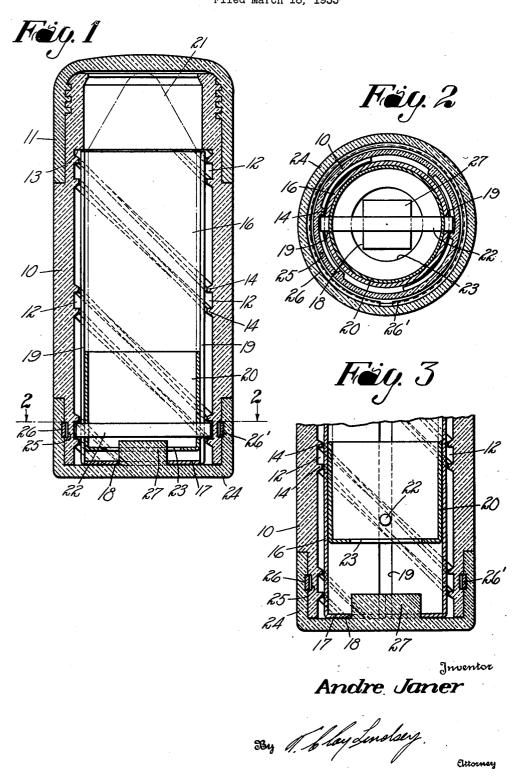
CONTAINER FOR LIP STICKS AND THE LIKE Filed March 18, 1933



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## CONTAINER FOR LIP STICKS AND THE LIKE

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for lip sticks and the like and in which the lip stick is adapted to be moved into and out of the container.

Containers of this character usually include an outer casing and it is very desirable for many obvious reasons to form this outer casing from casein or similar material having substantially the same characteristics as casein. The means 10 for moving the lip stick into and out of the casing usually comprises a cooperating spiral screw thread, a longitudinally extending slot, and a pin member associated with the lip stick carrier and adapted to engage in the screw thread and slot. It is desirable to have the spiral thread outermost and fixed to the outer casing. Heretofore when the outer casing has been formed from casein or the like, in order to effect this above mentioned arrangement, it has been necessary to provide a sleeve which is fixed to the inner surface of the outer casing and in which the spiral thread is formed. The provision of the spirally threaded sleeve has been necessary because it has not been possible to mold the spiral thread in 25 the outer casing when it is made of casein or similar moldable material.

It is an object of the present invention to mold a pair of spiral tracks or guideways directly in the inner surface of a casing of casein or other similar moldable material and thereby eliminate the outer sleeve.

It is another object of the present invention to provide an improved container of this character which is shorter than containers made heretofore and, at the same time, will accommodate the standard size lip stick or other cosmetic. This produces a more compact container which may be more easily handled and which takes up less space in a pocketbook or the like.

Still another object of the present invention is to provide an improved device of this kind in which no rivets or like fastening means are required for holding the several parts in assembled relation and, hence, the parts of my improved 45 container may be easily and quickly assembled.

A still further object of the present invention is to provide an improved device of this character in which the lip stick carrier has mounted thereon, for free axial movement, a pin, the opposite sides of which engage in the respective tracks or guideways of the casing. This mounting of the pin in a free manner allows it to centralize itself and to accommodate itself to the guideways.

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The present invention relates to containers improved device of this kind which is simple in construction and is economical to manufacture.

Other objects will be in part obvious, and in part pointed out more in detail hereinafter.

The invention accordingly consists in the features of construction, combination of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth and the scope of the application of which will be indicated in the appended claims.

In the accompanying drawing, wherein is shown, for illustrative purposes, one of the embodiments which the present invention may take,

Fig. 1 is a longitudinal central sectional view of my improved container and showing the po- 15 sition of the several parts when the lip stick and carrier therefor are in fully retracted position;

Fig. 2 is a sectional view on the line 2-2 of Fig. 1; and

Fig. 3 is a fragmentary longitudinal central sec- 20 tional view of my improved container and showing the position of the several parts when the carrier is in partly projected position.

