Nov. 5, 1935. N. KASDAN ET AL 2,019,680

LIP STICK HOLDER

Filed Aug. 31, 1932

Fig. 1.

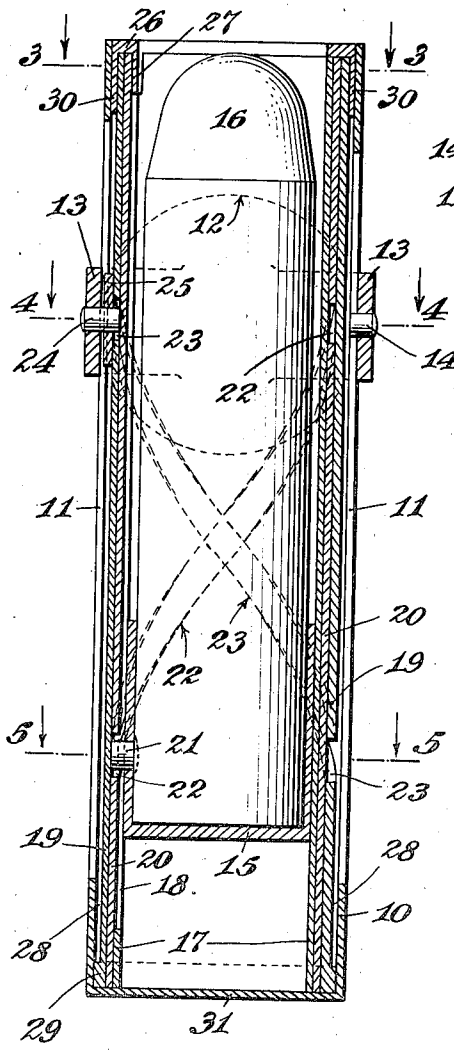


Fig. 2.

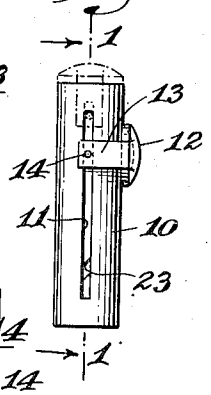


Fig. 3.

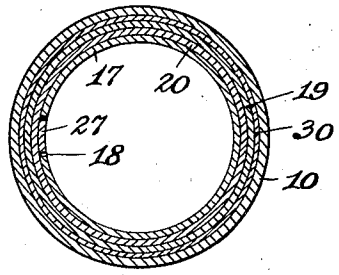


Fig. 4.

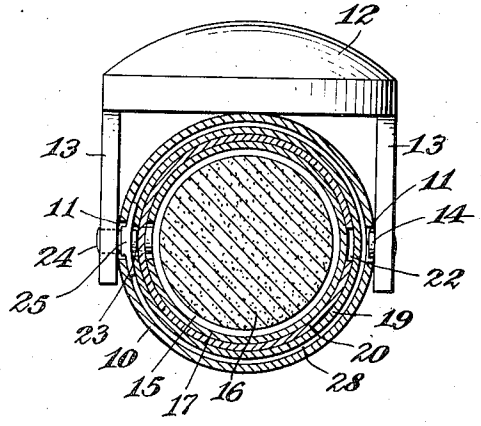
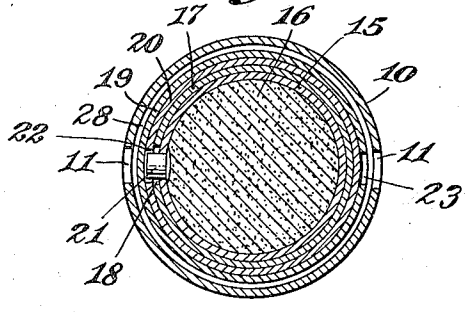


Fig. 5.



INVENTORS:
Nathan Kasdan and
Richard F. Landwehr

BY Alf. R. Johnes.
their ATTORNEY.

