Feb. 22, 1966 E. J. KLASSEN 3,235,900

ROLL-ON COSMETIC APPLICATOR

Filed March 5, 1962 2 Sheets-Sheet 1

Fig. 1

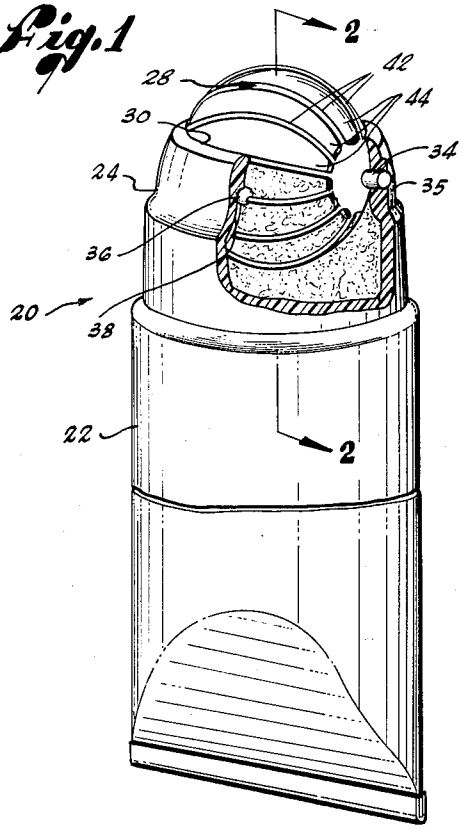


Fig. 3

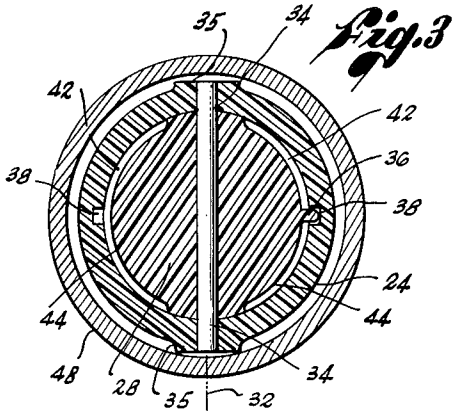


Fig. 2

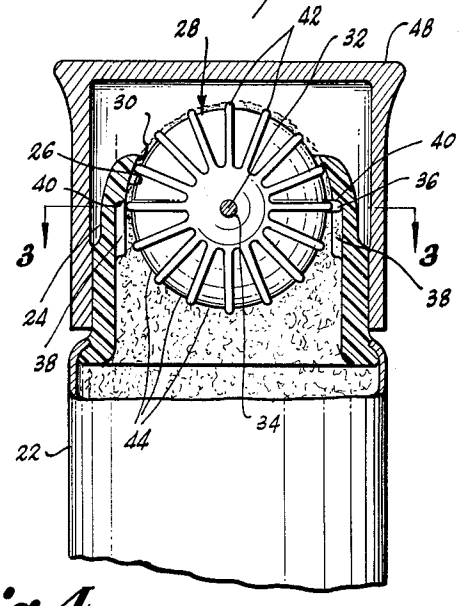
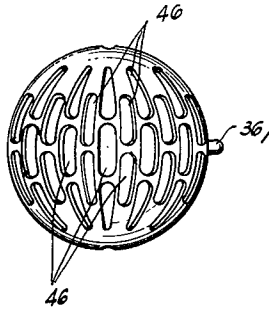


Fig. 4



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Feb. 22, 1966 E. J. KLASSEN 3,235,900

