Aug. 18, 1942. C. A. MUREAU 2,293,211

COSMETIC CONTAINING AND APPLYING DEVICE

Filed Aug. 14, 1939

Fig. 1.

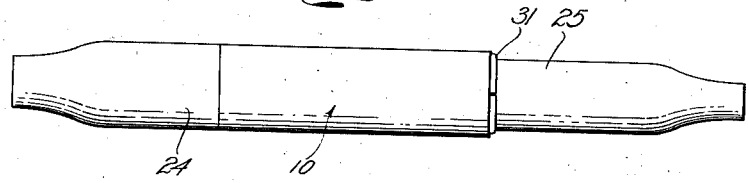


Fig. 2.

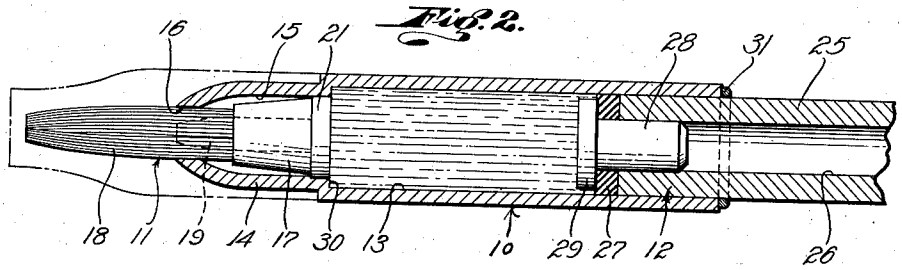


Fig. 3.

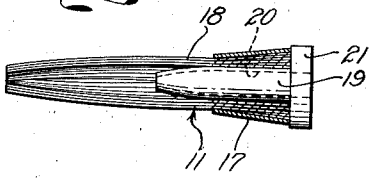


Fig. 8.

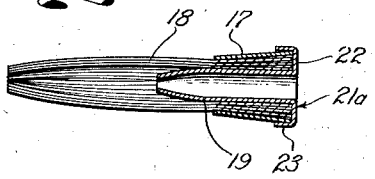


Fig. 4.

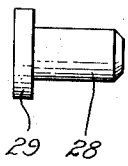


Fig. 5.

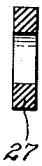


Fig. 6.

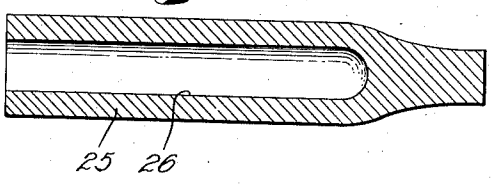
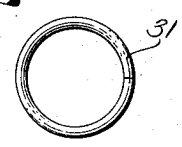


Fig. 7.



Inventor
CHARLES A. MUREAU
By
W. H. Clapsell
His Attorney

Patented Aug. 18, 1942 2,293,211

UNITED STATES PATENT OFFICE

2,293,211

COSMETIC CONTAINING AND APPLYING DEVICE

Charles A. Mureau, Los Angeles, Calif.

Application August 14, 1939, Serial No. 289,959

3 Claims. (Cl. 15—137)

This invention relates to a device for containing and applying cosmetics such as paste lip rouges, mascara, etc., and it is a general object of the invention to provide a practical, effective device of this character that is extremely simple and inexpensive of manufacture.

Another object of this invention is to provide a cosmetic applicator embodying a simple, inexpensive, one-piece body forming a container for a supply of a cosmetic and carrying a means for applying the cosmetic and a means for ejecting the cosmetic to the applying means.

Another object of this invention is to provide a device of the character mentioned in which the ejecting means embodies a minimum number of simple parts and does not necessitate the cutting of threads or the accurate machining of the parts.

Another object of this invention is to provide a device of the character mentioned in which the ejecting means is easily and quickly operated by merely pushing an operating part on the ejecting plunger.

Another object of this invention is to provide a device of the character mentioned embodying a novel and very effective means for yieldingly or releasably holding the ejecting plunger against movement, which means automatically releases when the plunger is pushed to eject the cosmetic.

A further object of this invention is to provide a novel and simplified brush means for a device of the character referred to that is simple and compact.

The various objects and features of my invention will be fully understood from the following detailed description of typical preferred forms and applications of the invention, throughout which description reference is made to the accompanying drawing, in which:

Fig. 1 is a side elevation of the improved device of the invention. Fig. 2 is an enlarged fragmentary longitudinal detailed sectional view of the device showing certain parts in elevation and indicating the normal position of the cap in broken lines. Fig. 3 is a longitudinal detailed sectional view of the brush means removed from the body. Fig. 4 is a side elevation of the retaining element or plug. Fig. 5 is a longitudinal cross section of the sealing element of the plunger. Fig. 6 is a longitudinal detailed sectional view of the plunger. Fig. 7 is an end view of the plunger-holding ring, and Fig. 8 is a longitudinal detailed sectional view of another form of brush means.

