

Dec. 29, 1936.

S. FREEMAN

2,065,800

LIPSTICK

Filed May 16, 1933

3 Sheets-Sheet 1

Fig. 1.

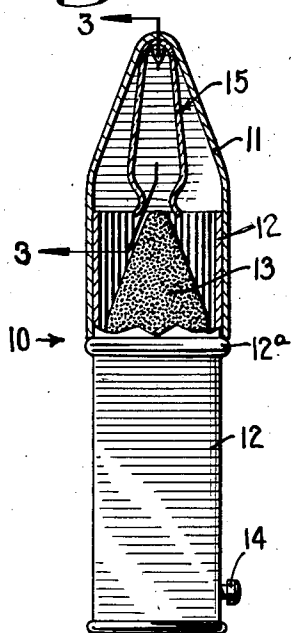


Fig. 2.

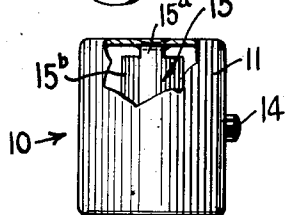


Fig. 4.

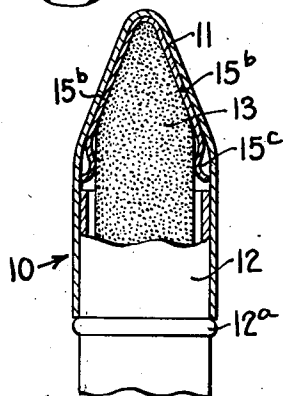


Fig. 3.

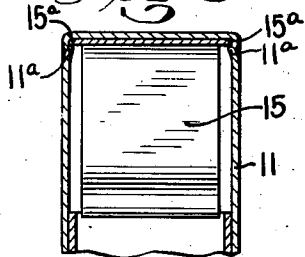


Fig. 5.

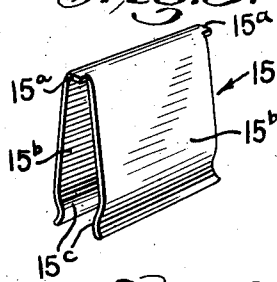


Fig. 6.

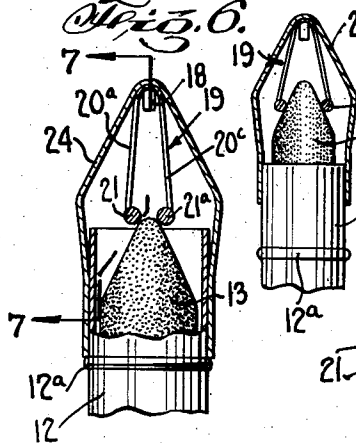


Fig. 7.

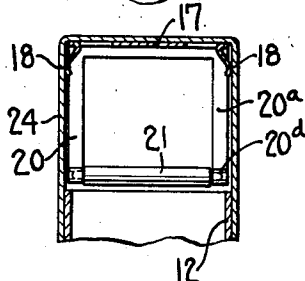


Fig. 8.

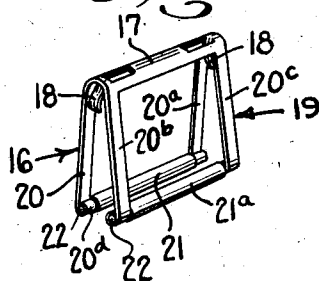


Fig. 10.

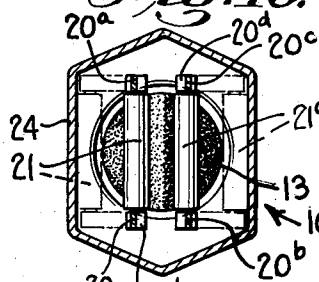


Fig. 9.

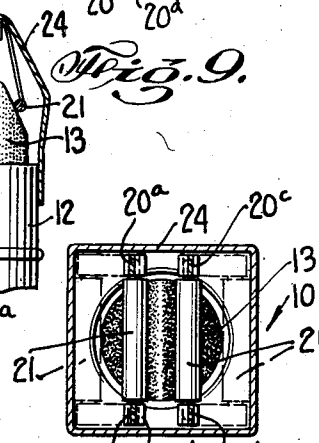


Fig. 11.

