Nov. 14, 1961 H. S. DEARLING 3,008,169

COSMETIC APPLICATOR

Filed May 11, 1960

FIG. 1

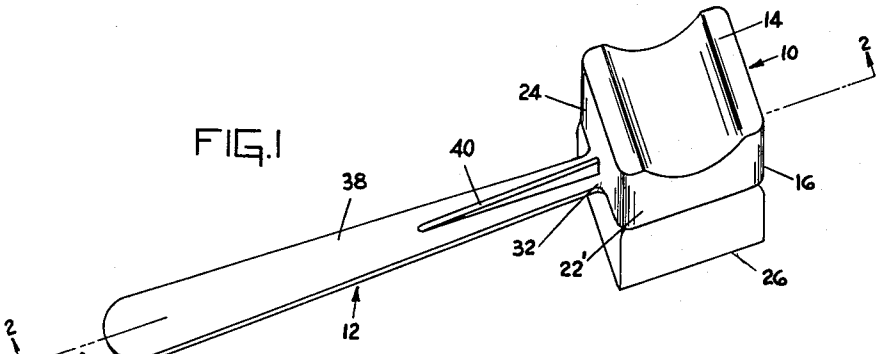


FIG. 2

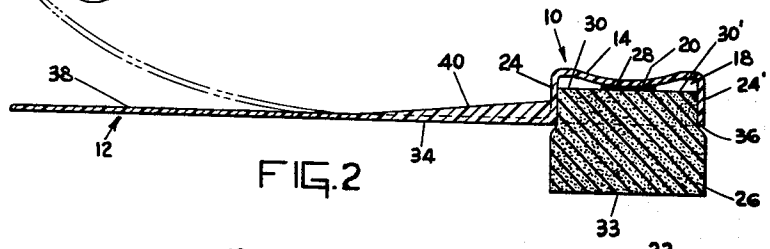


FIG. 3

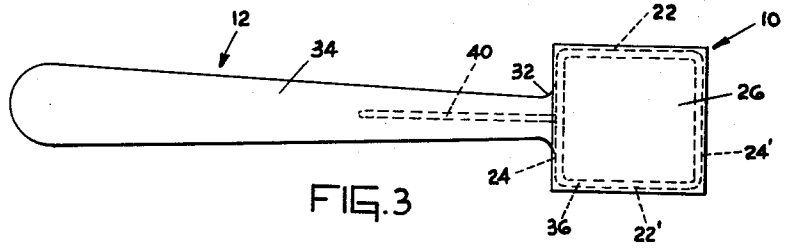
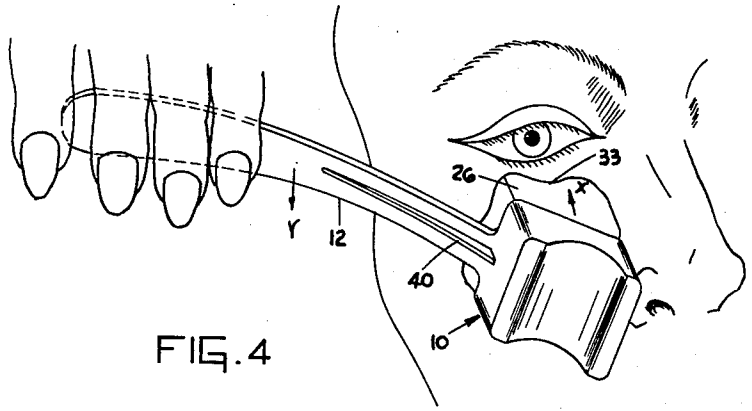


FIG. 4



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COSMETIC APPLICATOR

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The invention relates to improvements in means for applying cosmetics and lotions to the face, or other parts of the body.

In applying a liquid foundation, lotion or liquid make-up material to the face, it has been and still is the practice to apply the make-up material manually. The liquid material is poured into the palm of one hand, the fingers of the other hand are dipped in the liquid material, and then the wetted fingers are used to apply and work the material into the skin. In applying liquid make-up with the fingers, and to the delicate contours around the eyes, the nostrils and the lips, the skin is stretched, thereby undesirably opening the pores of the skin. Also, the manual application of liquid make-up material is a messy operation, requiring its subsequent removal from the hands.