ROLL-ON COSMETIC APPLICATOR

Filed March 5, 1962 2 Sheets-Sheet 2

Fig. 5

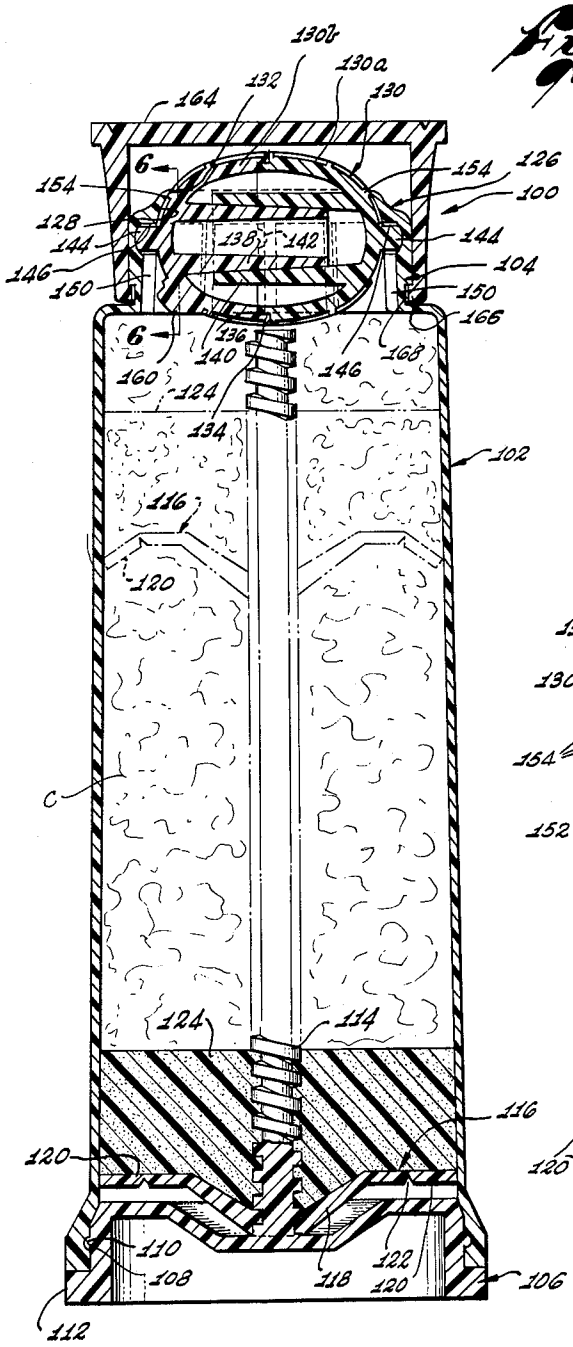


Fig. 6

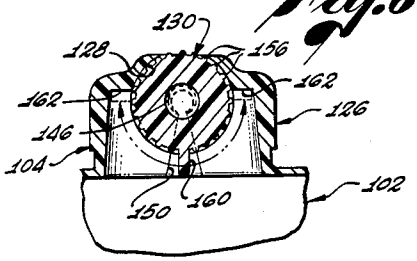


Fig. 7

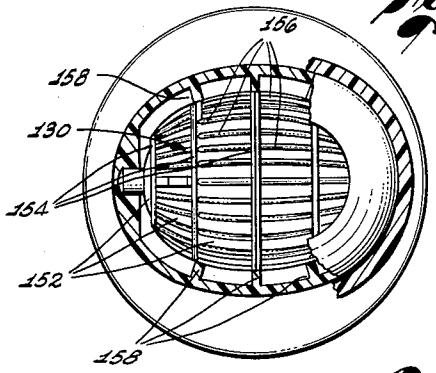
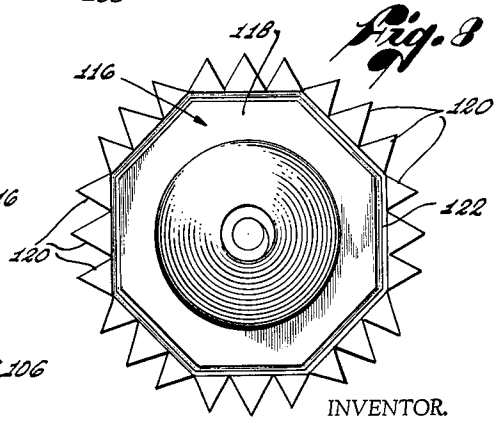


Fig. 8



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ROLL-ON COSMETIC APPLICATOR

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Filed Mar. 5, 1962, Ser. No. 177,646
9 Claims. (Cl. 15—558)

This application is a continuation-in-part of my copending application Serial No. 791,551, filed February 6, 1959, now abandoned, entitled Applicator for Viscous Cosmetics.

This invention relates generally to cosmetic applicators and, particularly, to an improved roll-on applicator for relatively viscous cosmetics, such as creams and pastes.

Briefly, the invention provides a cosmetic applicator having a container for the cosmetic and a cosmetic dispensing head on end of the container. This dispensing head includes a recessed applicator roller which turns in a closely conforming socket within the head and protrudes through an opening in the head.

In use, the applicator roller is rotated back and forth across the user's skin, the roller turning in its socket as it rolls. As the roller turns in its socket, its recesses become filled with the cosmetic in the container, whereby the cosmetic is carried around with the roller as it turns and is deposited on the user's skin.