INVENTOR.
Seymour Freeman
BY *Mook & Shum*
ATTORNEYS.

Dec. 29, 1936.

S. FREEMAN

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Fig. 12.

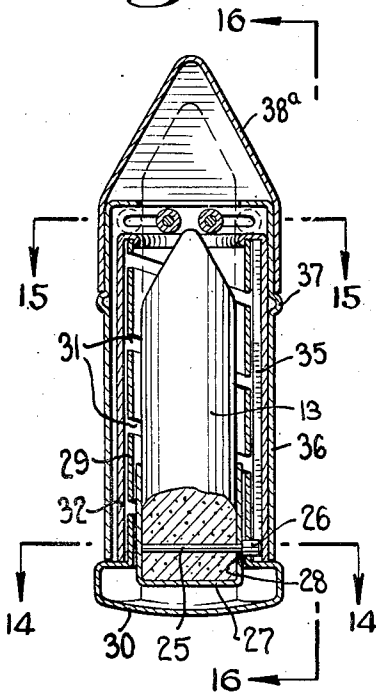


Fig. 13.

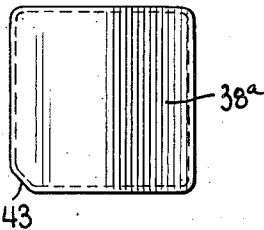


Fig. 14.

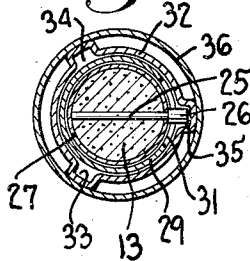


Fig. 17.

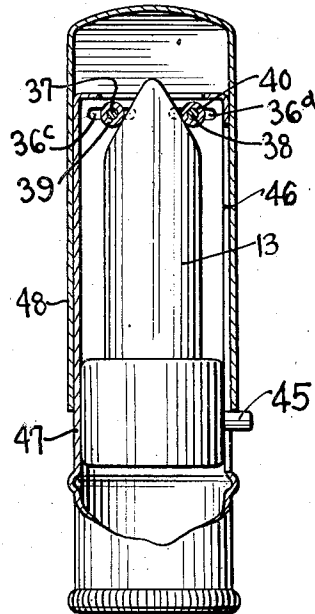


Fig. 15.

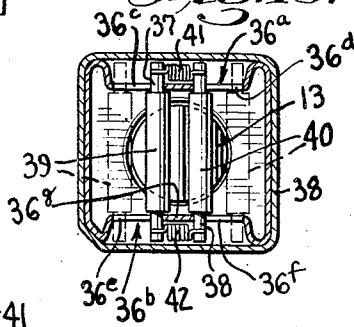


Fig. 16.

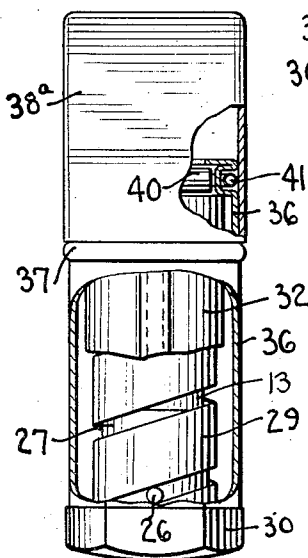
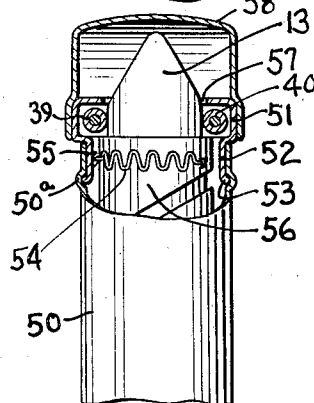


Fig. 18.



INVENTOR.
Samuel Freeman
 BY *W. H. & B. H.*
 ATTORNEYS.

Dec. 29, 1936.

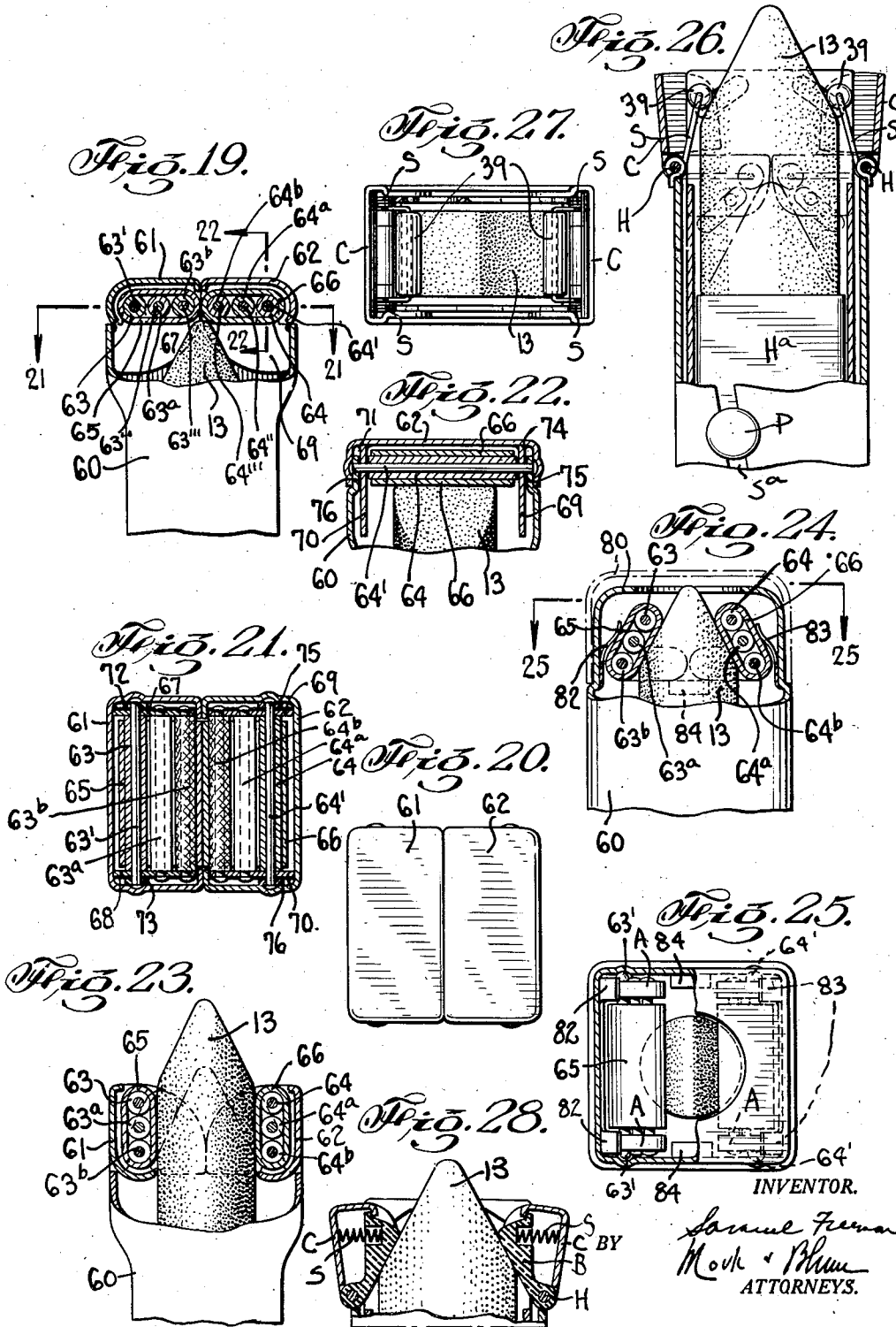
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UNITED STATES PATENT OFFICE

2,065,800

LIPSTICK

Samuel Freeman, New York, N. Y.

Application May 16, 1933, Serial No. 671,297

9 Claims. (Cl. 132—79)

This invention relates to improvements in shaping mechanisms for lipsticks or like cosmetic articles.

At the present time lipsticks are shaped so as to provide chisel pointed contours so that the same may be readily applied evenly by users thereof. One of the inherent difficulties involved in the use of such lipsticks lies in the fact that the lipsticks, upon being applied, become flattened or rounded with the result that the required chisel shape is lost after the first few applications of the lipstick.

Broadly, it is an object of this invention to provide a novel form of mechanism disposed within the shield of a lipstick holder which is operable upon movement of the lipstick to act upon the lipstick portion that has been originally of chisel shaped contour and has been dulled at such portion by use, to resharpen and thus reshape such portion to present the required chisel shaped formation.

Specifically, it is an object of this invention to provide for a mechanism disposed within a lipstick holder and actuable upon displacement of the lipstick within the holder in either direction to exert a pressure against the sides or periphery of the lipstick, thereby to cause the same to at all times maintain the chisel shaped contour in which it was originally formed.

Still further, it is an object of this invention to provide a novel form of shaping mechanism for lipsticks of the tapered chisel point or cone formation, which mechanism is carried either by the body of the casing carrying the lipstick or the cap for the casing, such shaping mechanism being adapted to be resiliently mounted with respect to either the body or the cap and to exert a pressure contact against the lipstick, thereby to impart to such lipstick a substantially sharp taper.

In general, then, it is an object of this invention to provide a shaping mechanism with respect to a holder for a lipstick, whereby the lipstick may either prior or after use or prior and after use be subjected to pressure of a resiliently mounted mechanism, thereby to maintain and impart a required taper to the portion of the lipstick to be used.

These and other advantages, capabilities and features of the invention will appear from the subjoined detailed description of one specific embodiment thereof illustrated in the accompanying drawings, in which

Figure 1 is a side elevation of my invention, partially in section for greater clearness, showing the lipstick in normal position.

Figure 2 is a top plan view, with parts broken away.

Figure 3 is a section along the lines 3—3 of Figure 1.

Figure 4 is a side elevation similar to Figure 1 with the lipstick shown as it is being shaped.

Figure 5 is a perspective view of one type of shaper held in the cap of lipstick used in Figures 1 to 5 inclusive.

Figure 6 is a side elevation of my invention, partially in section, showing another type of shaper.

Figure 7 is a section along lines 7—7 of Figure 6.

Figure 8 is a perspective view of another type of shaper used in Figures 6 to 11 inclusive.

Figure 9 is a side elevation partially in section as in Figure 6, showing the initial position in the shaping of a lipstick.

Figure 10 is a plan section of a hexagon cap using the type of shaper as shown in Figure 8.

Figure 11 is a plan section of a square cap using the type of shaper as shown in Figure 8.

Figure 12 is a side elevation in section showing a different form of lipstick and another type of shaper.

Figure 13 is a top plan view of Figure 12.

Figure 14 is a section along the lines 14—14 of Figure 12.

Figure 15 is a section along lines 15—15 of Figure 12.

Figure 16 is a front view partially broken away for greater clearness.

Figure 17 is a sectional view of another type of lipstick.

Figure 18 is a side elevation partially in section and broken away, showing the shaper in conjunction with the swivel type of lipstick and means for returning the shaper to original position.

Figure 19 is a side elevation partially in section of another type of lipstick.

Figure 20 is a top plan view of Figure 19.

Figure 21 is a section on lines 21—21 of Figure 19.

Figure 22 is a section on lines 22—22 of Figure 19.

Figure 23 is a side elevation similar to Figure 19, but with the lipstick protruding beyond roller and cap.

Figure 24 is a front elevation of Figure 19.

Figure 25 is a top plan view of Figure 19.

Figure 26 is a side elevation partially in section of a different type of shaper.

Figure 27 is a plan view of Figure 26.

Fig. 28 is a side elevation, partly in section, of another type of lipstick.

