

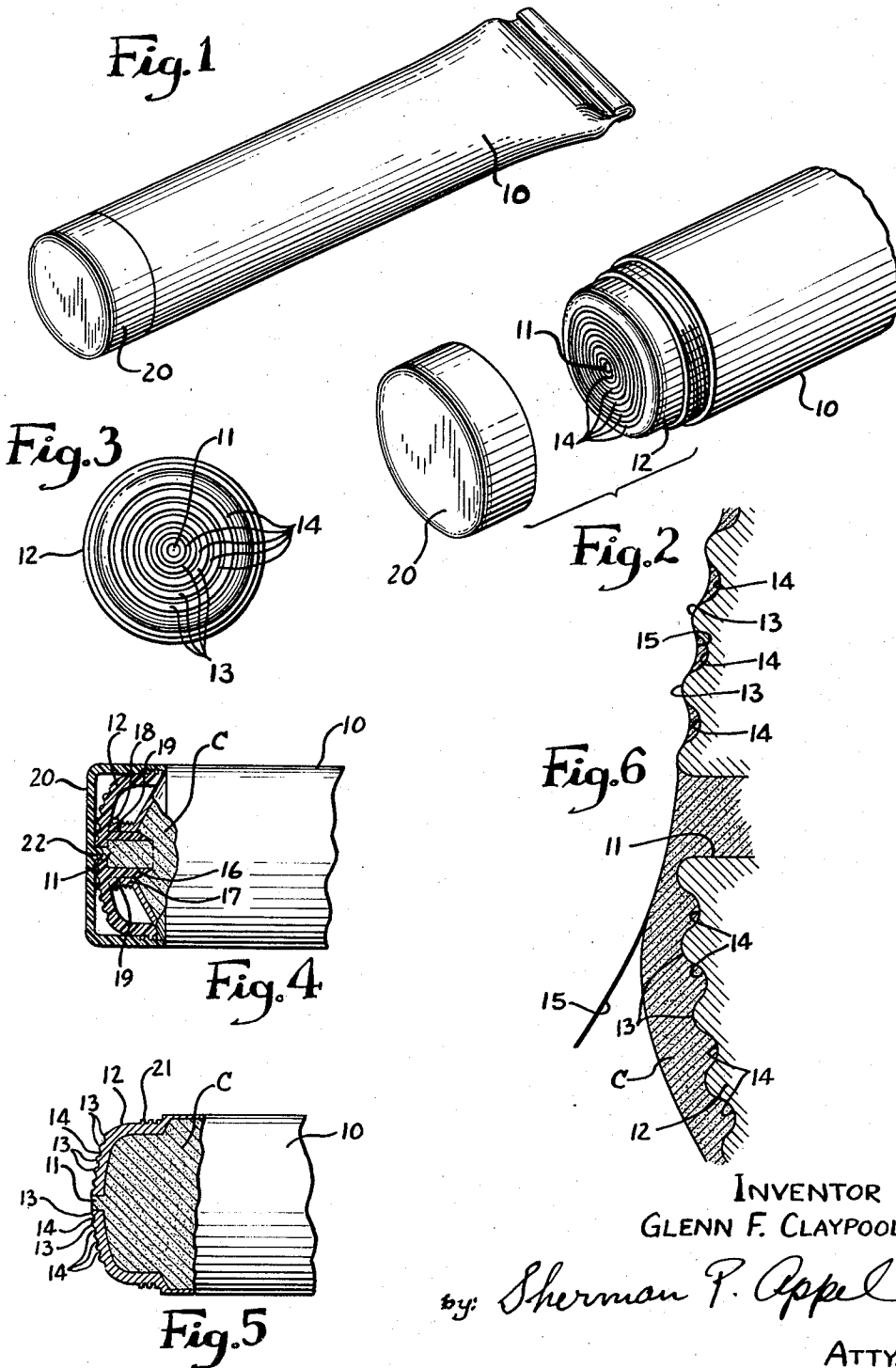
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COMBINATION CONTAINER AND APPLICATOR FOR COSMETICS AND THE LIKE

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COMBINATION CONTAINER AND APPLICATOR FOR COSMETICS AND THE LIKE

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1 Claim. (Cl. 15—135)

The instant invention relates to dispensers of materials having a creamy consistency, which are to be applied to the surface of the human anatomy. More particularly, the invention relates to a combination dispenser and applicator of form retaining fluids which are adapted to be spread upon the surface of the human body.

Many materials in the cosmetic and related classes contain oils or oily substances which cannot be readily washed from the hands. By reason of the foregoing, numerous attempts have been made in this art to provide applicators in combination with the dispensing containers of the materials therein contained which are adapted to apply the materials directly to the surface of the body without the use of the hands or fingers. The applicator devices generally are rounded or have round applying surfaces which are not entirely satisfactory because they do not uniformly distribute the material sought to be applied. That is because the material dispensed serves as a lubricant to cause the rounded applicator surface to slide over the material rather than distribute it as desired.

In the following description, reference is particularly had to shaving cream as the material to be distributed. It will be appreciated that shaving cream only serves as a convenient illustration of the class of materials for which the instant invention is adapted. Additionally, the dispensed material will be referred to as a form retaining fluid; and although the term may seem incongruous, based upon certain physical definitions, what is referred to herein as a form retaining fluid is a rather viscous creamy material like shaving cream, for example, the form of which can be retained for reasonable periods of time and the form of which is readily changeable upon the application of slight external pressure.