One feature of the invention resides in a unique limit stop for the applicator roller which limits rotation of the latter to approximately one-half revolution. This permits the roller to be repeatedly stroked in one direction over the user's skin, to massage into the skin a quantity of cosmetic previously applied to the skin by back and forth rolling motion of the roller, without the latter turning in its socket to deposit additional cosmetic on the skin.

In order to assure filling of the recesses in the applicator roller with cosmetic, and thereby proper dispensing of the cosmetic, means are provided for forcing the cosmetic from the container and against the recessed surface of the applicator roller. A second feature of the invention resides in a unique arrangement of the roller in its socket whereby excess cosmetic is prevented from squeezing past the roller when the cosmetic is thus forced from the container. With regard to this feature of the invention, the latter also provides a unique plunger arrangement for forcing the cosmetic from the container which effectively prevents leakage of cosmetic past the plunger, and thereby minimizes waste, and which maintains the cosmetic in the container under slight pressure following each adjustment of the plunger, whereby the applicator continues to dispense its cosmetic properly for an extended period of time following each plunger adjustment.

Other features of the invention reside in the ease and economy of manufacture and assembly of the applicator.

A general object of the invention is, therefore, to provide an improved roll-on applicator for relatively viscous cosmetics.

Another object of the invention is to provide a roll-on applicator of the character described in which rotation of the applicator roller is limited in a unique way, whereby the roller can be used to both apply cosmetic to the skin and massage the applied cosmetic into the skin without depositing additional cosmetic on the skin.

Yet another object of the invention is to provide a roll-on applicator of the character described having means for pressurizing the cosmetic in the container of the applicator to assure proper dispensing of the cosmetic and wherein the applicator roller is arranged in a unique way to prevent squeezing of excess cosmetic past the roller.

A further object of the invention is to provide a roll-on applicator of the character described embodying a unique plunger arrangement for pressurizing the cosmetic in the container of the applicator which continues to maintain the cosmetic under slight pressure following each adjustment of the plunger, whereby the applicator continues to dispense its cosmetic properly for an extended period of time following each plunger adjustment.

Yet a further object of the invention is to provide a roll-on applicator of the character described which is relatively simple in construction, easy and economical to manufacture and assemble, minimizes waste of the cosmetic, and is otherwise ideally suited to its intended purposes.

Other objects, advantages, and features of the invention will become evident as the description proceeds.

Briefly, the objects of the invention are attained by providing a roll-on applicator of the character described earlier in which the applicator roller is inserted into its socket through the inner end of the latter and the wall of the socket curves over the roller about the socket opening through which the roller protrudes. The roller is rotatably mounted in its socket by an axle or journals at the ends of the roller which are supported in the wall of the socket and prevent pressure of the roller against the skin from forcing the roller out of the socket.

If wear occurs at the axle or journals in use, pressurizing of the cosmetic in the cosmetic container of the applicator, to urge the cosmetic into the recesses of the applicator roller, forces the roller into sealing relationship with the overlying wall of the socket to prevent squeezing of excess cosmetic past the roller. As a matter of fact, in one illustrative embodiment of the invention, the applicator roller is relatively loosely journaled in its socket so that it floats, in effect, in the socket and is thereby urged into sealing relation with the overlying socket wall when the cosmetic is pressurized. In this case, the socket wall is longitudinally grooved in a unique way to permit initial assembly of the roller in its socket.

The applicator roller has a projecting stop engageable with stop shoulders in the socket to limit rotation of the roller so that the latter can be used to both apply cosmetic to the skin and massage the cosmetic into the skin. The stop shoulders are arranged in a unique way to permit assembly of the roller into its socket.

In one illustrative form of the invention, the cosmetic container is a flexible tube which is simply squeezed to force the cosmetic therefrom and into the recesses in the applicator roller. In a second illustrative form of the invention, a unique manually operable plunger is provided for forcing the cosmetic from the container. This plunger is arranged so that sealing relationship between the plunger and the container wall is maintained even though the latter is tapered because of the draft required in molding of the container. The plunger also functions as a spring for maintaining the cosmetic under slight pressure following each adjustment of the plunger so that proper cosmetic dispensing action of the applicator is assured for an extended period of time following each plunger adjustment.

A better understanding of the invention may be had from the following detailed description of the two illus-

trative embodiments thereof taken in connection with the attached drawings, wherein:

FIG. 1 is a perspective view, partially broken away, of one roll-on applicator according to the invention;

FIG. 2 is an enlarged section taken along line 2—2 in FIG. 1;

FIG. 3 is a section taken along line 3—3 in FIG. 2;

FIG. 4 is a detail of the applicator roller removed from the applicator in FIG. 1;

FIG. 5 is a longitudinal section through a modified roll-on applicator according to the invention;

FIG. 6 is a section taken along line 6—6 in FIG. 5;

FIG. 7 is a top plan view of the applicator in FIG. 5 with the cap removed and with parts broken away; and

FIG. 8 is a detail of a plunger diaphram removed from FIG. 5.

