal slot provided in an inner cylindrical sleeve having an upper end and coaxially surrounding said cup, said peg also engaging a helical slot provided in an outer cylindrical sleeve coaxially surrounding said inner sleeves, said cup being mounted for axial displacement within said inner sleeve between a retracted position and projecting position relative to said upper end, and the inner sleeve being rotatable within said outer sleeve, in which the improvement comprises said inner sleeve being made of sheet metal, said inner sleeve providing at said upper end at least two, circumferentially equidistant, inwardly directed deformations, such as radially flattened and inwardly inclined portions of said inner sleeve upper end, adapted to engage peripheral portions of said cup to provide stability for said stick in the projecting position, said longitudinal slot extending to said upper end of said inner sleeve.

2. The holder of claim 1, wherein one of said deformations straddles the upper end of said longitudinal slot.

3. The holder of claim 1, wherein said upper end of said inner sleeve has two deformations which are arranged at diametrically opposite locations.

4. The holder of claim 1, wherein each one of said deformations is a flat which is inclined inwardly at an angle of between 13° and 20° to the longitudinal axis of said inner sleeve.

5. The holder of claim 1, wherein said inner sleeve is made from a planar sheet metal blank.

6. A container for a lipstick or similar stick of pasty material comprising: an inner, sheet metal, cylindrical sleeve having an upper end and outer cylindrical sleeve coaxially surrounding said inner sleeve; a cylindrical cup adapted to hold said stick and provided with at least one radially and outwardly extending peg projecting through a longitudinal slot provided in said inner sleeve, said inner sleeve coaxially surrounding said cup, said peg also engaging a helical slot provided in said outer sleeve, said cup being mounted for axial displacement within said inner sleeve between a retracted position and a projecting position relative to said upper end, and said inner sleeve being rotatable within said outer sleeve, said stick being contained in a projecting shell having an open end telescoped over the open end of said cup, said inner sleeve having at its upper end at least two, circumferentially equidistant, inwardly directed deformations, such as radially flattened and inwardly inclined portions of said inner sleeve upper end, whereby said deformations act to strip said shell from said stick when said cup is returned to a retracted position from an initial projecting position, and said deformations engaging peripheral portions of said cup to provide stability for said stick in the projecting position, said longitudinal slot extending to said upper end of said inner sleeve.

7. The holder of claim 6, wherein one of said deformations straddles the upper end of said longitudinal slot.

8. The holder of claim 6, wherein said inner sleeve upper end has two deformations which are arranged at diametrically opposite locations.

9. The holder of claim 6, wherein each one of said deformations is a flat which is inclined inwardly at an angle of between 13° and 20° to the longitudinal axis of said inner sleeve.

10. The holder of claim 6, wherein said inner sleeve is made from a planar sheet metal blank.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,806,263 Dated April 23, 1974

Inventor(s) Edward Webster

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 2, lines 40-41, "reduce" should be -- reduced --;

Claim 6, column 4, line 32, "projecting" should be -- protecting --;

Signed and sealed this 10th day of September 1974.

(SEAL)
Attest:

McCOY M. GIBSON, JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents