Aug. 10, 1937. N. KASDAN ET AL 2,089,832

LIPSTICK HOLDER

Filed June 14, 1933

Fig. 1.

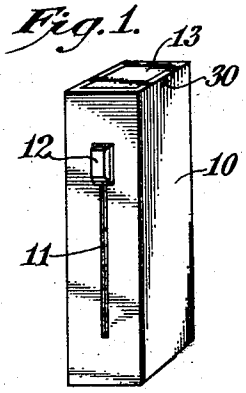


Fig. 2.

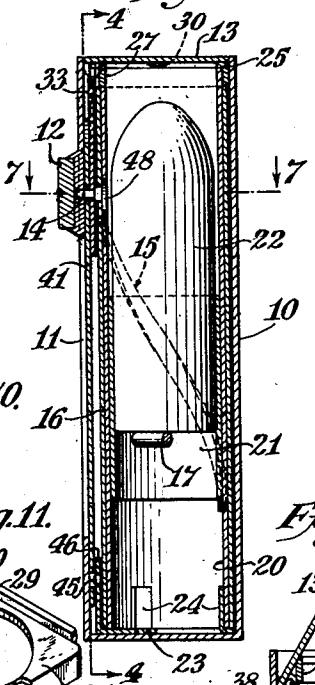


Fig. 3.

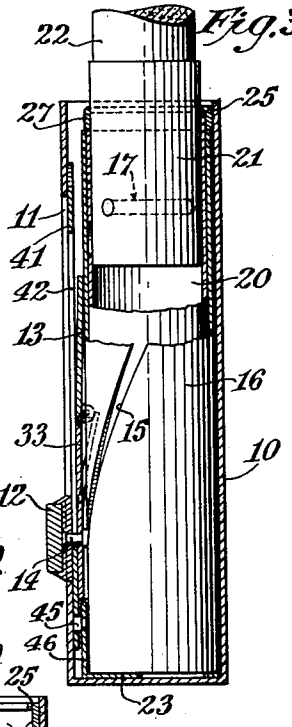


Fig. 10.

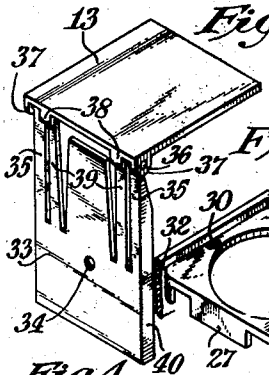


Fig. 11.

Fig. 9.

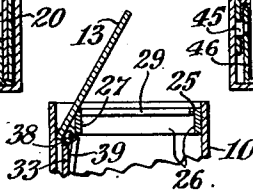


Fig. 4.

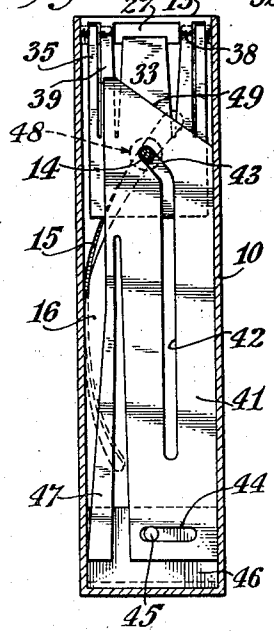


Fig. 5.

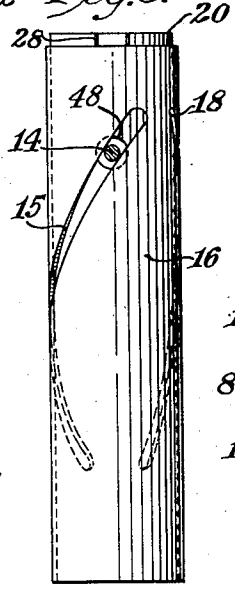


Fig. 6

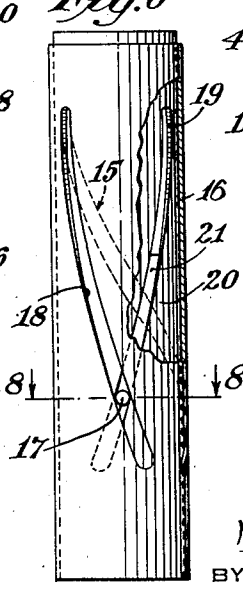


Fig. 7.