The roll-on applicator **20** illustrated in FIGS. 1–4 of these drawings will be seen to comprise a container **22** which is open at one end and adapted to be filled with a quantity of a desired cosmetic. In the case of a cream or paste-type cosmetic, such as a cream or paste deodorant, the container may be in the form of a flexible tube, for example. When the cosmetic to be applied is a semi-solidified substance, such as many of the so-called "stick" deodorants, a rigid walled container may be used, as will be seen presently.

Attached to the open end of the container **22** in any suitable manner is a cosmetic dispensing head including a socket element **24**. This socket element, which may be molded from a suitable plastic, for example, is formed with an internal socket **26**. One end of socket **26** opens to the interior of container **22**, as shown. Rotatably fitted in the other end of socket **26** is an applicator roller **28**. Applicator roller **28** is preferably molded from a suitable plastic and has a relatively close fit in the socket and has a portion of its periphery protruding through an opening **30** in the socket element. The applicator roller turns on an axis **32** and is rotatably mounted on an axle **34**. The ends of this axle are press fitted in bores in a pair of raised bosses **35** on the outside of the socket element.

Applicator roller **28** has a radial stop **36**, and the socket element **24** has a pair of diametrically opposed grooves or recesses **38** for receiving this stop when the roller is in the position of FIGS. 1–3, and a position wherein the roller is rotated approximately 180° from the position illustrated respectively. The end walls **40** of these recesses form stop shoulders engageable by the stop **36** on the roller **28** to limit rotation of the latter to approximately 180°. It will be observed that the parts are so proportioned that applicator roller **28** can be inserted into the socket **26** through the inner end of the latter. The recesses **38** open toward this inner end of the socket to permit the roller to be thus inserted through the inner end of the socket and to then enable the roller stop **36** to rotate from one stop shoulder **40** to the other. The recesses **38** should also be open at their ends, of course, to facilitate removal of the molded socket element from the mold cavity.

The surface of applicator roller **28** is recessed in such a way as to form a series of raised, circumferentially spaced ribs **42** on the roller and disposed in planes containing the roller axis **32**.

The wall of socket **26**, about the opening **30**, curves over and is disposed in sealing relation to the applicator roller **28**, as shown. The clearance between the curved wall of socket **26** and the surface of the applicator roller, that is the surfaces of the ribs **42**, is made sufficient (on the order of .002 inch) to permit free rotation of the roller and yet prevent cosmetic from squeezing past the roller when the container or tube **22** is compressed. Free rotation of the roller, of course, requires some clearance between the roller and its axle **34**. In use, the tube **22** is compressed to force cosmetic therefrom and into contact with the inwardly facing surface of the roller. The resulting pressure of the cosmetic against the roller urges the latter toward the overlying curved wall of the socket

26 to the extent permitted by the slight clearance required between the roller and its axle. This, in turn, decreases the clearance between the roller and socket wall, thereby even more effectively preventing the cosmetic from squeezing past the roller. If any wear occurs between the roller and its axle in use of the applicator, this floating movement of the roller is increased with the result that the roller is urged into more intimate sealing relation with the socket wall as the applicator continues to be used. The ribs **42** on the applicator roller are also spaced so that at least one rib is always aligned with the spherically curved surface of the socket **26** in every angular position of the applicator roller, as is obviously the case in the illustrative applicator, so as to prevent leakage of cosmetic substance past the roller.

Ribs **42**, which are on the order of .030 inch high, define therebetween recesses **44** in the surface of the applicator roller. It will be obvious that recesses may be formed in the surface of the applicator roller in other ways, such as by merely forming a plurality of pockets **46** in the surface of the roller, as shown in FIG. 4.

The applicator is completed by a removable cap **48**. This cap is removably fixed to the socket element **24** in any convenient way and serves to enclose the exposed portion of the applicator roller when not in use.

In use of the applicator, the applicator roller **28** is first rolled back and forth over the user's skin in much the same manner as a conventional roll-on applicator. Simultaneously, the tube **22** is sequeezed slightly to force the cosmetic within the tube into the recesses **44** in the applicator roller. As the applicator is moved back and forth in this way, the recesses are filled with cosmetic and are rotated into contact with the skin, the cosmetic within the recesses being deposited on the skin. After a desired quantity of the cosmetic has been applied in this way, the back and forth rolling motion of the applicator roller is discontinued and it is continuously stroked on the skin in one direction.