Patented Nov. 5, 1935 2,019,680

UNITED STATES PATENT OFFICE

2,019,680

LIP STICK HOLDER

Nathan Kasdan, New York, and Richard F. Landwehr, Woodside, N. Y., assignors to Majestic Metal Specialties, Inc., New York, N. Y., a corporation of New York

Application August 31, 1932, Serial No. 631,204

14 Claims. (Cl. 206—56)

This invention relates to lipstick holders and more especially to those of the so-called one-hand type which are adapted for opening, ejecting, using, returning and closing the lipstick all with one hand. This invention also relates to that class of lipstick holders in which the actuating means slides down to eject the lipstick and moves upward to withdraw the lipstick material into the casing.

Heretofore lipstick holders of the above class have contemplated a flexible band connecting the carrier and actuator. Such constructions generally require a great overall length because at one end of the container where the flexible band is bent the bend must be gradual inasmuch as the band is of metal.

An object of this invention is to decrease the length necessary for a lipstick holder of this type in order to contain a lipstick of a given length and at the same time retain the advantages of a one-hand lipstick holder.

Referring to the drawing Fig. 1 is a section on the line 1—1 of Fig. 2. Fig. 2 is an outside view of the device shown in Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a section on the line 4—4 of Fig. 1. Fig. 5 is a section on the line 5—5 of Fig. 1.

Referring to the drawing the casing 10 is provided on opposite longitudinal sides with the slots 11 and has its upper end portion normally closed by the cap or actuator 12, the opposite end of the casing 10 being permanently closed. The cap 12 has the arms 13 secured to a pivot 14 slidable along the slots 11.

Located within the container casing 10 is a carrier 15 for supporting lipstick material 16 and the like. A stationary inner tube 17 is provided with a longitudinal slot 18. Contiguous the tubes 17 is a rotatable tube 20 provided therein with a helical slot or guide 22. Around the tube 20 is another rotatable tube 19 having therein a helical slot or guide 23 which extends in a direction opposite to that of the helical slot in the tube 20. A pin 21 on the carrier 15 extends through the slot 18 and into the helical slot 22 of the inner rotatable tube 20. The tubes 19 and 20 are secured together by soldering or in some other convenient manner so that these tubes always rotate together. A pin 24 extends into the helical slot 23 of the outer tube 19 and thence through the outer casing 10 where it is engaged by one of the cover arms. The pin 24 is provided with an insert, crosshead or shoulder portion 25 sliding in the space 28 indicated between the casing 19 and the outer rotatable tube 19.

A ring 26 is soldered to the top of the casing 10 and carries a projection 27 for engagement within the slot 18 of the tube 17 in order to prevent rotation of the tube 17. Ring 26 is also provided with a flange 30 located as shown in Fig. 1 within the space 28 between the casing 10 and tube 19. Tube 19 at the lower end is provided with a flange 29 for spacing the lower end portion of the tube from the casing. The bottom of the casing is closed as shown at 31 so that it may take any downward thrust from the tubes 19 and 20. The ring 26 takes any upward thrust from these tubes.

In operation the lipstick holder is held in the fingers of one hand and the thumb may swing the cover 12 about its pivots to open the casing. After the cover has been swung to an open position it may be slid longitudinally of the casing by the thumb continuing its movement. As the cover is moved downwardly the pin 24 passing through the slot 11 and engaging the helical slot 23 in the outer tube 19 causes the pair of tubes 19 and 20 to be rotated together since they are keyed or soldered. The pin 21 extending from the carrier through the slot 18 of the inner stationary tube 17 into the helical slot 22 of the inner rotatable tube 20 is caused to travel upwardly without rotation as the inner tube 20 is rotated under the influence of a downward movement by the cover and actuating pin 24. The length of the slot 11 may control the travel of the pin 24 and the extent of movement of the carrier 15.