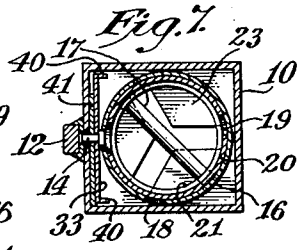
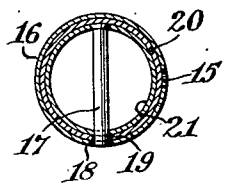


Fig. 8.



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2,089,832

LIPSTICK HOLDER

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Application June 14, 1933, Serial No. 675,852

28 Claims. (Cl. 206—56)

This invention relates to lipstick holders of the so called one hand operated type and has for its object to provide a device of this class which is easy to operate, simple in construction and sturdy and reliable.

A number of prior suggestions have been made for one hand operated lipsticks which generally operate the cover and move the carrier in opposite directions by a single movement of an actuator button. One type has contemplated a flexible band, but a cover made of such material has been found fragile and likely to become bent and deformed by contact with other articles in a woman's handbag. Another type has contemplated a single rotatable tube transmitting mechanism between a carrier and an actuator button, said tube having oppositely inclined slots that do not cross each other and are not in the same longitudinal portion of the tube with a result that such a construction requires a much longer tube than is the movement of either the carrier or actuator.

Under this invention these disadvantages are eliminated and a strong pivotal cover is made to slide down inside the casing where it will be out of the way and not in danger of catching on anything. The single rotatable tube is made shorter in length for a given carrier travel by having the driven pin slot steeper without making the carrier harder to move or in danger of sticking. This has been accomplished by having the driven or carrier pin slot in the stationary tube inclined oppositely to that of the same pin slot in the rotatable tube.

Referring to the drawing:

Fig. 1 is a perspective showing one embodiment of this invention.

Fig. 2 is a longitudinal section through the device shown in Fig. 1.

Fig. 3 is a view corresponding to Fig. 2 with the lipstick and carrier in fully extended position.

Fig. 4 is a section on the line 4—4 of Fig. 2.

Fig. 5 is a detail showing the rotatable tube surrounding the inner stationary guide tube.

Fig. 6 is another view of the same tubes shown in Fig. 5.

Fig. 7 is a section on the line 7—7 of Fig. 2.

Fig. 8 is a section on the line 8—8 of Fig. 6.

Fig. 9 shows the upper end of the tube in section with the cover in partially opened position.

Fig. 10 is a perspective showing the cover and flap.

Fig. 11 is a detail showing the top plate for positioning the inner stationary guide tube within the casing.

The outer casing 10 is provided with a longitudinal slot 11 in which an actuator button 12 may be moved. The cover 13 and carrier are movable by the actuator button. This is accomplished by means of an actuator or driving pin 14 engaging an inclined slot 15 in the rotatable tube 16. The rotatable tube 16 is also provided with a slot 18 for receiving the driven or carrier pin 17 which also moves in a stationary tube 20 having a longitudinal slot 19 inclined substantially oppositely and equally with the slot 18. The carrier 21 supports a lipstick 22 or other material.

The stationary guide tube 20 is positioned slightly to one side of the casing longitudinal axis by means of top and bottom plates. The bottom plate 23 is shown in Fig. 2 as being provided with bent up fingers 24 engaging the inside of the stationary tube 20. The bottom plate 23 is of the general rectangular shape illustrated in Fig. 7 to conform to the casing cross section. At the top plate 25 shown in Figs. 2 and 11 is provided on three sides with down turned flanges 26 which are tangent to the outside of the stationary tube 20. In the top front portion the stationary tube 20 is provided with an opening 28 in and across which extends the front flange 27 of the top plate 25 so that this front flange 27 locks the stationary tube against rotation. As shown in Fig. 2 instead of being tangent to the outer surface of the tube 20, flange 27 is tangent to the inner surface of the stationary tube where it extends across the opening 28. The top plate 25 is provided with a large opening 29 of a size to permit the carrier and lipstick to be ejected through the opening. Slight indentations 30 on opposite sides of the casing at the top engage small seats 31 to lock or yieldably retain the top plate 25 in position against movement either laterally or longitudinally of the casing. As shown in Figs 2 and 11 the top plate 25 is positioned below the top of the casing 10 an amount sufficient to permit reception of the cover within the casing and have the cover substantially flush with the top of the casing wall. The corners 32 of the top plate adjacent the cover pivots are rounded as indicated at 32 to provide adequate clearance for the lugs of the cover pivots.