Referring to the drawings, and as shown in Figures 1 to 5 inclusive, a lipstick holder 10, which consists of a cap 11, a base portion 12, a bead 12a, integral with base portion 12, for limiting the downward movement of cap 11, a lipstick 13, a button 14 attached to lipstick holder, which button 14 provides the means to raise and lower the stick 13.

Held firmly in cap 11 by means of projections 15 11a is the shaper 15, whose teats 15a are in frictional contact with projections 11a as shown in Figures 2 and 3. The shaper 15 may be held by other means in the cap 11, as soldering, riveting, but the sides 15b of the shaper 15 are always free to move.

The shaper is so constructed that it will produce a chisel point on the lipstick 13, for, as shown in Figure 4, when the lipstick 13 is pushed upwardly into the shaper 15, the sides 15b thereof will be spread apart while being in contact with the tapered portion of the lipstick 13, first making contact with the beaded portion 15c of the shaper 15, and then sliding against the inside of walls 15b of the shaper 15, the lipstick 13 being tapered both by the original pressure contact of the beaded portion 15c and then the pressure of the walls 15b of the shaper 15. When the lipstick 13 is retracted from the shaper 15, a chisel or wedge shape will have formed or be retained on the lipstick 13. The shaper 15 is preferably made of springy material, such as metal, celluloid, fibre, or any material that can be shaped as desired and after the pressure on it is removed the shaper will resume its original position. This type of shaper is best used with a lipstick which moves in a straight up and down motion, but when used with a spiral motion the cap has to be raised until the lipstick protrudes above the top of the lipstick holder and the cap is then pushed down, so that the shaper will shape the lipstick. The sides 15b of the shaper are movable in a direction which is generally perpendicular to and which is therefore inclined to the longitudinal axis of the holder.

Referring to Figures 6 to 11, another type of shaper is disclosed, which is preferably held in the cap of the lipstick. As shown in Figure 8, it consists of spring metal member 16 whose base 17 is provided with spring ears 18, which serve to lock the shaper 19 in position. Extending from the base 17 are arms 20, 20a, 20b, and 20c, which arms are curled as at 20d to form bearing members. Rollers 21 and 21a are provided with reduced end portions 22 which fit turnably in the openings of the bearings 20d of the arms 20, 20a, 20b, 20c.

The member 16 is made of springy metal and formed into the normal shape shown in Fig. 8. The rollers can rotate the two pairs of arms 20—20a, 20b—20c, can diverge from the position shown in Fig. 8 when the lipstick is pushed up between rollers 21 and 21a. The rollers always maintain pressure contact with the lipstick, so that when the lipstick is withdrawn, a perfect taper or wedge shape will have been formed. Thus, as shown in Figure 6, the shaper 19 is held in the cap 24 by means of members 18. As shown in Figure 9 the lipstick has been pushed upwardly further than shown in Figure 6 and the shaping has started. The cap 24 has been raised before

pushing up lipstick 13 as this is intended to demonstrate the use of a device in which the lipstick is moved up and down, and is simultaneously turned around its own longitudinal axis.

When used with a straight up and down motion lipstick the cap does not have to be raised first. Figure 7 shows how member 18 is pushed against the inside of cap 24, the pressure being towards the cap 24. In Figures 10 and 11 there is shown a different type of cap that can be used with this shaper. Means are provided to maintain the cap in the same position by making or shaping one side of the cap differently, from the other sides and having this side conform to the shape of one side of the body.

Referring to Figures 12 to 17, there is shown the shaper as being incorporated in the base of the lipstick and not in the cap as heretofore described. In these figures the lipstick is one in which its motion is straight up and down, and does not revolve. The lipstick holder, as shown in Figure 12, consists of a lipstick 13, a pin 25, one end as at 26 being enlarged for purposes to be later described. The pin 25 holds the lipstick 13, in the holder 27, since there is a hole 28 through which the pin is pushed through the casing 27 and into the lipstick as shown in Figures 12 and 14. A cylinder 29 having a head 30 of any desirable shape but shown as a hexagon is applied, the cylinder being provided with a spiral opening 31 so that the head 26 of the pin 25 can ride in this slot. Thus, if the head 30 is turned the head of the pin 25 will ride up in the slot 31 and propel the lipstick 13 upwardly, and, to recede the lipstick 13 when the head 30 is turned in the opposite direction. In this way we have a spiral up and down motion.