To assemble the device illustrated in Fig. 1 the carrier 15 may be slid into the tube 17, its pin 21 entering the open upper end of the slot 18 in tube 17. The tubes 19 and 20 being withdrawn from the casing, the tube 17 and the carrier may be inserted within the tubes 19 and 20, the pin 21 entering the open upper end of the helical slot 22. The rotatable tubes together with the inner tube 17 and carrier 15 may next be assembled within the casing by insertion through the open upper end of the casing 10. The pin 24 and its shouldered insert 25 is placed in position on the inside of the casing 10 with the pin projecting through the casing. After the pin 24 is in place the inner tubes may next be inserted within the casing by seeing that the open lower end of the helical slot 23 in the tube 19 receives the pin 24. The ring 26 may next be placed in position and soldered.

As a last operation the cover may be attached to the casing by first inserting the pin 14 in the slot 11 and then causing the opposite arm 13 to

spring over and engage the pin 24, or vice versa, by springing pin 14 into slot 11.

A special feature of the present invention is the reduction in overall length required for the outer casing to accommodate a lipstick 16 of prescribed length. Due to the slots 22 and 23 overlapping each other longitudinally throughout substantially their full length no space is wasted longitudinally of the casing. The cover 12 may if desired be so constructed that it may be opened in only one direction and not swung to either side of the casing. The slots 22 and 23 are in the embodiment illustrated of substantially the same pitch although extending in opposite directions. If desired the pitch of the slot 23 in the outer tube may be made slightly greater than the pitch to the slot 22 in order to increase the ease of operation. As shown the inclination of each slot is about 45 degrees. When the slot 23 is given a greater inclination the translational movement of the pin 24 may more readily and easily rotate the tubes 19 and 20. When the pitch of the slot 22 of the inner tube 20 is lowered to an amount less than 45 degrees there will be less tendency for the carrier 15 to be lowered under its own weight even if the cover and pin might be released. As shown in Fig. 1 the pivot pin on only one side of the cover serves as an actuator, the pin on the opposite side merely guiding the cover movement longitudinally of the casing.

If desired, the inner tubes 17, 19 and 20 may be assembled through the bottom if the bottom is formed by a removable or soldered cap and the ring 26 is made integral with the casing 10 by having it stamped or bent over. It may also be desirable to round the top of the ring 26 as well as the inner surface of the cap on a radius about the pivot of the cap in order to provide a better fit and facilitate the swinging movement of the cap. In the latter event it will be desirable to form successive steps on the under side of the ring 26 in order that each tube may have a separate flat bearing surface for its end, because otherwise only an edge of a tube would bear against the ring 26 if it were sloping or rounded on top and of uniform thickness.

In practice it has been found desirable to make the helical slot 23 have an inclination to the horizontal of about 47 degrees and the slot 22 have an inclination of the horizontal of about 43 degrees in Fig. 1. Each slot 22 and 23 preferably has a closed end at the opposite end portion of the tube from the other slot closed end.

In the embodiment illustrated the cover arms engage a flattened portion of the casing when in closed position or else a small projection and cooperative recess may be used, one on the casing above the top of the slot 11 and the other on the inside of one or both arms 13 so that the cover will be yieldably held in closed position and at the same time the carrier held in its lowermost position. If a small projection is used on an inner surface of an arm it is located far enough away from the pivot so as not to contact with the casing when the cover is in the position shown in Fig. 2.

We claim:

1. A lipstick holder comprising a longitudinally slotted container, a cover, a carrier within the container, a longitudinally slotted stationary inner tube, a pair of concentric tubes connected for rotating together between the container and the inner tube, a helical slot in each of said concentric tubes, said slots extending in opposite directions and being longitudinally overlapped throughout the major portion of their length, means connecting the cover and outer helical slot, and means passing into the inner tube and connecting the carrier with the inner helical slot whereby longitudinal movement of the cover actuates the carrier in the opposite direction.