As shown in Fig. 10 a cover flap or slide 33 is pivotally secured to the cover 13 and provided with a hole 34 centrally thereof for reception of the actuator pin 14. The cover flap is provided with arms 35 engaging the pivot pins 36 which pass through the lugs at the opposite corners of the cover 13. The cover is also provided with a

pair of down turned lugs 38 for engagement with the longitudinal leaf spring fingers 39 formed integrally with the cover flap so that as the fingers engage the cover it tends to close since the spring fingers 39 tend to rotate the cover 13 about its pivot pins 36 to a closed position. The travel of the pivot pin lugs 37, and the flexure of the arms 39 takes place in the clearance spaces shown in Fig. 7 between the casing 10 and rotatable tube 16 on each side of the longitudinal center.

Fig. 4 shows how a shutter 41 is provided contiguous the inside of the casing for closing the longitudinal slot 11 when the cover is closed so as to keep out any dirt or grit from the inside of the casing. The shutter 41 is provided with a longitudinal slot 42 having an upper inclined portion 43 as shown in Fig. 4. The actuator pin 14 slides in the slot 42 and its inclined portion 43. In the lower part of the shutter 41 is located a transverse slot 44 engaged by a pin 45 on the front upstanding portion 46 of the bottom plate 23. The shutter is stamped out in a way to provide a leaf spring 47 for engagement with the casing, the spring 47 tending to shift the shutter laterally to the right as shown in Fig. 4. On moving the actuator pin down the shutter 41 is moved to the left in Fig. 4 without any longitudinal movement, and against the action of the spring 47. As the actuator pin 14 moves up again into the inclined portion 43 of the slot 42 the spring 47 is allowed to shift the shutter 41 to close the slot 11 in the casing. The shutter is provided with an inclined top edge 49 to lessen any likelihood of the lugs 38 catching upon the edge of the shutter, inasmuch as the shutter is located between the cover flap and casing. The actuating pin 14 is inserted from the inside of the stationary tube through the hole 48 in said tube but it will be understood that the pin after its insertion does not extend into said hole 48, but passes through the slot 15 in the rotatable tube, hole 34 in the cover flap, the slot 42 in the shutter 41, slot 11 in the casing 10 and preferably has its outer end of reduced diameter and upset within the actuating button 12. This pin 14 does not extend into the stationary tube. The driven slot 18 is given an inclination to the longitudinal axis only about half that which the driving slot 15 has to the same axis. This enables both slots 15 and 18 to be made in the same longitudinal portion of the rotatable tube without their crossing each other. It is because the slot 19 in the stationary tube 20 forms with the rotatable tube slot 18 an included angle substantially equal to the angle formed by the driving slot 15 with the longitudinal axis, that a given movement of the actuator 12 produces an equal movement of the carrier. Specifically the angle between slots 18 and 19 is about 25 or 26 degrees and each slot 18 and 19 forms with the tube axis an angle of about half that amount. This arrangement of the carrier pin slot 19 in the stationary tube 20 at an opposite and substantially equal angle to the inclination of the slot 18 permits smooth operation of the carrier without any tendency to stick and without the necessity for having the driven slot 18 as much inclined as is the driving slot 15. The carrier and pin 17 move in a direction substantially midway between the slots 18 and 19 and the slot 18 need occupy a smaller angular portion of the periphery of the rotatable tube.

