

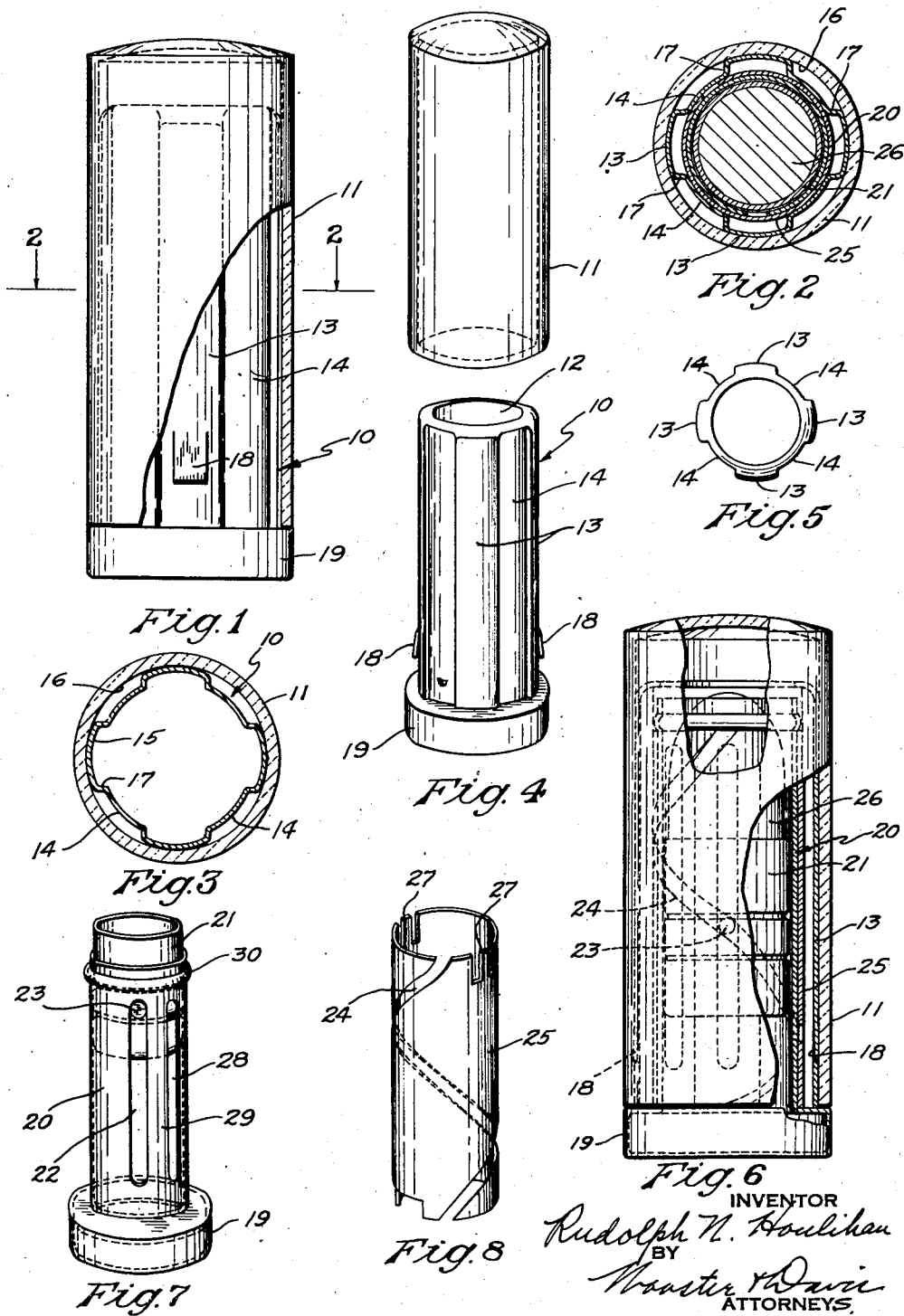
Sept. 23, 1941.

R. N. HOULIHAN

2,256,644

COSMETIC HOLDER

Filed Feb. 13, 1940



UNITED STATES PATENT OFFICE

2,256,644

COSMETIC HOLDER

Rudolph N. Houlihan, Bridgeport, Conn., assignor
to The Bridgeport Metal Goods Manufacturing
Company, Bridgeport, Conn., a corporation of
Connecticut

Application February 13, 1940, Serial No. 318,673

7 Claims. (Cl. 208—56)

This invention relates to cosmetic holders, particularly of the type for holding sticks of cosmetic such as lipsticks, shaving soap, and the like, and which employ a molded plastic material for the cap or cover member enclosing the body of the container.