Referring more particularly to the drawing, designates a casing which may be of any de- 25 sired shape and which is made of casein or some similar moldable material having substantially the same characteristics as casein. In the present illustrated disclosure, the casing 10 is shown as being of generally cylindrical form and open 30 at each of its ends. The upper end of the casing is of reduced diameter and is provided with an external thread which is adapted to cooperate with a complementary thread provided on a cover 11. The inner surface of the casing 10 tapers up- 35 wardly and is provided with a pair of spirally arranged tracks or guideways 12 which extend through the lower edge of the casing 10 at diametrically opposite points. The guideways 12 extend in the same direction and terminate at 40 points which are substantially in the same horizontal plane as the lower surface of the annular shoulder 13 formed on the interior of the casing and which overhangs the upper open ends of the guideways 12. Each guideway 12 com- 45 prises a pair of spirally arranged spaced apart parallel ribs 14 which may be molded integral with the casing at the same time at which the latter is molded and which project from the inner surface thereof. The formation of these 50 spiral spaced apart ribs provides a spiral space or groove therebetween the bottom of which is formed by the inner surface of the casing 10. It will be noted that the spiral formation of the ribs The present invention also aims to provide an 14 is a sharp one so that there is a considerable 55

distance between the successive helices of the guideways 12.

Disposed within the casing is a shell or tube is which may be of metal or any other suitable 5 material. The shell is preferably cylindrical so as to conform to the shape of the casing 10 and may be drawn to the desired shape. The upper end of the shell is open and the edge thereof abuts the shoulder 13 to prevent upward move-10 ment of the shell within the casing. The lower end of the shell is closed by a bottom 17 provided with a polygonal shaped opening 18 which, in the present instance, is illustrated as being rectangular for a purpose later to be described. The 15 shell is provided with a pair of diametrically disposed longitudinally extending slots 19 which may be open through the upper end of the side wall of the shell, while the lower ends of the slots terminate in the lower edge of the side wall of the 20 shell.

A generally cylindrical cup-shaped carrier 20 is provided for the lip stick 21, and the carrier 20 has a sliding fit within the shell 16. The side wall of the carrier 20 is provided with a pair of diametrically opposed openings which receive a pin 22 in a freely slidable manner. The opposite end portions of the pin 22 extend through the respective openings in the carrier and the respective slots in the shell 16 and are slidably received by the respective guideways 12. The bottom of the carrier is provided with a circular opening 23.

The lower end of the casing 10 is of reduced diameter and is closed by means of a cap 24 rotatably mounted on the casing. The lower reduced 35 portion of the casing is provided with an annular groove 25, and the cap has an annular groove These grooves are in registry when the cap is in place on the casing. A split resilient ring 26' is accommodated by the registering grooves 40 and straddles the joint between the casing and cap adjacent said grooves. The cap 24 is provided with a substantially centrally disposed boss 27 which is received by, and is of substantially the same size and shape as, the opening 18 in the bot- $_{45}$  tom of the shell 16 so that the boss is snugly received by the opening whereby, when the cap 24 is rotated, the shell is will also be rotated. The circular opening 23 in the carrier accommodates the upper end of the boss 27 when the car-50 rier is in the retracted position shown in Fig. 1.

To assemble my improved container, assuming that the lip stick is mounted upon the carrier and the pin is properly received by the openings in the carrier, the carrier may be positioned with-55 in the shell 16 by sliding the carrier into the open end of the shell and with the opposite ends of the pin engaged in the respective slots of the shell. The shell 16 and carrier 20 may then be introduced into the casing 10 through the lower 60 open end thereof until the upper edge of the wall of the shell engages the shoulder is of the casing. As the shell is being moved upwardly into the casing, the opposite ends of the pin 22 may be engaged in the respective guideways 12. The  $_{65}$  ring 26' may now be inserted in the groove 25 which has a depth substantially equal to the thickness of the ring. The cap 24 may now be slid into proper position over the lower end of the casing, at which time the grooves 25 and 26 70 will register and the ring 26' will spring into the groove 26. Since this groove 26 has a depth less than the width of the ring, the latter will assume a position in which it is in line with the joint between the casing and cap, thereby perma-75 nently locking the cap and casing together, but

permitting rotation of the cap on the casing. The polygonal shaped boss 27 and opening 18 in the shell 16 effect a driving connection between the cap and shell so that rotation of the cap also rotates the shell which, in turn, rotates the pin 22 and thereby causing the pin and carrier to travel upwardly in the casing by virtue of the spiral guideways 12. Since the shoulder 13 abuts the upper edge of the shell i6 and overhangs the guideways 12, it will engage the opposite ends 10 of the pin 22 to limit the upward movement of the pin and carrier to prevent the pin from escaping from the guideways. The pin 22, due to its loose mounting, may centralize itself and accommodate itself to the taper of the casing and 15 any irregularities in the guideways. It is also noted that the shell is held in the casing by having contact at only two points, namely, the shoulder 13 and cap 24, being free of connection with the casing between these points.