The device of the invention may be said to comprise, generally, a body 10 for containing a supply of a cosmetic, cosmetic applying means 11 projecting from an end of the body 10, and ejecting means 12 for ejecting the cosmetic from the body 10 to the applying means 11.

The body 10 is an elongate hollow or tubular member having a central longitudinal opening which constitutes a chamber 13 for the cosmetic. It is a feature of the invention that the body 10 is a simple one-piece member adapted to be formed of any suitable material such as one of the so-called plastics. The exterior of the body 10 may be shaped and finished as desired. In the case illustrated the body 10 has a plain, cylindrical exterior. The cosmetic chamber 13 extends to the rear end of the body 10 to receive a part of the ejecting means 12, as will be later described. The forward portion 14 of the body 10 is reduced in diameter and the forward extremity of the body is curved or tapered inwardly. A socket 15 of reduced diameter is provided in the forward body portion 14 and a reduced opening 16 passes through the forward wall of the body. It is to be noted that the body 10 does not embody joints or connections and does not require the cutting of threads.

The applying means 11 is provided to facilitate the application of the cosmetic. The means 11 is mounted in the forward portion of the body 10 and is preferably in the form of a brush means. In Figs. 1 to 7, inclusive, of the drawings the brush means 11 comprises a tubular shell 17, a brush tuft 18 and a tube 19 in the tuft 18.

The shell 17 is a tapered or frusto-conical member and is positioned in the body socket 15. The shell 17 is arranged to have its small end facing forwardly. The internal diameter of the small end of the shell 17 is substantially the same as the diameter of the opening 16. The brush tuft 18 comprises a multiplicity of bristles of good quality arranged longitudinally in the shell 17. The inner portions of the brush bristles are set in a body of wax and rosin or wax and synthetic wax in the tapered shell 17. The bristles forming the tuft 18 are sufficiently long to project forwardly through the opening 16 and to protrude a substantial distance from the forward extremity of the body 10. The forward end of the shell 17 may be spaced rearwardly from the front wall of the body 10 as the opening 16 serves to support and stabilize the outer projecting portion of the brush tuft 18.

The tube 19 extends forwardly in the brush tuft 18 from the inner end of the tuft. The lon-

gitudinal opening 20 of the tube 19 is large in diameter to readily conduct the cosmetic forwardly from the chamber 13 to the interior of the bush tuft 18. The forward portion of the tube 19 may be tapered or reduced to concentrate the cosmetic discharge. The tube 19 discharges within the brush tuft 18 at a point between the ends of the tuft. In the preferred arrangement the foward discharge end of the tube 19 is substantially flush with the forward extremity of the body 10. A flange 21 is provided on the inner end of the tube 19. The flange 21 is pressed or force-fitted in the socket 15 to secure the brush means 11 in the body 10. In the embodiment of the invention being described the flange 21 is solid and the shell 17 and the inner end of the brush tuft 18 engage against the forward face of the flange. In the alternative form of brush means illustrated in Fig. 8 of the drawings the flange 21a of the tube 19 is cup-shaped, having a radial end wall 22 and a circular axial wall 23 facing or projecting forwardly. In this case the inner portion of the shell 17 and the inner part of the brush tuft 18 are received within the wall 23 of the flange 21a. This serves to support and centralize the shell 17 and the brush tuft 18 and reduces the overall length of the brush means 11. The axial wall 23 of the flange 21a is force fitted in the socket 15 to secure the brush means in the body 10. In both forms of applying means or brush means the set or embedded inner portion of the brush tuft 18 is dependably retained in the conical shell 17. The wall of the conical shell 17 has a wedging action and firmly holds the brush tuft.

A cap 24 is provided to cover and protect the protruding portion of the brush tuft 18. The cap 24 may be removably slid on the reduced forward portion 14 of the body 10 and the major portion of the cap may be of the same shape and diameter as the body 10. The forward portion of the cap 24 is tapered or reduced in diameter. The cap 24 is easily removable from the body 10 to expose the brush tuft 18 for use.

The ejecting means 12 is operable to eject portions of the cosmetic from the chamber 13 to the interior of the brush tuft 18. In accordance with the invention the ejecting means 12 is in the nature of a sliding plunger means. The means 12 includes a plunger 25 operable in the chamber 13. The plunger 25 extends from the rear end of the chamber 13 to protrude from the body 10. In practice the plunger 25 may be a simple, generally cylindrical member formed of a plastic or the like. It is preferred to make the plunger 25 hollow or tubular to reduce its weight and cost. In the case illustrated the plunger 25 has a central longitudinal opening 26.