It has been found that in containers of this type employing a cover or cap member of molded plastic material there is a good deal of expansion and contraction of the molded cover or cap. These are generally molded of this material in a solid condition and then drilled or bored out to the proper internal diameter to fit over the body or shell of the container. It has been found that such covers may fit all right when applied and then sometime later may be found to be too tight or too loose due to gradual contraction or expansion. It is therefore an object of the present invention to provide a construction for the body or shell of the container in which the contact surface between the shell and the inner wall of the cap is greatly reduced over what it would be with a plain cylindrical outer wall for the shell, and therefore the frictional resistance between the two members as the cap is slid on or off of the shell is greatly reduced insuring comparatively easy sliding movement of the cap should this cap have shrunk somewhat, and also to so form the walls of the body or shell that they may yield slightly in case the cap has shrunk so that it may be readily slid off or slid onto the shell even after changes in the cover.

With the foregoing and other objects in view I have devised the construction illustrated in the accompanying drawing forming a part of this specification. It will of course be understood that various changes and modifications may be employed within the scope of the invention.

In this drawing:

Fig. 1 is a side elevation of a holder involving this invention with a portion of the cover or cap broken away;

Fig. 2 is a transverse section substantially on line 2—2 of Fig. 1;

Fig. 3 is a similar view showing a slight modification and with the internal operating elements omitted;

Fig. 4 is a perspective view of the cap and body members in separated relation;

Fig. 5 is a plan view of the upper end of the shell or body member;

Fig. 6 is a partial side elevation and partial section showing one arrangement of internal operating elements which may be employed;

Fig. 7 is a perspective view of the operating member and the carrier for the cosmetic; and

Fig. 8 is a perspective view of the operating spiral sleeve.

The device illustrated is the type of cosmetic

holder used for lipsticks comprising a metal shell or body member 10 and a cap or cover 11 of molded plastic material, a great many types of which plastic material are now available on the market under various trade names and may be produced in different colors for different artistic effects. These caps are usually molded as a solid cylinder and then drilled or bored out to the proper internal diameter to slide over the metal body member or shell containing the lipstick to close the open end 12 of this shell and also enclose the shell itself as shown in Fig. 1. It has been found that due to the properties of these synthetic molded materials of gradually expanding and contracting after they are made that after a while they may be too large or too small to properly fit the metal shell even though it may have fitted when first made or applied. Thus if it shrinks and the container has stood for some time it may be so tight as to be difficult to remove, or it may have increased in size so as to become too loose.

I have found that if instead of making the inner body or shell 10 cylindrical I make the outer wall of spaced longitudinal extending portions the contact surface between the inner shell and outer cap may be greatly reduced over what it would be with a cylindrical shell thus greatly reducing the friction between them should the cap shrink sufficiently to permit removal of the cap, and the outer wall of the shell may also be constructed so that it may yield inwardly slightly under contraction of the cap maintaining an even frictional engagement between the two so that they will not bind. Thus the shell 10 may be drawn from sheet metal with a series of spaced relatively wide portions 13 extending longitudinally for the length thereof with the connecting walls 14 between them of considerably less diameter, the outer portions 13 being on the arc of a circle of substantially the inner diameter of the cap 11 as shown in Fig. 2, or they may be transversely curved on arcs 15 of somewhat smaller radius than the radius of the internal walls 16 of the cap as shown in Fig. 3, thus still further reducing the contact surface engaging the inner wall or surface of the cap and thus still further reducing the friction between them. The curved walls 13 and 14 of Fig. 2 or 14 and 15 of Fig. 3 are connected by continuous short walls 17, and because of this arrangement the outer walls 13 and 15 may yield inwardly slightly under pressure on their outer walls, the connecting walls 17 bending laterally slightly, which would not be possible were the outer wall a continuous cylindrical wall, and this slight yielding is even more readily secured in the construction shown in Fig. 3 where the radius of the wall portions 15 is somewhat less than the radius of the inner wall of the cap. The same internal operating

mechanism for shifting the cosmetic carrier may be used in the form of Fig. 3 as in Fig. 2, these elements merely being omitted in Fig. 3 to simplify the drawing. In order to hold the cap against accidental removal from the shell the shell may be lanced adjacent the inner end of the shell and spring ears bent outwardly as shown at 18 to yieldingly engage the inner wall of the cap to frictionally hold it in position.

This construction of shell may be used with different types of holders employing different types of mechanism within the shell for holding and carrying the cosmetic stick. In the present construction I have shown it applied to what is known as the swivel type of holder in which an operating hand piece or head 19 is rotated to advance the lipstick from the open end of the shell to expose it for use or to withdraw it into the shell after use, but it may also be used with other types of holders such for example as the sliding type.