It has been proposed to use a piece of sponge or a sponge pad to apply liquid make-up material to the face. The difficulty here is that in holding the sponge pad with the fingers, the hand covers that portion of the face to which the make-up is being applied, and prevents viewing in a mirror. Also, the liquid cosmetic material is squeezed out from the sponge pad and onto the hand, requiring removal by washing.

It has been proposed to provide an applicator in the form of a handle having a sponge pad at one end thereof. Such prior art applicator, while permitting viewing in the mirror of that portion of the face to which the make-up is being applied, and eliminating the necessity for removing the make-up material from the hands, has not served to apply the cosmetic material in a satisfactory manner. Known applicators of this type do not function to apply the make-up material evenly or uniformly to the variously contoured areas of the face.

An object of the invention is to provide an applicator for cosmetic material which enables the uniform and even application of the material to the variously contoured areas of the face without unduly stretching the skin to undesirably open the pores, while permitting the viewing in a mirror of that area of the face to which the cosmetic material is being applied.

Another object of the invention is to provide a cosmetic applicator for realizing the foregoing advantages which is of simplified construction and is inexpensive to manufacture.

These, and other objects and advantages of the invention will be apparent from the following detailed description, taken in conjunction with the accompanying drawings illustrating a preferred embodiment of the invention, in which:

FIG. 1 is a perspective view of the rear side of an applicator made in accordance with the invention;

FIG. 2 is a vertical cross-sectional view taken approximately in the plane of line 2—2 of FIG. 1;

FIG. 3 is a front view of the applicator; and

FIG. 4 illustrates the manner in which the applicator operates when applying cosmetic material to the face.

I have found that in order to apply cosmetics, more particularly liquid make-up material, to the variously contoured areas of the face so that the material may be uniformly and evenly distributed, the support or holder for a porous, compressible pad which retains the cosmetic material and the handle must be related to one another so that the handle of the applicator will function as a highly flexible extension of the pad holder. By structurally

relating the pad holder and the handle of the applicator so that the handle may flex in a plane perpendicular to the length of the handle in a direction opposite to the direction in which pressure is applied to the face by the pad, the handle, the pad holder, and the pad will cooperate with one another in a manner whereby the applying surface of the pad will coextensively conform to the variously contoured areas of the face with the pressure distributed to afford uniform or even coating of the make-up material upon the contoured area. Also, such even and uniform application of the make-up is accomplished without unduly stretching the skin.

Referring to FIGS. 1 to 3, the cosmetic applicator of the invention comprises a pad holder 10 and a handle 12 extending therefrom. The pad holder and the handle are molded of a suitable plastic material in integral form as a single piece. Preferably, the applicator body, consisting of the integrally formed pad holder and handle, is made by injection molding a material such as medium, impact-strength styrene.

The pad holder 10 comprises a bottom wall 14 and an integrally formed, peripheral upstanding rim 16 which together provide a recess or well 18, as shown in FIG. 2. Preferably, the pad holder portion of the applicator is rectangular or square in lateral outline, as shown. A suitable size for the holder provides a recess which is one inch square in its lateral dimensions. The bottom wall 14 is provided with a raised or projecting portion 20 so that the recess 18 has a reduced depth at the center thereof. Preferably, and for simplicity of mold structure to make the applicator body, the bottom wall's raised portion 20 is convexly shaped to extend between the side walls 22, 22' with a pad holder having a square outline, as illustrated. Although the bottom wall may be thickened at the projecting portion thereof, the bottom wall preferably is dished at the rear side to provide the desired convexity and a bottom wall of uniform thickness, thereby saving plastic material. The other pair of spaced side walls, which together with the side walls 22, 22' constitute the upstanding rim 16, are designated 24, 24'.

A pad 26 is positioned in the recess 18 and secured to the pad holder. The pad is made of a flexible, compressible, porous material which will retain liquid or powdered make-up material. The sponge form of polyurethane is particularly suitable. The normal or uncompressed thickness of the pad is greater than and preferably at least twice the depth of the recess at the centrally raised portion thereof. With a substantially square outline of pad holder, as shown, the sponge pad is similarly of square outline, with its lateral dimensions at least equal to and preferably slightly greater than the lateral dimensions of the recess. Through the recess is of varying depth, it is preferred that the pad be of substantially the same thickness throughout.