2. A holder comprising a casing having a longitudinal slot therein, a carrier for material, an actuating knob in said casing slot, a stationary inner tube provided with a longitudinal slot therein adjacent the carrier, a rotatable helically slotted tube contiguous the inner tube, a second rotatable tube outside the first mentioned rotatable tube, secured for rotation with said first mentioned rotatable tube and being helically slotted in an opposite direction to that of said first mentioned rotatable tube, said knob extending into the helical slot of the outer rotatable tube, a pin on the carrier extending through the slot of the inner tube and into the helical slot of the first mentioned and inner rotatable tube, the helical slot in the inner rotatable tube being open at the top thereof while the helical slot in the outer rotatable tube is open at the bottom.

3. A holder comprising a casing having a longitudinal slot therein, a carrier for material, an actuating knob in said casing slot, a stationary inner tube provided with a longitudinal slot therein adjacent the carrier, a rotatable helically slotted tube contiguous the inner tube, a second rotatable tube outside the first mentioned rotatable tube, secured for rotation with said first mentioned rotatable tube and being helically slotted in an opposite direction to that of said first mentioned rotatable tube, said knob extending into the helical slot of the outer rotatable tube, a pin on the carrier extending through the slot of the inner tube and into the helical slot of the first mentioned and inner rotatable tube, said casing and outer rotatable tube being spaced apart for a major portion of their length and said knob being provided with a shoulder located between the casing and outer rotatable tube.

4. A holder comprising a casing having a longitudinal slot therein, a carrier for material, an actuating knob in said casing slot, a stationary inner tube provided with a longitudinal slot therein adjacent the carrier, a rotatable helically slotted tube contiguous the inner tube, a second rotatable tube outside the first mentioned rotatable tube, secured for rotation with said first mentioned rotatable tube and being helically slotted in an opposite direction to that of said first mentioned rotatable tube, said knob extending into the helical slot of the outer rotatable tube, a pin on the carrier extending through the slot of the inner tube and into the helical slot of the first mentioned and inner rotatable tube, a ring at the top of said casing provided with an inturned projection adapted to engage the inner stationary tube to prevent rotation thereof, said ring being adapted to take any outward thrust from said rotatable tubes, the bottom of said casing being closed to take any downward thrust of said rotatable tubes.

5. A lipstick holder including a casing, a carrier therein for lipstick material, an actuator for the carrier slidable longitudinally of the casing and rotatable means within the casing connected to the carrier and actuator for moving the carrier in an opposite longitudinal direction to the movement of the actuator, a cover for the casing pivotally connected at one side to said actuator and independent of the actuator on the opposite side where it is pivotally connected to a slidable pin.

6. A lipstick holder including a casing, a carrier

therein for lipstick material, an actuator for the carrier slidable longitudinally of the casing, and rotatable means within the casing connected to the carrier and actuator for moving the carrier in an opposite longitudinal direction to the movement of the actuator, said rotatable means being provided with guides forming an angle therebetween, a cover for the casing, said actuator constituting a pivot pin on which the cover is mounted to swing, said pivot pin also cooperating with one of said guides.

7. A lipstick holder including a casing, a carrier therein for lipstick material, an actuator for the carrier slidable longitudinally of the casing and rotatable means within the casing connected to the carrier and actuator for moving the carrier in an opposite longitudinal direction to the movement of the actuator, said rotatable means being provided with a pair of oppositely inclined guides which cross each other, one of said guides cooperating with said actuator and the other guide cooperating with the carrier, the first mentioned guide being inclined to the casing longitudinal axis less than 45° and the second mentioned guide with which carrier cooperates being inclined to the casing longitudinal axis more than 45°.

8. A lipstick holder comprising a casing provided with a longitudinal slot, a pivotal cover, a carrier, a crosshead sliding in and guided substantially entirely by said casing slot, mechanism between the carrier and casing for moving the carrier in the opposite direction to the crosshead movement, said cover being pivoted to said crosshead.