This action causes the applicator roller to turn to one limit of rotation, after which it remains stationary in its socket and serves to massage the cosmetic into the skin. Since the applicator roller does not turn in its socket, no additional cosmetic is applied to the skin.

It is evident that the same action may be obtained without the stop means **36**, **38** by first rolling the applicator roller back and forth over the skin, as described, and then stroking the applicator against the skin in a direction parallel to the axis of rotation **32** of the roller. The applicator roller, of course, will not rotate when stroked against the skin in this latter direction, so that cosmetic may be massaged into the skin without applying any additional cosmetic to the skin.

Reference is now made to FIGS. 5–8 illustrating a roll-on applicator **100** including a cosmetic container **102** and a cosmetic dispenser **104** on one end of the container. The other end of the container is open and flared slightly to receive a rotatable tapered disc **106**. Disc **106** is rotatably retained in the end of the container by a bead **108** on the disc fitting in a groove **110** in the container. Formed on the disc is an exteriorly accessible, serrated rim **112** by which the disc may be turned.

Rigid on the disc **106** and extending coaxially through the container **102** is a lead screw **114**. A diaphragm **116** is threaded on this lead screw. As shown best in FIG. 8, diaphragm **116** comprises a polygonal center portion **118**, from the edges of which extend teeth **120** integral with the center portion. The diaphragm has a V groove **122** along the sides of its center portion **118**.

Container **102** and diaphragm **116** comprise a molded plastic material, such as polyethylene plastic. The thickness of the diaphragm is somewhat greater than the wall thickness of the container. Also, the center portion **118** of the diaphragm and the individual teeth **120** thereon is cup shaped. The center portion of the diaphragm are, therefore, somewhat stiffer and more rigid than the

container. The reduced diaphragm thickness at the apex of the V groove **122** in the diaphragm, however, forms, in effect, hinge means for the diaphragm teeth **120**. The elasticity of the diaphragm material yieldably urges the teeth against the inner surface of the container wall, thereby causing the points of the teeth to "bite" slightly into the container wall.

Seating on the upper side of the diaphragm **116** is a resilient plunger **124**. This plunger preferably comprises a plastic sponge material, such as a polyurethane foam plastic. Plunger **124** is proportioned to be slightly compressed when it occupies its solid line position of FIG. 5 in the lower end of the container **102** so that the plunger is disposed in sealing relation to the container wall. Screw **114** passes through and is threadedly engaged with the plunger, as shown.

The resilient contact, discussed above, of the points of the diaphragm teeth **120** with the wall of container **102** is effective to restrain the diaphragm **116** against rotation in the container when the screw **114** is rotated by turning the end disc **106**. The frictional contact of the plunger **124** with the container wall and the diaphragm further restrains the diaphragm, as well as the plunger itself, against rotation in the container. Accordingly, the diaphragm **116** and plunger **124** can be advanced toward the dispensing head **104** by rotation of the end disc **106** in the appropriate direction. As will be seen, this upward movement of the plunger forces the cosmetic C from the container **102** into the dispensing head. As will also be seen, the back pressure of the cosmetic on the plunger urges the latter into more intimate sealing relation with the container wall.

In order to facilitate removal of the container **102** from its mold cavity following molding of the container, the latter must have draft. Accordingly, the wall of the container is slightly tapered, as shown. As a result, the diaphragm teeth **102** are bent downwardly and the plunger **124** is placed under slightly increasing radial compression as the diaphragm and plunger approach the upper end of the container. The plunger and diaphragm are thereby more effectively restrained against rotation and the plunger is urged into more intimate sealing relation with the container wall.

The dispensing head **104** is similar to that in the previous applicator and comprises a socket element **126** which is illustratively molded integrally with the container **102**. Within a socket **128** in this socket element is an applicator roller **130**. Roller **130** is molded from a relatively hard plastic, such as polystyrene plastic. Socket **128** is proportioned to receive the roller through its lower end. The socket wall curves over the roller about the opening **132** in the socket element through which the roller protrudes.

Roller **130** is molded in two halves **130***a* and **130***b* have interfitting annular lips **134**, **136** and interfitting hubs **138**, **140**. The two halves of the roller have interfitting recess and projection means **142** which locate the two halves in a predetermined angular position when they are assembled. After assembly, the two halves of the roller may be cemented together.

At the ends of the applicator roller **130** are axle journals **144** which are rotatably supported in journal bores **146** in the socket element **104**. The roller journals **144** have a relatively loose fit in the journal bores **146**, as shown, so that the roller can float slightly in the socket **128** in the axial direction of the latter.