The sponge pad is secured within the recess by a suitable adhesive or cement, such as a rubber cement. The adhesive line 28 connecting the sponge pad to the bottom wall preferably is restricted to the raised or convex portion 20. The adhesive may be applied as a central stripe to the sponge pad, and then inserted into the recess and pressed against the projection 20 to provide the adhesive connection, as shown in FIG. 2. Thus, the sponge pad 26 is positioned within the recess 20 with the bottom portions thereof, designated 30, 30', which are adjacent the central portion, in unattached or unadhered relationship to the bottom wall at such areas. Also, the adjoining sides of the sponge pad are unadhered to the inner face of the rim 16 or the side walls 22, 22' and 24, 24'.

The handle 12 is made of very thin section. Though as shown, the greatest width of the handle is at its free end,

and it is reduced in width at the juncture **32** with the pad holder **10**, the thickness of the handle is preferably only 1/32 inch, and considerably less than the most narrow width thereof. The handle may be said to be blade-like in character. Further, the thin, blade-like handle is joined to the pad holder rim **16** at the rim's upper edge. In effect, the handle is a lateral extension of the rim, with the upper surface **34** of the handle substantially coextensive with the top edge **36** of the rim. The rim may also be of thin section, having a thickness approximately equal to the thickness of the thin, blade-like handle. Due to the thin sections involved and to prevent fracture, the rear surface **38** of the handle preferably is molded with a central strut **40** extending longitudinally from the juncture **32** along the handle's length. Thus, the handle possesses substantial flexure in a plane perpendicular to its length in a direction opposite to the direction that pressure is applied by the pad when used, the handle readily assuming a flexed condition as illustrated by the dotted lines in FIG. 2. The described structural relationship of the applicator body's handle and pad holder portions also allows twisting flexure about the longitudinal axis of the handle.

FIG. 4 illustrates make-up being applied to a hollowed portion of the face, adjacent the nose, by the applicator of the invention after liquid make-up material has been applied to and is retained by the porous, compressible sponge pad **26**. In applying the make-up material, one uses a tangential or wiping action, together with pressure, in a direction perpendicular to the area of the face being coated, or in the direction indicated by the arrow X. The ability of the handle **12** to flex in a direction opposite to the direction of pressure application, or in the direction of the arrow Y, permits the pressure applied by the pad **26** to be distributed so that the make-up material is wiped onto the face uniformly and evenly, though the area to which the make-up is being applied is a curved surface with which the pad's surface **33** matingly conforms. Sufficiently firm pressure may be applied to reach all concavely, convexly and concavo-convexly contoured areas of the face, and yet provide uniform and even distribution of the make-up material upon the particular area.

Clear viewing in a mirror of that area of the face to which the make-up is being applied is afforded. The raised area **20** in the pad holder provides firm support for the sponge pad as the wiping action, with the component of pressure normal to the area being coated, applies the make-up material. The intersecting corners of the square pad adjoining the surface **33** furnish a thinned area, permitting coating in such restricted areas of the face as adjacent the corners of the eye. The areas of the sponge which are unadhered or unattached to the bottom wall and the side walls, the areas adjacent the adhesive line **28**, provide a desirable squeegee action when, after use, the sponge pad is to be rinsed and cleaned to remove residual make-up material.

It will be apparent that an applicator in accordance with the invention, because of its simplicity of construction, permits manufacture at minimum cost.

It also will be apparent that while a preferred embodiment of the invention has been illustrated and described, various modifications and changes may be made without departing from the spirit and scope of the invention as sought to be defined in the following claims.

I claim:

1. A cosmetic applicator comprising a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of plastic material, said pad holder having a bottom wall and a peripheral, upstanding rim to provide a recess, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, a porous, compressible pad of substantially uniform thickness and normally having a thickness greater than the depth of the recess at the central portion thereof, the pad being positioned in the recess and adhesively secured to the bottom wall, said pad having lateral dimensions at least equal to the lateral dimensions of the recess, said handle being of blade-like thinness and joining the pad shoulder at the top of said rim, whereby upon the application of pressure by said pad, the handle may readily flex in a direction opposite to the direction of pressure application.