Among the advantages of this invention may be mentioned that both slots in the rotatable tube occupy substantially the same longitudinal portion of the tube with the result that a shorter and more compact construction is possible than is the case where the two oppositely inclined slots in the rotatable tube are not overlapped longitudinally to the same extent. The carrier is moved an amount equal to the travel of the actuator 12 but in an opposite direction. Unlike many prior art constructions the shutter has only a lateral and not any longitudinal movement. The cover 13 is durable and movable between the shutter and rotatable tube to an out of the way position within the casing. Arranging the cover pivots as well as the leaf springs 39 on each side of the center of the cover flap permits these parts to occupy a clearance space on each side of the place where the rotatable tube is substantially tangent to the cover flap. In practice it will not be necessary to have as large a vacant space as is shown in Fig. 2 between the bottom of the carrier and the bottom of the casing. The method of assembly for the actuator pin whereby it is inserted from the inside of the stationary tube is believed to be advantageous. The stationary tube is maintained in position at both the top and bottom by the upper and lower plates described. The cover flap 33 may be stiffened by having longitudinal ribs 40 arranged as shown in Figs. 7 and 10.

We claim:

1. A toilet stick holder including a casing, a carrier, a cover, an actuator for both the cover and carrier, mechanism between the actuator and carrier for effecting movement thereof and comprising a pair of tubes one of which is rotatable and one stationary, the actuator engaging an inclined slot provided in said rotatable tube to effect movement thereof, a driven carrier pin passing through slots oppositely inclined in each of said tubes, the actuator pin slot being inclined to the longitudinal axis of the tubes about twice the amount of the inclination of the driven pin slots.

2. A toilet stick holder comprising a casing, a carrier, an actuator, a cover, and means connecting the carrier and cover for movement by said actuator, said cover being pivotal and slidable within the casing in a direction opposite to the movement of said carrier, said means including a tube helically slotted in such manner that the carrier moves substantially equally and oppositely to the actuator, said means including a tube provided with two inclined slots in substantially the same longitudinal portion of said tube and of substantially equal length longitudinally of the tube.

3. A container having a casing, a carrier, an actuator for the carrier, a pivotal cover adapted to be drawn within the casing, a guide tube for the carrier, the casing being of different shaped cross section from said guide tube and located closer to said tube in some portions of the tube periphery than in others, a leaf spring for closing said cover, said spring being arranged to be flexed transversely within a clearance space between the casing and tube.

4. A container comprising a casing, a cover, a carrier, a guide tube around the carrier, an actuator for moving the cover and carrier, a flap pivoted to the cover and engaging said actuator, a pair of spaced springs between the cover and flap for closing said cover, said springs being arranged one on each side of said actuator, said springs being longitudinally arranged in clearance spaces between the casing and guide tube.

5. A toilet stick holder comprising a casing provided with a longitudinal slot in which an actuator is slidable, a shutter for said slot, a car-

rier, a stationary tube adjacent said carrier and provided with a longitudinal slot, a shutter for said tube slot, and pins shiftable in said slots and shutters for effecting the travel of the carrier.

6. A toilet stick holder comprising a casing provided with a longitudinal slot in which an actuator is slidable, a shutter for said slot, a carrier, a stationary tube adjacent said carrier and provided with a longitudinal slot, a shutter for said tube slot, and pins shiftable in said slots and shutters for effecting movement of the carrier, one of said shutters being rotatable and the other transversely shiftable.

7. A holder comprising a casing, a carrier, a cover, an actuator for the cover and carrier, a cover flap pivotally connected to said cover and cooperating with said actuator, spring fingers on said flap constructed to engage the cover for closing the same, and a carrier guide tube, said casing and guide tube being of dissimilar cross section to provide clearance spaces, and each spring finger being located in one of said clearance spaces.

8. A container comprising a casing, a carrier, a guide tube for the carrier, an actuator for the carrier and plates for positioning said guide tube in the casing and including means for cooperation with the inside of said tube adjacent one end thereof and means for cooperation with the outside of said tube adjacent the other end thereof.

9. A container comprising a casing, a carrier, a guide tube for the carrier, an actuator for the carrier and plates for positioning said guide tube within the casing, a cover, a cover flap pivoted to the cover and engaging said actuator, a spring for closing said cover, said cover and flap being slidable within said casing and outside of said tube, the cover being opened by cooperation with the edge of said top plate which is adjacent the cover pivot on sliding said actuator.

10. A container comprising a slotted casing, a cover, a carrier, an actuator for the carrier movable in the casing slot, a shutter for closing said casing slot when the cover is closed, said shutter having a longitudinal slot through which passes said actuator, and a guide means arranged for said shutter whereby it may shift only transversely of the casing.

