The present invention relates to an all plastic lipstick case having means for facilitating the movement of the lipstick therein from a retracted to a projected position. It is an object of the present invention to provide an all plastic lipstick case which is simple to manufacture, easy to assemble and operate, and relatively inexpensive.

Another object of the invention is to provide means on the inner casing for venting the inner casing to permit a uniform free movement of the lipstick and carrier in the inner casing.

These objects are accomplished by making the lipstick casing from three molded parts, each formed of plastic material. The inner part in which a lipstick carrier is mounted for sliding movement is provided with means cooperating with an outer sleeve for moving the lipstick carrier longitudinally of the casing to project or retract the lipstick and the inner part is provided with a venting panel disposed intermediate the end thereof to vent the casing to permit free movement of the carrier in the casing.

Other features and advantages of the invention will be apparent from the specification and claims when considered in connection with the accompanying drawings in which:

FIG. 1 shows a longitudinal sectional view of the device with the lipstick in dot and dash lines.

FIG. 2 is a view of the inner casing with the outer sleeve shown in section.

FIG. 3 is a side view of the inner casing showing the venting panel.

FIG. 4 is a top view of FIG. 1 without the lipstick.

FIG. 5 is a sectional view taken along line 5-5 of FIG. 1 with the lipstick in position.

In the drawings, an inner casing comprises a cylindrical member 11 molded of plastic material and having a transverse wall 12 at one end closing the member. The other end of the cylindrical member is open and is adapted to have a lipstick 13 (shown in dot and dash lines in FIG. 1) projected therefrom or retracted within the casing.

In order to project the lipstick, a carrier 14 is provided which is slidably mounted within the cylindrical member. Preferably, the carrier is a molded one-piece cup-shaped element 15 having rib 16 formed on its inner wall adapted to bite into a lipstick as it is inserted in the carrier, as shown in FIG. 5, to prevent relative rotation between the lipstick and carrier. The bottom of the carrier is provided with an aperture 17 or vent to permit air to be expelled from the cup as the lipstick is pressed therein. Projecting from one side of the carrier is a button 18 which is adapted to pass through a longitudinally extending slot 19 formed in the side wall of the inner member 11. As shown in FIG. 2, the slot extends from a point spaced inwardly from the closed end and extends longitudinally along the member to the free end of the member.

The inner end of the slot is provided with a lateral passage 20 into which the button is moved in the innermost position of the carrier and is held against inadvertent longitudinal movement. The slot adjacent the other end is provided with a lateral passage 21 extending from the opposite wall of the longitudinal slot and into which the button is moved in its projected position to prevent inadvertent retrograde movement of the lipstick from projected position.

In order to move the carrier from retracted to projected position, the device of the present invention is provided with a plastic sleeve 22 which is adapted to be mounted on the inner member solely for rotation with respect thereto and which is provided on its inner surface with a spiral groove 23 into which the end of the button on the carrier projects. It will be seen that by relatively rotating the sleeve on the inner member the button will be caused to move out of the bottom side passage 20 and into and along the longitudinal passage to project the lipstick, and at the completion of the projecting movement the button will move into the other lateral passage 21 to hold it in projected position. The sleeve is located on the inner member by having its lower end engage an abutment 24, preferably of a depth equal to the thickness of the sleeve, formed on the inner member and is held against the abutment by having an annular recess 24 formed on the inner surface at its outer end adapted to receive a projection or rim 25 on the end of the inner member. The edge of the rim is beveled at 26 to facilitate assembly of the device.

The cup-shaped carrier slidably engages the inner wall of the inner member 11 as it moves along and is stabilized against tilting movement. In order to facilitate its movement, the inner wall is provided with a venting panel 27 which extends for a substantial length along the wall intermediate the end.

The panel, as herein illustrated, comprises a plurality of square openings 28 extending through the wall of the inner member opposite the slot therein. While the openings may be of any shape, such as round, oval or the like and can be arranged in any particular pattern, in the herein illustrated form of the invention the square openings are arranged in a rectangular panel to provide for uniform and adequate venting of the inner member as the carrier and lipstick are moved therealong, the venting panel permitting oil blisters, which usually develop because of the high oil content of many lipstick formulations, to evaporate and prevent uncontrolled slipping therebetween.

The bottom of the inner member may be provided with knurling or other finger-engaging means 29 for facilitating the rotation of the inner member with respect to the sleeve which can be held in the fingers.

The device of the present invention can be readily molded from plastic material and the three elements thereof can be quickly and easily assembled. In assembling the device, the carrier 14 is inserted into the interior of the inner member with the button passing through the open end of the slot 19. After the button on the carrier has been moved to the bottom of the slot, the sleeve is passed over the end of the inner member. The beveled edge 26 and the resiliency of the material and the opening of the slot at the end of the inner member causes sufficient contraction of the projection 23 at the end of the inner member to enable the sleeve to be passed in the position of FIGS. 1, and 2 in which the projection snaps into the annular groove 24 in the sleeve and locks it in position against longitudinal movement but permits relative rotation between the sleeve and inner member.

The spiral groove 23 in the sleeve extends from the bottom of the sleeve and, as shown in FIG. 2, terminates at a point coinciding with the upper edge of the lateral passage 21 so that as the sleeve is put in position the inner end can receive the button 18 and move into contact with relation therewith for moving the button longitudinally of the slot 19 and into the proper lateral passages 20, 21 in response to relative rotation of the sleeve on the inner member.