Formed in the wall of the socket element **126** are grooves **150** which open at their upper end to the journal bores **146**, respectively, and open at their lower end through the lower end of the socket element. As shown best in FIG. 6, grooves **150** taper inwardly as they approach their respective journal bores **146** and to a width which is somewhat less than the diameter of the respective bores. When assembling the applicator roller **130** in its socket **128**, the roller is inserted through the lower end of the container to a position in which its journals **144** engage in the lower ends of the tapered grooves **150**. Pressure is then exerted on the roller to force its journals through the grooves into the journal bores **146**. The walls of the grooves **150**, being of a relatively resilient plastic, yield under the pressure of the roller journals thereagainst to permit the journals to be forced through the grooves. When the journals snap into the journal bores, the groove walls return to their normal positions behind the journals, thereby confining the latter in the journal bores. As an added precaution against the roller journals being forced out of their journal bores by pressure on the exposed portion of the applicator roller, the upper end of the screw **114** is spaced just slightly from the roller to act as a stop for the roller.

Applicator roller **130** is provided with recesses **152** which define circumferentially extending ribs **154** on the roller. As shown best in FIG. 5, the ribs **154** at the two ends of the roller are disposed in sealing relation with the curving end walls of the socket **128**. Recesses **152** also define ribs **156** on the applicator roller, in planes containing the axis of the roller, which are disposed in sealing relation to the curving side walls of the socket **128**. Since the applicator roller **130** can float slightly in the socket **128**, the pressure of the cosmetic C against the roller created by advancing of the plunger **124** toward the dispensing head forces the roller ribs **154**, **156** into sealing contact with the socket walls to prevent the cosmetic from squeezing past the roller. Effective sealing contact of the roller ribs with the socket walls is assured by the fact that the material of the applicator roller is relatively hard while the material of the socket element **126** is relatively resilient, so that the socket walls form fit themselves, as it were, to the applicator roller when the latter is forced against the walls by the pressure of the cosmetic C on the roller, thereby further preventing the cosmetic from squeezing past the roller. In order to lend rigidly to the socket element below the upper curving walls of its socket **128**, the lower, relatively thin walls of the element are formed with interal reinforcing ribs **158** (FIG. 7).

As in the earlier applicator, the applicator roller **130** is formed with a projecting stop **160** which is engageable with stop shoulders **162** in the socket element **126** to limit rotation of the roller.

When not in use, the dispensing head **104** is covered by a flexible plastic cap **164** having a lower internal bead **166** which snaps into an external annular groove **168** in the socket element **126**.

In use of the applicator just described, the cap **164** is removed and the disc **106** is turned through a few degrees to force the cosmetic C from the container **102** into socket **128** below the applicator roller **130**. The recesses **152** in the roller thereby become filled with cosmetic. The roller is urged into sealing contact with the socket walls by the pressure of the fluid so that no cosmetic squeezes past the roller. The back pressure of the cosmetic on the plunger **124** also compresses the latter, thereby urging the plunger into effective sealing contact with the wall of container **102** to prevent cosmetic from squeezing past the plunger.

The applicator roller is then rolled back and forth over the user's skin to apply a quantity of cosmetic to the skin, as in the earlier form of the invention. After the desired quantity of cosmetic has been applied, it is massaged into the skin by repeatedly stroking the roller in one direction over the skin, the roller stop means **160**, **162** then preventing the roller from turning to deposit additional cosmetic.

The aforedescribed compression of the plunger **124** resulting from turning of the plunger-adjusting disc **106** to force the cosmetic C from the container **102** and against the applicator roller **130** maintains the cosmetic in the applicator under slight pressure and in contact with the applicator roller during several successive uses

of the applicator. Thus, each adjustment of the plunger-adjusting disc **106** conditions the applicator for several uses. Accordingly, the disc need not be readjusted each time the applicator is used. It is evident from FIG. 5 that plunger **124** may continue to be thus periodically adjusted until it is finally forced against and into substantially conforming relation to the exposed inner half of the applicator roller **130**. Accordingly, substantially all of the cosmetic may be dispensed from the container **102**.

It will be apparent, therefore, that cosmetic applicators have been described and illustrated which are fully capable of attaining the several objects preliminarily set forth.

While certain preferred embodiments of the invention have been disclosed, numerous modifications in the design and arrangements of parts of the invention are possible within the scope of the following claims.