11. A toilet stick holder comprising a longitudinally slotted casing, a carrier, a longitudinally slotted stationary guide tube around the carrier, a rotatable tube between the casing and stationary tube, said rotatable tube being provided with a pair of oppositely inclined guide means in the same longitudinal portion of the tube and of the same general length longitudinally of the tube, an actuator pin engaging said guide means, a carrier pin engaging the other of said guide means in the rotatable tube, one of said guide means being much more steeply inclined than the other.

12. The combination with a casing, having therein a carrier, a pair of tubes around the carrier and relatively movable with respect to each other, and provided with oppositely inclined guides, a pin on said carrier engaging the said oppositely inclined guides, of an actuating guide on one of said tubes located at least in part in substantially the same longitudinal portion thereof, and a shiftable actuator engaging said actuating guide for effecting relative rotation between said tubes and translation of said carrier.

13. A holder comprising a casing, a carrier, an actuator and mechanism for moving the carrier in response to the actuator, said mechanism including a tube with oppositely inclined non-crossing guides having at least the major portions of their lengths located in the same longitudinal portion of the tube, said actuator cooperating with one and the carrier cooperating with the other of said inclined guides.

14. A lipstick holder comprising a casing, a carrier, an actuator shiftable in a longitudinal slot in the casing for moving the carrier, a laterally shiftable shutter for the casing slot and guide means for the shutter to prevent longitudinal movement thereof in response to the longitudinal travel of the actuator.

15. In a container the combination with a casing, of a carrier movable longitudinally of the casing, an actuator outside of the casing for moving the carrier, a carrier guide tube of smaller cross sectional area than the casing, and means for holding one end of the guide tube transversely fixed in said casing, said means comprising a plate held in one end of the casing and having a bent projection for holding said guide tube against lateral shifting.

16. In a container the combination with a casing, of a carrier movable longitudinally of the casing, an actuator slidable outside of the casing for moving the carrier, a carrier guide tube within the casing, a shutter for closing a longitudinal casing slot along which the actuator moves, a plate within the bottom of the casing and having a bent up portion to which the shutter is slidably secured.

17. The combination with a casing, of a cover therefor, an actuator for the cover slidable longitudinally of the casing, a plate to which said cover is pivoted and to which said actuator is engaged, guideways inside the casing along which said plate and cover slide, said plate including a spring finger engaging said cover and tending to close the same.

18. A toilet article comprising a casing provided with a longitudinal slot, a carrier, a pivotal cover, an actuator longitudinally movable along the casing slot to open the cover and move the carrier, a slidable shutter for closing the casing slot when the cover is closed, spring means cooperating with the shutter and casing tending to move the shutter to a position closing said casing slot, and means for longitudinally anchoring one end of the shutter to the casing.

19. A toilet article comprising a casing, a carrier, a cover, an actuator for moving the cover and carrier, and means between the carrier and actuator comprising a rotatable sleeve having oppositely inclined guide means, one being inclined substantially twice the inclination of the other.

20. A toilet article comprising a casing having a longitudinal slot, a carrier, a cover, an actuator for both the carrier and cover, a rotatable sleeve engaged by the actuator and having a guide means inclined sufficiently to get the desired rotation of the sleeve on sliding said actuator, the guide means in said sleeve being inclined to such an extent that an oppositely and equally inclined guide means cannot be formed in the same longitudinal portion of the sleeve, and means giving the carrier at least substantially the same longitudinal travel as the actuator which comprises an oppositely inclined guide means in said sleeve of less inclination than the first guide means, a contiguous stationary sleeve having a guide means inclined about the same amount and oppositely to the second guide means in the rotatable sleeve.

21. A toilet article comprising a casing having a longitudinal slot, a carrier, a cover, an actuator for both the carrier and cover, a shutter for clos-

ing the casing slot when the cover is closed, and a cover opener directly connected to the actuator, said shutter for the casing slot being separate from the cover opener and movable in a different manner and direction therefrom.