With the sleeve in position, the elements are effectively locked together against separation. The carrier can be moved to its outer position and the lipstick can be readily inserted therein for retraction and projection by the carrier.

The movement of the carrier in the inner member is
greatly facilitated by the novel venting panel 27 disposed opposite the slot 19.

After the lipstick has been inserted in the carrier and moved to retracted position, a usual cover (not shown) may be positioned over the casing.

Variations and modifications may be made within the scope of the claims and portions of the improvements may be used without others.

I claim:

1. A plastic lipstick container comprising an inner cylindrical member of plastic material having a straight longitudinal slot in the side wall extending parallel to the axis thereof to an open outer end of the member, a lipstick carrier of plastic material comprising a one-piece, cup-shaped member slidably engaging the inner surface of the cylindrical member and having an integral button projecting therefrom and through said slot, and an operating sleeve of plastic material mounted on the outer surface of the member solely for relative rotation thereon and having an internal helical groove receiving the end of the button and cooperating therewith for moving the button of the carrier along the longitudinal slot in response to relative rotation between the sleeve and inner member, said inner member having a plurality of vent openings in the wall opposite the longitudinal slot arranged to form a venting means extending for a substantial distance along the member intermediate the ends thereof to facilitate movement of the lipstick carrier and a lipstick carried thereby along the inner member.

2. A plastic lipstick container comprising an inner cylindrical member of plastic material having a straight longitudinal slot in the side wall extending parallel to the axis thereof to an open outer end of the member, a lipstick carrier of plastic material comprising a one-piece, cup-shaped member slidably engaging the inner surface of the cylindrical member, said cup-shaped member having an integral button projecting therefrom and through said slot and having spaced inner ribs adapted to engage the sides of a lipstick inserted therein to prevent relative rotation therebetween, said cup-shaped member having a vent in the bottom to facilitate insertion of the lipstick therein, and a plastic operating sleeve mounted on the outer surface of the member solely for relative rotation thereon and having an internal helical groove receiving the end of the button and cooperating therewith for moving the carrier along the longitudinal slot in response to relative rotation between the sleeve and inner member, said inner member having a plurality of vent openings in the wall opposite the longitudinal slot arranged to form a venting means extending for a substantial distance along the member intermediate the ends thereof to facilitate movement of the lipstick carrier and a lipstick carried thereby along the inner member.

3. A plastic lipstick container comprising an inner cylindrical member having a transverse wall at one end forming a closure therefor and provided with a longitudinal slot in the side wall extending to the open outer end of the member, said slot having an inner stop passage extending laterally from one side thereof at the inner end thereof and having an outer stop passage extending from the other side at a point spaced inwardly of the outer end thereof, a lipstick carrier of plastic material comprising a cup-shaped member slidably mounted within the cylindrical member having an integral button projecting therefrom and through said slot, and a plastic operating sleeve mounted on the outer surface of the member solely for rotation with respect thereto and having an internal helical groove receiving the end of the button and cooperating therewith for moving the carrier along the longitudinal slot and into the stop passages in response to relative rotation between the sleeve and inner member, said inner member having a plurality of vent openings therein in the wall opposite the longitudinal slot and forming a venting panel extending for a substantial distance along the member intermediate the ends thereof to facilitate movement of the lipstick carrier and a lipstick carried thereby along the inner member.

4. An all-plastic lipstick container comprising an inner cylindrical member of plastic material having a transverse wall forming a closure for one end thereof and provided with a straight longitudinal slot in the side wall extending from adjacent the wall to the open outer end of the member, a lipstick carrier of plastic material comprising a cup-shaped member closely fitting within and slidably mounted on the cylindrical member and having an integral button projecting therefrom and through said slot, and an operating sleeve of plastic material rotatably mounted on the outer surface of the member and having an internal helical groove receiving the end of the button and cooperating therewith for moving the carrier along the longitudinal slot in response to relative rotation between the sleeve and inner member, said slot having an inner stop passage extending laterally from one side thereof at the inner end thereof and having an outer stop passage extending from the other side at a point spaced inwardly of the outer end thereof to receive the projection at each end of movement of the carrier in the member, said inner member having a plurality of longitudinally spaced vent openings in the wall opposite the longitudinal slot and extending for a substantial distance along the member intermediate the ends thereof to facilitate movement of the lipstick carrier and a lipstick carried thereby along the inner member.

5. In a lipstick device having a lipstick carrier movable therein, an inner tubular member of plastic material adapted to receive said lipstick carrier, said inner member having a transverse wall forming a closure for one end thereof and provided with a straight longitudinal slot in the side wall extending from adjacent the wall to the open end of the member and having a plurality of longitudinally spaced vent openings in the side wall opposite the longitudinal slot and forming a vent panel extending for a substantial distance along the member intermediate the ends thereof to facilitate movement of said lipstick carrier along the inner member.

References Cited in file of this patent

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Inventor</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,732,875</td>
<td>Anderson</td>
<td>Oct. 22, 1929</td>
</tr>
<tr>
<td>2,345,315</td>
<td>Anderson</td>
<td>Mar. 28, 1944</td>
</tr>
<tr>
<td>2,351,395</td>
<td>Broder</td>
<td>June 13, 1944</td>
</tr>
</tbody>
</table>
UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 2,999,585

Eric G. Hultgren

September 12, 1961

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 4, line 47, after "open" insert -- outer --.

Signed and sealed this 16th day of January 1962.

(SEAL)
Attest:

ERNEST W. SWIDER
Attesting Officer

DAVID L. LADD
Commissioner of Patents