Means is provided on the forward end of the plunger 25 for slidably sealing with the wall of the chamber 13. This means includes an annular washer or sealing element 27 seated against the forward end of the plunger 25 and sealing with the wall of the chamber 13. A plug 28 is pressed or force-fitted in the forward end of the opening 26 and has a head 29 engaging against the forward face of the sealing element 27 to hold the element in place and to close the forward end of the opening 26. It will be observed that the sealing element 27 is secured to the plunger 25 without resorting to the use of screw threads or other expensive securing means. The head 29 of the plug 28 is preferably proportioned to clear the wall of the chamber 13. An annular rearwardly facing shoulder 30 occurs on the wall of the chamber 13 where the chamber joins the socket 15 and the head 29 is adapted to engage the shoulder 30 to limit the forward movement of the plunger 25. The plunger 25 may be pushed or moved forwardly relative to the body 10 to eject a portion of the cosmetic through the opening 20 into the brush tuft 18.

The invention provides simple yet very effective means for normally releasably holding the plunger 25 against longitudinal movement. This means comprises a spring ring 31 engaging about the plunger 25 at the rear end of the body 10. The spring ring 31 is proportioned to grip the plunger 25 through its resiliency and its cooperation with the end of the body 10 normally prevents inward movement of the plunger relative to the body. The chamber 13 is filled with the cosmetic and atmospheric pressure resists outward movement of the plunger 25. When the plunger 25 is intentionally pushed or moved inwardly the spring ring 31 yields or merely frictionally resists the movement. The spring ring 31 is such that the plunger 25 may be effectively operated to discharge required quantities of the cosmetic into the brush tuft 18 by merely applying short quick taps or thrusts to the rear end of the plunger.

In the use or operation of the device the chamber 13 initially contains a supply of the cosmetic and the cap 24 normally encloses and protects the brush tuft 18. The device may be carried in a pocketbook or in a pocket without danger of loss of the cosmetic and without soiling the clothing. When it is desired to use the device the cap 24 is removed from the body 10 and the plunger 25 is moved forwardly relative to the body 10. The plunger may be operated by grasping the body 10 and tapping or thrusting the plunger 25 to move it the required distance. As above described the spring ring 31 normally holds the plunger against inward movement but yields to allow this movement when the plunger is intentionally operated. Upon forward movement of the plunger 25 a quantity of the cosmetic is forced through the opening 20 into the brush tuft 18. The brush tuft 18 may be conveniently employed to apply the cosmetic. The body 10 and the plunger 25 constitute a handle for the brush tuft 18. After use the cap 24 is replaced. When it is desired to replenish the supply of cosmetic the plunger 25 is merely withdrawn from the body 10 and a supply of the cosmetic in the form of a cartridge or in any other form is introduced into the chamber 13. The plunger 25 carrying the ring 30 is then replaced in the chamber 13.

Having described only typical preferred forms and applications of the invention, I do not wish to be limited or restricted to the specific details herein set forth, but wish to reserve to myself any variations or modifications that may appear to those skilled in the art or fall within the scope of the following claims.

Having described my invention, I claim:

1. A cosmetic applicator comprising a body having an opening forming a cosmetic reservoir, cosmetic applying means on the forward end of the body having communication with one end of the opening, a slidable plunger in the opening operable to eject the cosmetic to the applying means and having a portion projecting from the rear end of the body, and a spring ring riding with and normally tightly gripping said projecting portion of the plunger engageable with the rear end of the body to hold the plunger against

operation and capable of being forced by intentional positive operation of the plunger.

2. A cosmetic applicator comprising a body having an opening forming a cosmetic reservoir, cosmetic applying means on the forward end of the body having communication with one end of the opening, a slidable plunger entering the other end of the opening operable to eject the cosmetic to the applying means and having a portion projecting from the rear end of the body, and a split ring riding with and normally tightly gripping said projecting portion of the plunger for engaging the rear end of the body to prevent unintentional operation of the plunger and capable of being forced by intentional positive operation of the plunger.

3. A cosmetic applicator comprising a tubular body forming a cosmetic container, cosmetic applying means projecting from the forward end of the body and having communication with the interior of the body, a sliding plunger entering the rear end of the body and operable forwardly to force the cosmetic to the applying means, the plunger having a portion projecting from the rear end of the body adapted to be pushed to move the plunger forwardly to eject the cosmetic to the applying means, and a spring member riding on and normally tightly gripping said projecting portion of the plunger and engaging the rear end of the body to resist forward movement of the plunger and capable of being forced by intentional forcible operation of the plunger, the plunger being adapted to be pulled rearwardly out of the body to allow replenishing of the cosmetic, said member moving with the plunger when the plunger is moved rearwardly.

CHARLES A. MUREAU.