22. A toilet article comprising a casing, a cover, a carrier, a slidable actuator for moving the carrier and cover substantially the same amount, and means between the carrier and actuator comprising a rotatable sleeve having oppositely inclined non-crossing guide means in the same major longitudinal portion thereof, said actuator cooperating with one of said guide means and said carrier cooperating with the other of said guide means.

23. A toilet stick holder comprising a carrier, a pair of sleeves surrounding the carrier and capable of relative rotation of one with respect to the other, a pin projecting from the carrier into cooperation with said sleeves, each of said sleeves having a guide means which is substantially uniformly helical for cooperation with the carrier pin, the guide means in one sleeve being oppositely inclined to that in the other, and means for effecting relative rotation between said sleeves, said last mentioned means including a slidable member engaging another inclined guide means in one of said sleeves.

24. A toilet stick holder comprising a casing having a longitudinal slot therein, a cover, a flap hinged to the cover, a carrier for stick material slidable within said casing, an actuator button, an actuator pin extending from said button through the longitudinal casing slot, a guide tube for the carrier having therein a longitudinal slot, a pin projecting from said carrier into the longitudinal slot of said guide tube, means for transmitting motion from said actuator pin to the carrier pin for moving the carrier up when the actuator is moved down and vice versa, the cover flap being directly engaged by said actuator pin and slidable within the casing outside said guide tube, the longitudinal travel of the carrier being substantially equal to that of the actuator.

25. A toilet stick holder comprising a casing having a longitudinal slot therein, a cover, a flap hinged to the cover, a carrier for stick material slidable within said casing, an actuator button, an actuator pin extending from said button through the longitudinal casing slot, a guide tube for the carrier having therein a longitudinal slot, a pin projecting from said carrier into the longitudinal slot of said guide tube, means for transmitting motion from said actuator pin to the carrier pin for moving the carrier up when the actuator is moved down and vice versa, the cover flap being directly engaged by said actuator pin and slidable within the casing outside said guide tube, the longitudinal travel of the carrier being substantially equal to that of the actuator, the casing being provided with an indentation adjacent the cover when closed, which is adapted to prevent longitudinal movement of the carrier guide tube out of the casing.

26. A toilet stick holder comprising a casing having a longitudinal slot therein, a cover, a flap hinged to the cover, a carrier for stick material slidable within said casing, an actuator button, an actuator pin extending from said button through the longitudinal casing slot, a guide tube for the carrier having therein a longitudinal slot, a pin projecting from said carrier into the longitudinal slot of said guide tube, means for transmitting motion from said actuator pin to the carrier pin for moving the carrier up when the actuator is moved down and vice versa, the cover flap being directly engaged by said actuator pin and slidable within the casing outside said guide tube, the longitudinal travel of the carrier being substantially equal to that of the actuator, said actuator pin being headed at its inner end, and the carrier guide tube being provided with a perforation through which a heading tool may be inserted for heading said actuator pin.

27. A toilet stick holder comprising a casing having a longitudinal slot therein, a cover, a flap hinged to the cover, a carrier for stick material slidable within said casing, an actuator button, an actuator pin extending from said button through the longitudinal casing slot, a guide tube for the carrier having therein a longitudinal slot, a pin projecting from said carrier into the longitudinal slot of said guide tube, the actuator having an opposite longitudinal movement to the carrier, a movable strip located at least in part between the cover flap and contiguous the casing on the inside for closing the longitudinal casing slot throughout substantially its entire length when the cover is closed, said actuator pin being headed on the inside to secure said strip and cover flap thereon.

28. A toilet stick holder comprising a casing having a longitudinal slot therein, a cover, a flap hinged to the cover, a carrier for stick material slidable within said casing, an actuator button, an actuator pin extending from said button through the longitudinal casing slot, a guide tube for the carrier having therein a longitudinal slot, a pin projecting from said carrier into the longitudinal slot of said guide tube, the actuator having an opposite longitudinal movement to the carrier, a movable strip located at least in part between the cover flap and contiguous the casing on the inside for closing the longitudinal casing slot throughout substantially its entire length when the cover is closed, said actuator pin being headed on the inside to secure said strip and cover flap thereon, the carrier guide tube being provided with a perforation through which a heading tool may be inserted for heading said actuator pin.

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