The swivel type shown comprises an inner rotatable shell 20 to which the hand piece or cap 19 is connected, and slidable in this shell is the carrier 21 for the stick of cosmetic material 26. This shell has a longitudinal slot 22 through which a pin or other projection 23 carried by the carrier extends into a spiral slot 24 in an intermediate spring sleeve 25. This resilient or spring sleeve 25 is located at the inner side of the outer shell 10 and between this outer shell and the inner shell 20. As the shell 25 due to its resilient action tends to expand it frictionally engages the inner surfaces of the curved walls 14 of shell 10 and is held stationary, these walls 14 giving sufficient bearing and friction for this effect. Therefore as the inner shell 20 is rotated the pin 23 is carried along the spiral slot 24 to advance and retract the carrier 21 carrying the lipstick or other cosmetic stick 26. To give a smoother action the sleeve 25 is slotted to provide spring lugs 27 which are bent inwardly somewhat to frictionally engage the outer surface of the sleeve 20. Also, the sleeve 20 may have another longitudinal slot 28 spaced from the slot 22 to provide a relatively narrow strip of wall 29 which is forced outwardly somewhat so as to yieldingly engage the inner surface of the sleeve 25 to give a frictional bearing and smooth even operation of the inner shell. This shell may have an outwardly extending bead 30 at its upper end under which the upper end of the sleeve 25 engages to hold them in assembled relation. As above indicated, however, it is to be understood that this inner mechanism for advancing or retracting the lipstick is merely shown by way of example and to illustrate a complete article, but that other types of operating mechanism may be used with this improved outer shell construction. Also, the same internal mechanism for shifting the cosmetic carrier may be used in the two forms of Figs. 2 and 3.

Having thus set forth the nature of my invention, what I claim is:

1. A cosmetic holder comprising a body member to hold the cosmetic and open at one end, a hollow cylindrical cover embracing said body, said body being of general cylindrical shape having in its outer wall relatively wide longitudinal channels separated by relatively wide longitudinal rib portions having outer transversely curved walls of substantially the same curvature as the inner walls of the cover to engage the inner walls of the cover.

2. A cosmetic holder comprising a body member to hold the cosmetic and open at one end, a hollow cylindrical cover of molded plastic material embracing said body, and said body comprising spaced relatively wide longitudinal side wall portions with the outer surfaces thereof forming arcs of a circle of substantially the same diameter as the inner diameter of the cover, said side wall portions being separated by relatively wide longitudinal channels.

3. A cosmetic holder comprising a body of resilient sheet metal to hold the cosmetic and open at one end, a hollow cylindrical cover of molded plastic material embracing said body, and said body being provided in its side walls with spaced, longitudinally extending transversely curved raised portions which are relatively wide and of substantially the same curvature as the inner walls of the cover so that the outer curved walls may yield inwardly slightly on pressure from the cover and there is a bearing of material width on the cover.

4. A cosmetic holder comprising a hollow sheet metal body and a hollow cylindrical cover embracing said body, the side walls of said body comprising relatively wide longitudinally extending alternate depressed and raised portions of substantially equal width and with the outer surfaces of the raised portions transversely curved of substantially the same curvature as the inner wall of the cover to engage the inner wall of the cover and provide a bearing of material width on the cover but with much less contact surface with this wall than would a continuous cylindrical surface of the same diameter.

5. A cosmetic holder comprising a hollow sheet metal body and a hollow cylindrical cover of molded plastic material embracing said body, the side walls of said body comprising two wall portions each comprising spaced relatively wide arcs of a cylinder with one of a greater diameter than the other, and each arc of one portion being between two arcs of the other portion and connected at its edges to the arcs of the other portion by connecting walls, and the arcs of the outer portion being in a cylinder of substantially the diameter of the inner wall of the cover.

6. A cosmetic holder comprising a body member to hold the cosmetic and open at one end, a hollow cylindrical cover of molded plastic material embracing said body, and said body comprising spaced relatively wide longitudinal side wall portions to engage the inner wall of the cover with a contacting surface of material width and with the outer walls of said portions transversely curved on arcs of a slightly smaller radius than the inside radius of the cover.

7. A cosmetic holder comprising a hollow sheet metal body and a hollow cylindrical cover of molded plastic material embracing said body, the side walls of said body comprising longitudinally extending alternate depressed and raised portions with the outer surfaces of the raised portions being relatively wide and transversely curved on substantially the same curvature as the inner wall of the cover to engage the inner wall of the cover, the edges of the raised portions being connected with the edges of the intermediate depressed portions by short integral walls, and the depressed portions being the arcs of a circle of less diameter than the internal diameter of the cover.