What is claimed is:

1. For use in a roll-on cosmetic applicator:

a roll-on cosmetic dispensing head having a central passage which opens at one end through one end of said head and terminates at its other end in a curved socket opening to the exterior of said head through a reduced opening in the other end of the head,

an applicator roller within said socket having coaxial journals at opposite ends thereof rotatably fitted in journal recesses in the wall of said head to rotatably support the roller in the socket,

the wall portion of said head about said reduced opening curving over said roller in sealing relation to the surface of the roller and said roller protruding through said opening for rolling contact with the user's skin,

said roller having recesses in its surface,

said head having internal, axially extending and tapered grooves opening at their narrow ends to said journal recesses, respectively, and at their wide ends through said one end of said head,

said passage being larger in cross-section than said roller throughout the entire length of the passage from said one end thereof to said socket, whereby said roller is insertable into said socket through said one end of said passage, and

said head comprising a relatively resilient plastic and the width of the narrow ends of said grooves being slightly less than the diameter of said roller journals, whereby the latter may be forced through said grooves into said journal recesses by pressure exerted on said roller and the walls of the narrow ends of the grooves close behind said journals to retain the latter in said journal recesses.

2. A roll-on cosmetic applicator comprising:

a cosmetic container,

a cosmetic dispensing head on one end of said container having a central passage which opens at one end through one end of said head to the interior of said container and terminates at its other end in a curved socket opening to the exterior of said head through a reduced opening in the other end of the head,

an applicator roller within said socket having coaxial journals at opposite ends thereof rotatably fitted in journal recesses in the wall of said head to rotatably support the roller in the socket,

the wall portion of said head about said reduced opening curving over said roller in sealing relation to the surface of the roller and said roller protruding slightly through said opening for rolling contact with the user's skin,

said roller having recesses in its surface which becomes filled with cosmetic from the container and carry the cosmetic to the user's skin as the roller is over the skin,

said head having internal, tapered, axially extending grooves opening at their narrow end to said journal recesses, respectively, and at their wide end through said one end of said head,

said passage being larger in cross-section than said roller throughout the entire length of the passage from said one end thereof to said socket, whereby said roller is insertable into said socket through said one end of said passage,

said head comprising a relatively resilient plastic and the width of the narrow ends of said grooves being slightly less than the diameter of said roller journals, whereby the latter may be forced through said grooves into said journal recesses by pressure exerted on said roller and the walls of the narrow ends of the grooves close behind said journals to retain the latter in said journal recesses,

a plunger in said container for forcing cosmetic therefrom against said roller,

a rotary screw extending axially through said container and threadedly engaged with said plunger for advancing the latter through said container,

means for turning said screw, and

one end of said screw being located adjacent said roller to act as a stop for the roller to prevent the roller journals from being forced out of their journal recesses.

3. A roll-on cosmetic applicator comprising:

a cosmetic container,

a cosmetic dispensing head on one end of said container having a central passage which opens at one end through one end of said head to the interior of said container and terminates at its other end in a curved socket opening to the exterior of said head through a reduced opening in the other end of the head,

an applicator roller within said socket having coaxial journals at opposite ends thereof rotatably fitted in journal recesses in the wall of said head to rotatably support the roller in the socket,

the wall portion of said head about said reduced opening curving over said roller in sealing relation to the surface of the roller and said roller protruding slightly through said opening for rolling contact with the user's skin,

said roller having recesses in its surface which become filled with cosmetic from the container and carry the cosmetic to the user's skin as the roller is rolled over the skin,

said head having internal, tapered, axially extending grooves opening at their narrow end to said journal recesses, respectively, and at their wide end through said one end of said head,

said passage being larger in cross-section than said roller throughout the entire length of the passage from said one end thereof to said socket, whereby said roller is insertable into said socket through said one end of said passage,

said head comprising a relatively resilient plastic and the width of the narrow ends of said grooves being slightly less than the diameter of said roller journals, whereby the latter may be forced through said grooves into said journal recesses by pressure exerted on said roller and the walls of the narrow ends of the grooves close behind said journals to retain the latter in said journal recesses,

a plunger in said container for forcing cosmetic therefrom against said roller,

a rotary screw extending axially through said container and threadedly engaged with said plunger for advancing the latter through said container,

means for turning said screw,

one end of said screw being located adjacent said roller to act as a stop for the roller to prevent the roller

journals from being forced out of their journal recesses,
a radially projecting stop on one end of said roller, and
internal stop shoulders on said head at opposite sides of and facing said one end of said passage for engagement by said roller stop to limit rotation of the roller in the socket.