To have a straight line motion a cylinder 32 is provided with three guideways 33, 34, 35, as shown in Figures 12, 14, and 16. The purpose of guideway 35 is to allow the head 26 of pin 25 to ride up and down in it. The channels of the guideways 33 and 34, about the inner surface of cylinder 36 as does the channel of the guideway 35. Thus, as the base of the cylinder 32 abuts the base of the head 30, (as shown in Figure 12, and the top of the cylinder is turned in and held fast to the top of the cylinder 29, which is open, and the channels about the inner wall of casing 36) the cylinder 32 is held fast.

Thus, if the head is rotated to propel or repel the lipstick 13, the pin riding in guideway is raised or lowered and the lipstick 13 will follow suit. The cylinder 36 which serves as an outer covering for the inner cylinder is provided with a bead 37 which serves to act as a stop for the cap 38a. The cylinder 36 rests on the base of the head 30 and as there is a tight fit between the channels and the inner surface of cylinder 36, the cylinder 36 will remain fixed. The top of the cylinder 36 is shaped as shown in Figure 15, the portion of the sides 36a and 36b being depressed towards the center to act as bearings for the shafts, which will be described later. Elongated slots 36c and 36d are provided in sides 36a, elongated slots 36e and 36f in side 36b. There are provided pins or shafts 37 and 38 on which rollers 39 and 40 respectively are mounted. The pin 37 with its corresponding rollers 39 are mounted as shown in Figure 15, the ends of the pin 37 passing through slots 36c and 36e. The pin 38 with its corresponding roller 40 is mounted also as shown in Figure 15, the ends of the pin 38 passing through slots 36d and 36f, 36a and 36b acting as bearing members. The rollers 39 75

and 40 are prevented from touching each other by portion of wall 36g of walls 36a and 36b. Springs 41 and 42 attached to pins 37 and 38 tend to keep the rollers towards each other, but when the lipstick 13 is propelled upwardly, the lipstick being of wedge shape spreads the rollers apart, the said rollers, by their pressure contact, smoothing the sides of the lipstick.

After the lipstick 13 is used it is repelled and the rollers travel towards each other and press against the sides of the lipstick to shape the same. The springs are of such tension that the rollers carried thereby do not disfigure the lipstick. The rollers travel in a horizontal plane away and towards each other. Thus, the lipstick will always retain its original shape for the lipstick must all be passed between the rollers before being used. The rollers being of larger diameter than the pin or the slots and practically equal to the distance between its bearing wall will prevent any twisting motion. As shown in Figure 13 as at 43 the cap may be shaped so that it will always be placed back on the body of the lipstick holder in the same position, which use is suggested for Figures 1-12 inclusive. Separate channel sections could be used instead of the depressed walls 36a and 36b of the cylinder 36 and forced fit on the inside of the cylinder head 43.

In Figure 17 is shown the type of lipstick container in which the lipstick 13 is pushed up or down by pushing pin 45 up or down in slot 46 of body 47 of lipstick casing. The same type of rollers and springs are used in the form shown in Figures 12 to 16 inclusive and also the slots and the depressed sides. The cover 48 is removed before the lipstick 13 is shaped.

In Figure 18 is shown the propelled and repelled lipstick and means are shown for having the rollers rotate in time relation with the lipstick so that the lipstick can pass between the rollers while being rotated spirally upward or downward.

The mechanism is the same as used on the ordinary spiral up or down motion lipstick except mounted on the inside of the outer cylinder 50; at its top is a rectangular shape frame 51 as shown in sections, having a round hub 52 with a turned edge 53 which fits into the inside of the bead 50a of the cylinder 50, the roller and the slots and springs being of the same construction as shown in Figure 15. An additional spring 54 is fastened at one end to hub 52 of member 51, as at 55, the other end being fastened to the cylinder 56 in which is cut the spiral groove. An opening 57 is provided in member 51 to allow lipstick 13 to be propelled upwardly.

