

Nov. 16, 1937.

N. KASDAN ET AL

2,099,488

LIPSTICK HOLDER

Filed Oct. 20, 1934

Fig. 1.

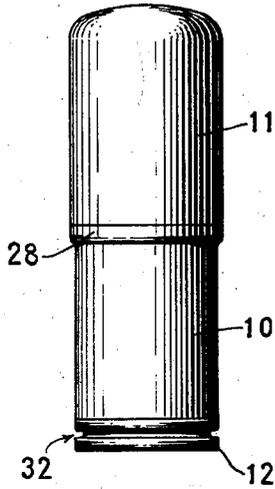


Fig. 2.

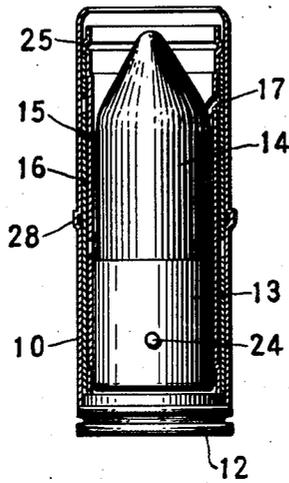


Fig. 3.

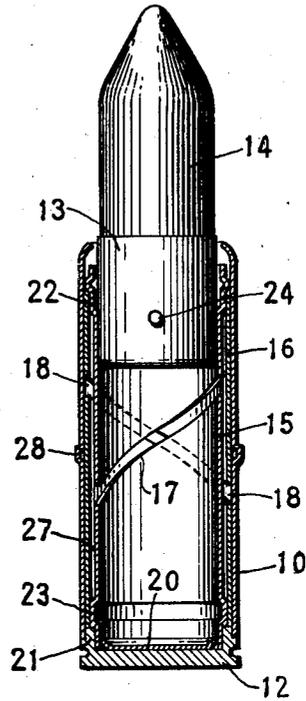


Fig. 4.

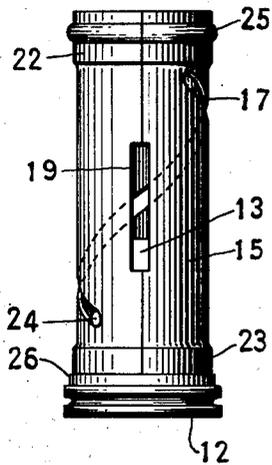


Fig. 5.

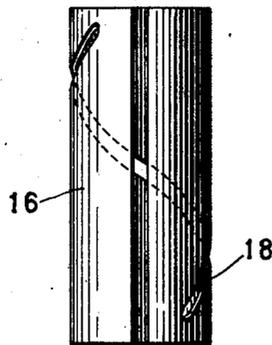
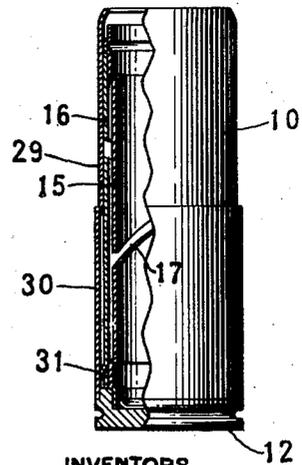


Fig. 6.



INVENTORS
NATHAN KASDAN, AND
RICHARD F. LANDWEHR
BY
H. R. Jones
ATTORNEY

UNITED STATES PATENT OFFICE

2,099,488

LIPSTICK HOLDER

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

Application October 20, 1934, Serial No. 749,136

16 Claims. (Cl. 206-56)

This invention relates to a holder for cosmetic sticks and the like, and has for its object to simplify and cheapen the construction thereof. Another object is to provide a slow motion rotary actuated device of this class which has a helical guide means bent from a stamped plate and arranged at such an angle as to hold the carrier in extended position against end thrusts. A further object is to provide such a device having a pair of thin relatively rotatable tubes or sleeves each slotted to receive a carrier pin and in which the bearing action of one tube rotating on the other is made smoother by having them slightly spaced apart throughout the major portion of their length.

Referring to the drawing, Fig. 1 shows the outside of one embodiment of this invention.

Fig. 2 is a longitudinal section through the device of Fig. 1.

Fig. 3 is a longitudinal section showing the carrier in extended position.

Fig. 4 shows the outside of the inner one of the helically slotted tubes or sleeves.

Fig. 5 shows the outer one of the helically slotted sleeves.

Fig. 6 is a longitudinal view partly in section of a slightly modified construction.