It is also apparent that, since there are no rivets or other similar fastening devices employed, the several parts of my container may be quickly and readily assembled without the use of tools or the like and the container may be made relatively short. It is also obvious that, by providing guideways having relatively large helics and upstanding ribs, the guideways may be molded directly in the casein casing thus eliminating the outermost sleeve heretofore considered necessary when a casing of casein or other similar moldable material was employed.

It will be observed that in my improved arrangement the casing has a pair of spiral grooves, and the pin associated with the carrier has its opposite ends respectively engaging in the grooves, an arrangement which gives a very well balanced movement and permits of a carrier of reduced height. Since the carrier is supported at opposite sides by the pin, there is no tendency to cant the carrier when it is moved up and down within the shell and, therefore, the pin may be located adjacent the lower end of the carrier and the carrier may be made relatively shorter.

As many changes could be made in the above 45 construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying 50 drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

I claim as my invention:

1. In a container for lip sticks or the like, a 60 casing of casein or the like having a pair of spirally arranged guideways molded directly upon its inner surface, each of said guideways comprising a pair of spiral spaced apart parallel ribs integral with, and projecting from, the inner surface of said casing, a rotatable shell disposed within said casing and having a pair of longitudinally extending slots, a rotatable carrier disposed within said shell and adapted to have longitudinal movement therein, and a pin on said carrier and having its opposite ends respectively extending through said slots and engaging in said guideways.

2. In a container for lip sticks or the like, a casing of casein or the like having a pair of 75

spirally arranged guideways molded directly upon its inner surface, a rotatable shell disposed within said casing and having a pair of longitudinally extending slots, a rotatable carrier disposed within said shell and adapted to have longitudinal movement therein, and a pin mounted on said carrier and having free axial movement therein, the opposite ends of said pin respectively extending through said slots and engaging in

10 said guideways.

3. In a container for lip sticks or the like, a casing having a spiral guideway on its inner surface, a rotatable shell disposed within said casing and having a longitudinally extending slot, a carrier mounted for longitudinal sliding movement within said shell and having a portion extending through said slot and engaging in said guideway, a cap rotatably mounted on said casing and having a boss, said shell having a bottom provided with an opening adapted to receive said boss when the cap is mounted upon the casing. said boss and opening being polygonal in shape so as to set up a driving connection between the cap and shell when the boss is disposed within 25 the opening.

4. In a container for lip sticks or the like, a casing having an internal shoulder adjacent its upper end and a spiral guidway on its inner surface, a cap on the lower end of said casing rotatably but axially immovably secured to said casing, a shell within said casing the opposite ends of which bear against said shoulder and cap respectively and having a longitudinally extending slot therein, a carrier slidably mounted within said shell and having a portion extending through said shell and engaging in said guideway, means for permanently locking said cap to said casing for relative rotation with respect thereto but against axial separation therefrom, 40 and means for associating said cap and said shell together against relative rotation.

5. In a container for lip sticks or the like, a casing having its opposite ends open and having on its inner surface a spiral guideway which opens through the lower edge of the wall of said casing, a shell rotatably mounted within said casing and having a longitudinally extending slot which opens through the upper edge of the side wall of said shell, a carrier slidably received by said shell and having a portion extending through said slot and engaging in said guideway, and a cap rotatably mounted on the lower end of said casing and having a polygonal shaped 10 boss, said shell having a bottom provided with a polygonal shaped opening adapted to receive said boss so that said shell will rotate with said cap.

6. In a container for lip sticks or the like, a casing having an integral spiral guideway on its 15 inner surface, a shell rotatably mounted in said casing and having a longitudinally extending slot. a rotatable carrier disposed within said shell and adapted to have longitudinal movement therein and having a portion extending through 20 said slot and engaging in said guideway, a cap rotatably but axially immovably mounted on said casing and having an operative connection with said shell, means between said casing and said cap for permanently locking the same together 25 for relative rotation therebetween but against axial separation thereof, and means for associating said cap and shell together against relative rotation therebetween.

7. In a container for lip sticks or the like, a 30 casing having a spiral guideway on its inner surface, a shell rotatably mounted in said casing and having a longitudinally extending slot. a rotatable carrier disposed within said shell and adapted to have longitudinal movement therein 35 and having a portion extending through said slot and engaging in said guideway, a cap rotatably mounted on said casing and having an operative connection with said shell, said cap and casing having registering grooves, and a resilient 40 ring confined within said grooves and disposed in line with the joint between said cap and casing. ANDRE JANER.