To operate the cap 58 should be removed and by means not shown the lipstick 13 is caused to travel upwardly, the cylinder 56 starts to rotate, pulling member 51 along with it for spring 54 is attached to both and guided by bead 50a. Thus, the rollers are always in the same relative position to the lipstick, and so the lipstick passes between the rollers and is caused to be wedge shaped. When the lipstick is caused to be receded and pass out of contact with the rollers the spring 54 returns to its original position.

Referring to Figures 19 to 27 inclusive, there is shown the invention used with lipsticks that have non-removable caps. Figures 19 to 25 show a lipstick body 60, hinge covers 61 and 62, lipstick 13, a series of rollers 63, 63a and 63b, and 64, 64a, 64b. The rollers 63b and 64b are knurled so that the endless belts 65 and 66 which cover both series of rollers can be propelled around without slippage. The rollers 63, 63a, 63b are provided

with pins or shafts 63', 63'', 63''', held in end bearings sector arms 67 and 68. The rollers 64, 64a, 64b are provided with pins or shafts 64', 64'', 64''', held in end bearings sector arms 69 and 70. The pins 63', 63'', 64', 64'', can be headed as shown in Figure 21. The pins 63' pass through sector arms 67 and 68, which pins 63' act as bearing for said sector arms 67 and 68. The sector arms 67 and 68 are fastened to the under side of the cover 61 as at 71. The pin 63' also passes through ears 72 and 73 of the body 60 and is headed as shown in Figure 21. Thus the rollers and its chain and bearing member and cover 61 are pivoted about pin 63' in the ears 72 and 73. The pin 64' passes through sector arms 69 and 70, which pin 64' acts as a bearing for said sector arms 69 and 70. The sector arms 69 and 70 are fastened to the under side of the cover 62 as at 74. The pin 64' also passes through ears 75 and 76 of the body 60 and is headed as shown in Figure 21. Thus the rollers and its chain and bearing member and cover 62 are pivoted about pin 64' in the ears 75 and 76. The heads of pin 63' and 64' are imbedded in the sides of covers 61 and 62 as shown in Figures 20, 21, and 22.

As shown in Figure 23, as the lipstick 13 is pushed up the sides of the wedge come into contact with the roller covers and force them upwardly and at the same time keep the wedge shape and open the covers. Thus, as the stick is used the upward and downward movement of the lipstick and the cover will keep the lipstick in the wedge shape that it has been molded in, although the body of the stick is circular. As shown in Figure 23, the roller conveyor is tangent to the diameter of the lipstick beyond the wedge shape. The dotted line position of lipstick 13 and the rollers shows this. In Figures 24 and 25 the same means are employed except for a removable cover 80, an opening 81 in top of the body 60 to let out the lipstick 13, and U-shaped springs 82 and 83 which are fastened to the inside of the body 60 and are pressing against bearing of rollers, so that there will be pressure against sides of the wedge shaped lipstick 13. The dotted line position shows starting position with stops 84 to prevent further downward movement of the rollers. The pivoting arms A are shown in Figure 25, the pivoting head of pin 63' and 64' bearing in the sides of the body 60.

Referring to Figures 26 and 27, the rollers 39 are held by the spring S, the spring S being mounted on the hinge pin H. Thus, as the holder Ha is pushed upward by pin P to which holder Ha is fastened, and as pin P rides in slot Sa, mechanism, not shown, opens hinged covers C, and the lipstick 13 rides against the rollers 39 and so lipstick is kept in original wedge shape. Figure 27 shows rollers riding on the tapered sides.

Another modification as shown in Fig. 28 shows other means than rollers, that is molded bakelite B pivoted on hinge pin H and spring S pressing inside cover and cut out in bakelite, and using the type of casing shown in Figures 26 and 27. The same result will be obtained, as shown before, as the bakelite parts are always at an angle toward each other.

It is obvious that various changes and modifications may be made to the details of construction without departing from the general spirit of the invention as set forth in the appended claims.