The device of the present invention comprises a casing 10 provided with a removable cover 11 which is taken off before movement of the actuator 12 to eject the carrier 13 containing a stick 14 of rouge or other toilet preparation. A sleeve 15 is within the outer sleeve 16, the inner sleeve containing a helical slot or guide means 17 while the outer sleeve 16 contains another helical slot or guide means 18, which is substantially, equally and oppositely inclined to the first slot 17.

The tube 15 is of thin sheet iron or other soft metal provided with a coating of tin, as is customary for metal with which the rouge might come in contact. The tube 15 is only about .012 inch in thickness, being formed from a flat sheet stamped out and rolled to the desired diameter. When the sleeve is permanently secured within the actuator cap 12, the longitudinal edges substantially abut, as shown in Fig. 4. The longitudinal perforation 19 is left to provide a space through which a tool may project when used in assembling the holder of this invention. Adjacent each end portion of the tube 15 is located a two step enlargement, the first step at each end designated by the numbers 22 and 23, is formed by an integral enlargement which consists of bearing surfaces on which the outer tube 16 may

rotate with respect to the inner tube. Due to these tubes being of very thin sheet material, it has been found that they are in danger of becoming distorted or flattened in handling and stacking, or from unknown causes.

Even a slight flattening of one of these tubes might affect the ease with which one rotates with respect to the other, and in order to eliminate a danger of some part of one tube catching on some part of another, it has been found desirable to keep the major portion of the length of these tubes slightly spaced apart. This is why the bearing surfaces 22 and 23 are provided. Figs. 2, 3, and 6 illustrate how these bearing surfaces 22 and 23 keep the tubes 15 and 16 slightly spaced apart. The second step at each end portion of the tube 15 is for the purpose of taking up any end thrusts between the tubes 15 and 16. At the top, this second step comprises an enlarged bead 25, while at the bottom the shoulder 26 formed by the top edge of the actuator cap constitutes the lower abutment for end thrusts on the sleeve 16.

The tube 15 is permanently secured to the actuator cap 12 by clamping the end of the tube 15 extending into the cap as shown in Fig. 3. A rounded disc 20 having its periphery bent as illustrated is adapted to hold the tube 15 and the cap 12 securely together, after pressure on the disc 20 has forced the flexed ends into tight contact with the wall of the tube 15, by a slight expansive action of the disc 20. The actuator cap illustrated is a lathe or screw machine product and its wall is thickened or reinforced at 21 to withstand any strain due to the disc 20.

Projecting from the carrier 13 is the usual carrier pin 24 and in this instance the carrier pin extends through the slot 17 in the sleeve 15 across the slight space separating the sleeves 15 and 16, and into the helical guide means 18 of the tube 16. The sleeve 16 is also formed from a rolled stamped sheet, but preferably this sleeve 16 is formed of a material having a slight resiliency or tendency to open so that the longitudinal edges are spaced apart as shown in Fig. 5 when the sleeve is out of the casing.

This slight expansive tendency of the sleeve 16 suffices to hold this sleeve frictionally secured to the casing 10 so that it is stationary while the sleeve 15 is rotated by the actuator 12.

The shoulder 28 on the casing constitutes an abutment for the removable cap or cover 11. In Fig. 3 the space between the sleeves 15 and 16 is indicated by the numeral 27.

Fig. 6 is similar to the construction illustrated

in the preceeding figures, except that the casing has an upper end portion 29 of reduced diameter, so that when the cover 11 is placed in position the outside diameter of the cover and the enlarged portion 30 of the casing are substantially the same and the holder with the cover in place gives the appearance of being a cylinder of substantially uniform diameter. In Fig. 6 the frictional contact between the casing portion 29 and the sleeve 16 holds the sleeve 16 stationary while the inner sleeve 15 is being rotated by the actuator 12. Instead of filling the space between the enlarged portion 30 of the casing and the tube 16 with an additional sleeve or strip, it has been discovered that providing a circumferential bead 31 on the lower end portion of the tube 16 serves the same function at less cost.