4. A roll-on cosmetic applicator comprising:
a cosmetic container,
a cosmetic dispensing head on one end of said container having an internal socket opening at one end to the interior of the container and at the other end to the exterior of the head through a reduced opening in the head,
an applicator roller in said socket and protruding through said reduced opening for rolling contact with the user's skin,
means supporting said roller in said socket for rotation in the socket and for limited floating movement in a transverse direction of said reduced opening into sealing contact with the wall of said head about said opening,
said roller having recesses in its surface which become filled with cosmetic from the container and carry the cosmetic to the user's skin as the roller turns in said socket,
a relatively soft, resiliently compliant and compressible, sponge-like plunger in said container,
screw threaded means acting between said plunger and container and operable exteriorly of said container for moving said plunger through the container toward said roller and restraining said plunger against retrograde movement, thereby to force cosmetic from the container into said roller recesses, and
said plunger being compressed by adjustment of said screw threaded means to pressurize said cosmetic, whereby said plunger is effective to maintain said cosmetic under pressure for several successive uses of the applicator.

5. A cosmetic applicator comprising:
a cosmetic container,
a cosmetic dispensing head on one end of said container including means for dispensing cosmetic from said container onto the user's skin,
a screw extending axially through said container,
exteriorly accessible means at the other end of said container for turning said screw,
a relatively rigid member within said container and threaded on said screw, said member including means which frictionally engage the container wall to prevent rotation of said member with said screw,
a relatively soft, resiliently complaint and compressible, sponge-like plunger seating on said member and disposed in sealing relation to said screw and said container wall,
said member and plunger being movable through said container toward said head to force cosmetic from the container into the head by rotation of said screw in one direction, and
said plunger being compressed by adjustment of said screw to pressurize said cosmetic, whereby said plunger is effective to maintain said cosmetic under pressure for several successive uses of the applicator.

6. A cosmetic applicator comprising:
a cosmetic container,
a cosmetic dispensing head on one end of said container including means for dispensing cosmetic from said container onto the user's skin,
a screw extending axially through said container,
exteriorly accessible means at the other end of said container for turning said screw,
a member within said container and threaded on said screw, the wall of said container being flexible and tapered and said member comprising a relatively rigid center portion and flexible pointed teeth about the edge of said center portion which yieldably engage said container wall to prevent rotation of said member in the container,
a resilient sponge-like plunger seating on said member and disposed in sealing relation to said screw and said container wall, and
said member and plunger being movable through said container toward said head to force cosmetic from the container into the head by rotation of said screw in one direction.

7. For use in a roll-on cosmetic applicator:
a roll-on cosmetic dispensing head having a central passage which opens at one end through one end of said head and terminates at its other end in a curved socket in the other end of said head,
an applicator roller positioned in said socket and protruding through a reduced opening in said other end of said head for rolling contact with the user's skin,
means rotatably mounting said roller on said head,
the wall of said head about said reduced opening curving over said roller in close proximity to the surface of the roller,
said passage being larger than said roller throughout the entire length of the passage from said one end thereof to said socket, whereby said roller is insertable into said socket through said one end of said passage,
said roller having a radially projecting stop within said socket which is rotatable with the roller across said passage from one side of the latter to the opposite side along a curved path passing between the roller axis and said one end of the passage, and
said head having internal stop shoulders at said sides of said passage and facing said one end of said passage for engagement by said roller stop to limit rotation of said roller in said socket.

8. For use in a roll-on cosmetic applicator:
a roll-on cosmetic dispensing head having a central passage opening at one end through one end of the head and terminating at its other end in a curved socket opening to the exterior of the head through a reduced opening in the other end of the head,
an applicator roller within said socket and protruding through said reduced opening for contact with the user's skin,
means rotatably mounting said roller in said socket,
the wall of said head curving over said roller and being disposed in sealing relation to the surface of the roller about said reduced opening,
there being recesses in the surface of said roller,
said head comprising a relatively soft, resilient material and said roller comprising a relatively hard material, and
projecting circular sealing ribs on the ends of said roller about the rotation axis thereof disposed in sealing contact with the opposing wall of said head to prevent leakage of cosmetic between the ends of the roller and the wall of said head.

9. The combination according to claim 4, wherein:
the wall portion of said dispensing head immediately surrounding said reduced opening curves over said applicator roller about the entire periphery of the reduced opening, and
the material of said dispensing head is relatively resiliently compliant and the material of said applicator roller is relatively hard, whereby said surrounding wall portion of said head yields into closely conforming sealing contact with said roller when the latter is forcibly pressed against said wall portion by the pressure of cosmetic in said container.

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11

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12

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