I claim:

1. In a lipstick shaping device of the class described, in combination with a casing, a lipstick reciprocable with respect to said casing, pressure

rollers carried in said casing and adapted to contact with at least some of the surfaces of the lipstick as the same is reciprocated, said pressure rollers being adapted to maintain and impart a tapered contour to said lipstick.

2. In a lipstick shaping device of the class described, in combination with a casing, a lipstick reciprocable with respect to said casing, pressure rollers carried in said casing and adapted to contact with at least some of the surfaces of the lipstick as the same is reciprocated, said pressure rollers being adapted to maintain and impart a tapered contour to said lipstick, and means for resiliently supporting said rollers.

3. In a lipstick shaping device of the class described, in combination with a casing, a lipstick reciprocable with respect to said casing, pressure rollers carried in said casing and adapted to contact with at least some of the surfaces of the lipstick as the same is reciprocated, and means for resiliently mounting said pressure rollers for lateral displacement, said pressure rollers being adapted to maintain and impart a tapered contour to said lipstick.

4. A lipstick holding and shaping device, comprising a holder in which the lipstick is longitudinally movable to-and-fro, and a shaping device located adjacent the mouth of said holder, said shaping device including at least one shaping element which is movable in a direction inclined to the longitudinal axis of said holder, said shaping element being mounted so that it will bear against and compress at least a part of the end portion of the lipstick when said end portion is protruded from the mouth of said holder.

5. A lipstick holding and shaping device, comprising a holder in which the lipstick is longitudinally movable to-and-fro, and a shaping device located adjacent the mouth of said holder, said shaping device including at least one shaping element which is movable in a direction inclined to the longitudinal axis of said holder, said shaping element being mounted so that it will bear against and compress at least a part of the end portion of the lipstick when said end portion is protruded from the mouth of said holder, said holder having a cap to which said shaping device is connected.

6. A lipstick holding and shaping device, comprising a holder in which the lipstick is longitudinally movable to-and-fro, and a shaping device located adjacent the mouth of said holder, said shaping device including at least one shaping element which is movable in a direction inclined to the longitudinal axis of said holder, said shaping element being mounted so that it will bear

against and compress at least a part of the end portion of the lipstick when said end portion is protruded from the mouth of said holder, said shaping device being connected to the holder.

7. A lipstick holding and shaping device, comprising a holder in which the lipstick is longitudinally movable to-and-fro, and a shaping device located adjacent the mouth of said holder, said shaping device including at least one shaping element which is movable in a direction inclined to the longitudinal axis of said holder, said shaping element being mounted so that it will bear against and compress at least a part of the end portion of the lipstick when said end portion is protruded from the mouth of said holder, said shaping device being connected to the holder, said shaping device including a turnable member which contacts with the adjacent portion of the wall of the lipstick, as the lipstick is moved from its inner position to protruded position.

8. A lipstick holding and shaping device, comprising a holder in which the lipstick is longitudinally movable to-and-fro, and a shaping device located adjacent the mouth of said holder, said shaping device including at least one shaping element which is movable in a direction inclined to the longitudinal axis of said holder, said shaping element being mounted so that it will bear against and compress at least a part of the end portion of the lipstick when said end portion is protruded from the mouth of said holder, said shaping device being connected to the holder, and a spring for forcing said shaping device into contact with the adjacent part of the wall of the lipstick, and to maintain said shaping device in contact with the lipstick as the lipstick is protruded beyond said shaping device.

9. A lipstick holding and shaping device, comprising a holder in which the lipstick is longitudinally movable to-and-fro, and a shaping device located adjacent the mouth of said holder, said shaping device including at least one shaping element which is movable in a direction inclined to the longitudinal axis of said holder, said shaping element being mounted so that it will bear against and compress at least a part of the end portion of the lipstick when said end portion is protruded from the mouth of said holder, said holder having means to which said shaping device is connected, said lipstick being mounted in an end retaining-device, said holder having means for turning said retaining-device around its longitudinal axis when the retaining-device is moved outwardly, said shaping device being turnable in unison with said retaining-device.

SAMUEL FREEMAN.