Among the advantages of this invention may be mentioned the provision of an inexpensive slow motion rotary actuated holder for cosmetic sticks and the like. The use of a relatively low pitched thread, that is, a thread or helical guide means having an inclination of 45 degrees or more to the vertical is desirable in order that the stick material may be held in extended position without danger of its being retracted under the application of a light downward thrust upon it. When this is so, the carrier does not have to be held in extended position but is held automatically by the low pitch helical guide means. The provision of a screw thread having any desired low pitch is a simple matter, aside from cost. Such low pitched threads generally require a seamless tube and a lathe operation in forming them. On the other hand, the cheapest construction involves a tube or sleeve which is made by the stamping out of a flat sheet and then rolling the sheet to the desired diameter. Where such stamped tubes are rolled, the presence of a longitudinal slit where their edges substantially abut is inevitable. It is extremely difficult to cut a helical guide means slot or screw thread across the slit in such a thin tube without complications in both assembly and operation with consequent danger of the carrier pin sticking as it passes the slit. In order to partake of the advantages of the stamped out rolled sleeves in cheapness of construction and also to partake of the advantages of a low pitch holder, it has been found desirable to have the carrier pin guide slots in each sleeve inclined about 45 degrees as shown, with the slot in one sleeve inclined in an opposite direction to that in the other. Such an arrangement gives the desired slow motion without the necessity of either slot attempting to cross the slit in its sleeve.

Another feature contributing to smoothness of operation is the use of the bearing surfaces 22 and 23 for keeping the sleeves 15 and 16 slightly spaced apart. Another feature is the securing of the sleeve 15 within the actuator cap 12 by means of the flexed disc 20 having slight expansive action to hold the walls of the tube 15 tightly in place against the walls of the cap 12.

The use of the annular spacing bead 31 in Fig. 6 does away with the need for an additional sleeve or spacing tube between the casing and the outer sleeve, 16.

Instead of having the actuator 12 knurled or otherwise roughened as is common, it has been found desirable to have the surface of the actuator relatively smooth so as to allow the operator's hand to slip or slide around the periphery after the carrier has reached an extreme position of its travel in either direction. This lessens the stress placed upon the carrier pin and upon the

sleeves 15 and 16, and reduces the shock of impact caused by the carrier pin reaching the ends of the guide slots 17 and 18. In other words, with the thin sheet metal sleeves used in this invention the operator's hand on the actuator functions after the manner of a slipping clutch after the carrier has reached an extreme position of its travel. In order to prevent the operator's hand from slipping longitudinally of the casing, it has been found desirable to provide a groove 32 between a pair of ribs. The adjacent edges of the ribs are preferably fairly sharp to also assist the operator's hand from slipping longitudinally. Instead of only one groove between two ribs, additional ribs and grooves may be used to provide a larger gripping surface longitudinally of the casing.

The longitudinal edges of the sleeve 16, when it is placed in the casing 10, may or may not be closed or substantially contiguous one another, but preferably these edges do abut.

We claim:

1. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation therebetween, a pin projecting from the carrier into cooperation with said sleeves, said sleeves being provided with oppositely inclined helical guide means for the carrier pin, said guide means being at such inclination as to hold the carrier against downward movement under an axial thrust, each of said sleeves being longitudinally slit and neither guide means crossing the slit in its sleeve.

2. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation therebetween, a pin projecting from the carrier into cooperation with said sleeves, said sleeves being provided with oppositely inclined helical guide means for the carrier pin, said guide means being at such inclination as to hold the carrier against downward movement under an axial thrust, each of said sleeves being longitudinally slit, and said guide means in each sleeve being substantially less than 360 degrees in extent and substantially equally inclined and not crossing the slit in its sleeve.

3. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation therebetween, a pin projecting from the carrier into cooperation with said sleeves, said sleeves each being slit provided intermediate the sides of said slit with helical guide means for the carrier pin inclined at least about as much as 45 degrees to the longitudinal axis of the lipstick holder, helical guide means of one sleeve being oppositely inclined to that in the other.

4. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation therebetween, a pin projecting from the carrier into cooperation with said sleeves, at least one of said sleeves being provided with helical guide means for said pin, said sleeves being spaced apart except at their ends.

5. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation therebetween, a pin projecting from the carrier into cooperation with said sleeves, at least one of said sleeves being provided with helical guide means, at least one of said sleeves being of thin rolled material longitudinally slit, and means adjacent the end portions of said sleeves for keeping them slightly

spaced apart throughout most of their length and constituting bearing surfaces on which the relative rotation between said sleeves takes place.

6. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation therebetween, a pin projecting from the carrier into cooperation with said sleeves, at least one of said sleeves being provided with helical guide means, at least one of said sleeves being of thin rolled material longitudinally slit, and means adjacent the end portions of said sleeves for keeping them slightly spaced apart throughout most of their length and constituting bearing surfaces on which the relative rotation between said sleeves takes place, and means for taking end thrusts in either direction between said sleeves.

7. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier, at least one of said sleeves having a helical guide means thereon, the other of said sleeves having a guide means of at least about the same longitudinal extent as said helical guide means, one of said sleeves being fixed and the other rotatable relatively thereto, a projection from the carrier extending into cooperation with the guide means of each sleeve, one of said sleeves being provided adjacent each end with a two step enlargement, the first steps being bearing surfaces for the relative rotation between the sleeves and the second steps taking end thrusts between the sleeves.

8. A cosmetic stick holder comprising a carrier, a pair of sleeves surrounding the carrier, at least one of said sleeves having a helical guide means thereon, the other of said sleeves having a guide means of at least about the same longitudinal extent as said helical guide means, one of said sleeves being fixed and the other rotatable relatively thereto, a projection from the carrier extending into cooperation with the guide means of each sleeve, a rounded casing outside of said sleeves, said casing having an upper end portion which is reduced in diameter with respect to the main body portion of the casing, the outermost sleeve being contiguous the upper reduced portion of the casing but spaced from the lower end body portion of the casing, and an integral rib spacing the lower end portion of the casing from the outer sleeve.

9. A cosmetic stick holder comprising a casing, a rotatable sleeve in the casing, an actuating knob secured to said sleeve by a flexed piece expanded within the knob.

10. A cosmetic stick holder comprising a tube having a cap secured to the lower end thereof by a flexed piece of material expanded inside the tube to hold the tube against said cap, said cap having its walls integrally reinforced and thickened adjacent said expanded piece of material.

11. A cosmetic stick holder comprising a cylindrical casing, a split sleeve having a guide slot therein for a carrier pin, said sleeve being frictionally held to the casing by the expansive character of the sleeve, another sleeve inside the first and also having a slot therein for a carrier pin, an actuating knob for the second sleeve, the first sleeve being spaced from the casing throughout a substantial portion of its length by means of an integral circumferential bead

formed on the first sleeve adjacent the lower end portion thereof.

12. A cosmetic stick holder comprising a casing, a carrier longitudinally movable therein, a rotary actuator for the carrier, means for transmitting movement of the actuator to the carrier, said actuator being located at one end of the casing, and having a smooth periphery to permit the operator's hand to slide over the surface of the actuator when the carrier has reached an extreme position of its travel, said actuator also having a circumferential groove forming a pair of ribs on each side of the groove, the adjacent edges on said ribs being relatively sharp to prevent the operator's hand from sliding off the actuator longitudinally of the casing.

13. A holder for a cosmetic stick and the like comprising a carrier, a pair of concentric, relatively rotatable sleeves around the carrier, means for translating the carrier and including said sleeves which are spaced apart radially at least throughout most of their length, at least one of said sleeves being of thin, flexible material.

14. A holder for a cosmetic stick and the like comprising a carrier, a pair of concentric, relatively rotatable sleeves around the carrier, means for translating the carrier and including said sleeves which are spaced apart radially at least throughout most of their length, one of said sleeves being provided at at least one end with a stepped portion adapted to constitute an abutment for an end thrust between said sleeves and to serve as a bearing surface for said relative rotation.

15. A toilet stick holder comprising a carrier, a pair of sleeves around the carrier and capable of relative rotation, helical guide means in each sleeve, the guide means in one sleeve being oppositely inclined with respect to that in the other sleeve, a carrier pin cooperating with said guide means of each sleeve, at least one of said sleeves being of sheet metal bent to cylindrical shape and longitudinally slit, the inclination of said helical guide means in said sleeves being such as to hold the carrier against longitudinal movement under an axial thrust, the helical guide means in the slit sleeve being of less than 360 degrees in angular extent and arranged so as not to cross said slit.

16. A toilet stick holder comprising a tubular casing member having a longitudinal slot fixed therein, a rotatable tubular sleeve member within the casing having a longitudinal slot therein, at least one of said slots being helical, a carrier for toilet stick material within said sleeve member, a pin extending from said carrier into said longitudinal slots, a cap closing the end of said tubular casing out of which the toilet stick is adapted to be projected, another cap closing the opposite end of said casing and adapted to produce relative rotation between said slots to move said carrier longitudinally of said casing, said second-mentioned cap and one of said tubular members being secured against longitudinal displacement by means of a disc under compressive stress causing the opposite walls of one to be laterally expanded into engagement with the other.

NATHAN KASDAN.

RICHARD F. LANDWEHR. 70