9. A lipstick holder comprising a casing, a rotatable means within the casing, a sleeve within the rotatable means fixed with respect to the casing, a carrier within the sleeve, the casing being provided with a longitudinal slot, a pair of oppositely disposed helical guide means carried by the rotatable means, an actuating pin extending through the casing slot for cooperation with one of said helical guide means, the sleeve being provided with a longitudinal slot, a carrier actuating pin extending through the sleeve slot for cooperation with the other helical guide means, said casing being provided with abutments to take up longitudinal thrusts in each direction on said rotatable means.

10. A lipstick holder comprising a casing, a rotatable means within the casing, a sleeve within the rotatable means fixed with respect to the casing, a carrier within the sleeve, the casing being provided with a longitudinal slot, a pair of oppositely disposed helical guide means carried by the rotatable means, an actuating pin extending through the casing slot for cooperation with one of said helical guide means, the sleeve being provided with a longitudinal slot, a carrier actuating pin extending through the sleeve slot for cooperation with the other helical guide means, at least one of the helical guide means being inclined less than 45 degrees to the longitudinal axis of the casing.

11. A lipstick holder comprising a casing, a rotatable means within the casing, a sleeve within the rotatable means fixed with respect to the casing, a carrier within the sleeve, the casing being provided with a longitudinal slot, a pair of oppositely disposed helical guide means carried by the rotatable means, an actuating pin extending through the casing slot for cooperation with one of said helical guide means, the sleeve being provided with a longitudinal slot, a carrier actuating pin extending through the sleeve slot for cooperation with the other helical guide means, the casing being provided with means engaging the sleeve to prevent rotation thereof, said last mentioned means engaging the end of the rotatable means, and means at the other end of the said rotatable means to transmit end thrusts to the casing.

12. A toilet stick holder comprising a casing provided with a longitudinal slot, a pivotal cover, a carrier, a crosshead sliding in and guided substantially entirely by said casing slot, rotatable mechanism between the carrier and casing for moving the carrier in the opposite direction to the crosshead movement, said cover being pivoted to said crosshead.

13. A toilet stick holder comprising a longitudinally slotted container, a cover, a carrier within the container, a longitudinally slotted inner tube, a pair of concentric tubes, connected for rotating together between the container and the inner tube, a helical longitudinal slot in the outer one of said connected tubes, an actuator pin projecting from outside the container through the longitudinal slot and into the helical slot in the outer one of said pair of tubes, a longitudinal slot in the inner one of said connected tubes forming an angle with that in the outer tube and longitudinally overlapping such slot throughout the major portion of its length, a pin connected to the carrier and passing through the slot of the stationary tube and into the slot of the inner one of said pair of rotatable tubes, said slot in the stationary tube and in the inner one of said pair of rotatable tubes forming an angle therebetween such that longitudinal movement of the actuator pin effects opposite movement of the carrier, said cover being connected to said actuator pin so that on moving the cover and sliding it downward the carrier moves toward the end of the container opened by said cover.

14. A toilet stick holder comprising a longitudinally slotted container, a cover, a carrier within the container, a longitudinally slotted inner tube, a pair of concentric tubes, connected for rotating together between the container and the inner tube, a helical longitudinal slot in the outer one of said connected tubes, an actuator pin projecting from outside the container through the longitudinal slot and into the helical slot in the outer one of said pair of tubes, a longitudinal slot in the inner one of said connected tubes forming an angle with that in the outer tube and longitudinally overlapping such slot throughout the major portion of its length, a pin connected to the carrier and passing through the slot of the stationary tube and into the slot of the inner one of said pair of rotatable tubes, said slot in the stationary tube and in the inner one of said pair of rotatable tubes forming an angle therebetween such that longitudinal movement of the actuator pin effects opposite movement of the carrier, the helical longitudinal slot in the outer one of said pair of rotatable tubes being open at one end and the longitudinal slot in the inner one of said pair of rotatable tubes being open at the opposite end from that at which the slot in the outer one is open.

NATHAN KASDAN.
RICHARD F. LANDWEHR.