2. A cosmetic applicator comprising a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of plastic material, said pad holder having a bottom wall and a peripheral, upstanding rim to provide a recess, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, a porous, compressible pad of substantially uniform thickness and normally having a thickness greater than the depth of the recess at the central portion thereof, the pad being positioned in the recess and adhesively secured to the bottom wall at the central portion thereof only, said pad having lateral dimensions at least equal to the lateral dimensions of the recess, said handle being of blade-like thinness and joining the pad holder at the top of said rim, whereby upon the application of pressure by said pad, the handle may readily flex in a direction opposite to the direction of pressure application.

3. A cosmetic applicator comprising a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of plastic material, said pad holder having a bottom wall and a peripheral, upstanding rim to provide a recess, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, a porous, compressible pad of substantially uniform thickness and normally having a thickness greater than the depth of the recess at the central portion thereof, the pad being positioned in the recess and adhesively secured to the bottom wall, said pad having lateral dimensions at least equal to the lateral dimensions of the recess, said handle being of blade-like thinness and joining the pad holder at the top of said rim, whereby upon the application of pressure by said pad, the handle may readily flex in a direction opposite to the direction of pressure application, and a reinforcing strut molded integrally with the handle and extending longitudinally thereof from the juncture of the handle with the rim.

4. A cosmetic applicator comprising a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of plastic material, said pad holder having a bottom wall and a peripheral, upstanding rim to provide a recess, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, a porous, compressible pad of substantially uniform thickness and normally having a thickness greater than the depth of the recess at the central portion thereof, said pad being positioned in the recess and adhesively secured to the bottom wall at the central portion thereof only, said pad having lateral dimensions at least equal to the lateral dimensions of the recess, said handle being of blade-like thinness and joining the pad holder at the top of said rim, whereby upon the application of pressure by said pad, the handle may readily flex in a direction opposite to the direction of pressure application, and a reinforcing strut moldled integrally with the handle and extending longitudinally thereof from the juncture of the handle with the rim.

5. A cosmetic applicator comprising a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of hard plastic material, said pad holder having a bottom wall and a peripheral, upstanding rim to provide a recess substantially square in its lateral dimensions, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, a sponge pad of substantially uniform thickness and normally having a thickness at least twice the depth of the recess at the central portion thereof,

the pad being positioned in the recess and adhesively secured to the bottom wall at the central portion thereof only, said pad having lateral dimensions at least equal to the lateral dimensions of the recess, said handle being of blade-like thinness and joining the pad holder at the top edge of said rim, whereby upon the application of pressure by said pad, the handle may readily flex in a plane perpendicular to its length in a direction opposite to the direction of pressure application, as well as allowing twisting flexure about the longitudinal axis of the handle, and a reinforcing strut molded integrally with the underside of the handle and extending longitudinally thereof from the juncture of the handle with the rim.

6. In a cosmetic applicator, a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of hard plastic material, said pad holder having an imperforate bottom wall and a peripheral, upstanding rim to provide a recess for receiving an applicator pad, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, said handle being of blade-like thinness and joining the pad holder at the top of said rim, whereby upon the application of pressure in a direction perpendicular to said bottom wall, the handle may readily flex in a direction opposite to the direction of pressure application.

7. In a cosmetic applicator, a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of hard plastic material, said pad holder having an imperforate bottom wall and a peripheral, upstanding rim to provide a recess for receiving an applicator pad, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, said handle being of blade-like thinness and joining the pad holder at the top of said rim, whereby upon the application of pressure in a direction perpendicular

to said bottom wall, the handle may readily flex in a direction opposite to the direction of pressure application, and a reinforcing strut molded integrally with the handle and extending longitudinally thereof from the juncture of the handle with the rim.

8. In a cosmetic applicator, a pad holder and a flexible handle extending therefrom, the pad holder and handle being integrally molded of hard plastic material, said pad holder having an imperforate bottom wall and a peripheral, upstanding rim to provide a recess substantially square in its lateral dimensions for receiving an applicator pad, said bottom wall having a raised portion to provide a central area in the recess of reduced depth, said handle being of blade-like thinness and joining the pad holder at the top edge of said rim, whereby upon the application of pressure in a direction perpendicular to said bottom wall, the handle may readily flex in a plane perpendicular to its length in a direction opposite to the direction of pressure application, as well as allowing twisting flexure about the longitudinal axis of the handle, and a reinforcing strut molded integrally with the underside of the handle and extending longitudinally thereof from the juncture of the handle with the rim.

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