To illustrate in a more particular fashion what is meant by "form retaining fluid," conventional types of shaving cream, for example, as well as many types of cosmetic creams, will retain their shape, unsupported, if in relatively small quantities, but they will not retain their shape if a sufficiently large mass is not supported by a jar or a tube. However, shaving cream and the like, which is contained conventionally in a collapsible tube, can be made to flow through an outlet, aperture or opening in such tube by exerting pressure on the mass.

In order to apply shaving cream, for example, which has been ejected from a collapsible tube, it is necessary that one of two things be done: Either the cream must be first placed upon the fingers and then rubbed or spread on the face using the fingers; or an applicator must be provided which will receive the shaving cream when ejected and then apply it to the surface of the face. To obviate the sliding caused by the conventional rounded type applicators used in conjunction with form retaining fluids of the class described, it is necessary to provide suitable means which will resist the tendency of the applicator to slide or slip by reason of the lubricants normally contained in the fluids of this class.

Accordingly, it is an object of this invention to provide a combination dispenser and applicator for form retain-

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ing fluids, which normally have lubricating characteristics, which comprises means for overcoming the lubricating effect of the fluids.

It is additionally an object of this invention to provide a combination dispenser and applicator for materials of the described class which has a plurality of friction members which are adapted to engage the surface of the body whereby the tendency of the applicator to slide on the material dispensed is overcome.

It is a further object of this invention to provide a combination dispenser and applicator of materials of the described class which includes a plurality of body surface engaging treads whereby material from the dispenser is distributed on the surface of the body.

It is a still further object of the instant invention to provide a device of the described class for dispensing and applying form retaining fluids which has a plurality of treads adapted to frictionally engage the surface of the body and hold the fluid being spread by the applicator between the treads.

Other and further objects of the invention will become apparent from the following description and appended claim, reference being had to the accompanying drawings and numerals of reference thereon.

On the drawings:

Fig. 1 is a perspective view of a collapsible tube construction embodying the invention.

Fig. 2 is a perspective view of the applicator end of the tube shown in Fig. 1 with the cap removed.

Fig. 3 is an elevational view of the applicator shown in Fig. 2.

Fig. 4 is a view in partial section illustrating one construction of the applicator.

Fig. 5 is a view in partial section illustrating another construction of the applicator.

Fig. 6 is an enlarged view illustrating the use of the applicator on the body.

Referring now more particularly to the drawings, a form retaining fluid C such as shaving cream or other cream adapted to be spread on the surface of the body is provided with a container 10. As in the case of shaving cream, the container is of the pressure ejection type and may be, but is not necessarily, a collapsible metal tube from which the cream material may be ejected by applying manual pressure on the outer surface of the walls of the tube. The container 10 may also adapt itself readily to being rolled, if desired, to keep the cream compacted toward the outlet end.

In the preferred embodiment of the invention, the container 10 carries an applicator or head 12 which is rigidly secured to or integral with the container 10. This applicator 12 is rigid, smooth finished and imperforate, and is preferably slightly rounded to provide maximum body engaging surface. It has a discharge port or opening 11 through which the fluid C is squeezed and ejected from the container 10. As illustrated herein, the opening or port 11 is centrally disposed. However, it is believed that this central disposition of the opening or port 11 is not critical to the invention.

The applicator or head 12 carries a plurality of rigid, imperforate and smooth finished friction members or treads 13 which are disposed about the opening 11. These friction members may be formed integral with the head and are raised portions thereon between which are formed grooves or troughs 14 which hold and retain the cream which is dispensed from the container 10 while it is being spread upon the surface of the body, as will become hereinafter more evident. In the form of the invention shown, the treads 13 are annular and concentrically disposed upon the head 12 about the central aperture or port 11. Such disposition increases the strength of the rigid head 12.

When the cream C contained within the tube 10 is squeezed through opening 11, it will tend to pile up about the opening. As illustrated in Fig. 6, when the applicator 12 is engaged with the face 15, for example, in the case of shaving cream, the cream C which was piled up about the aperture 11 will spread into the troughs 14 provided between the treads 13. As the applicator 12 is moved through the applicating motion about the face, portions of the elastic skin or body surface engaged enter into the troughs 14 to pick up the cream disposed therein as illustrated in Fig. 6. It will be observed that one of the treads 13 is located immediately about and defines the exit of the opening 11 and is located at the peak of the convex surface of the applicator for massaging and fluid spreading contact with the anatomy surface nearest said opening, the remaining treads 13 being disposed in progressively receding relation to said opening-defining tread and to one another conformable to the convex applicator surface.

The amount of the cream that will be picked up or applied to the surface of the body or face 15 at any one location will depend upon the pressure of engagement thereof with head 12. Slipping or sliding on the applied cream will be substantially or wholly precluded by reason of the treads 13 in the troughs 14 of which the skin engages. In this fashion, the shaving cream, or other like material, may be applied uniformly over the face exercising minimum effort and without engaging the fingers in the cream. Using the applicator head 12, uneven areas of cream application may be leveled by carrying the cream in the applicator head to areas of the skin having less cream or no cream thereon.

The device not only serves as an applicator for cream, but also, because of the skin gripping treads 13 with alternately positioned troughs 14, simultaneously serves to massage the body surface.

In accordance with the foregoing disclosure, it is now apparent that one is able to uniformly apply on the surface of the body a material such as shaving cream without engagement of the fingers in the mass of the cream. Additionally, it is apparent that the applicator head 12 may continuously be kept clean and clear by merely wiping the head 12 on the body surface 15 and because of the smooth finish, irritation to the body surface is precluded. Furthermore, by reason of the foregoing, substantial economies are effectuated because of the elimination of waste which results when the fingers are employed to spread the cream.

As illustrated in Fig. 5, the head or applicator 12 is shown formed integral with collapsible tube 10. However, if desired, the head or applicator 12 may comprise an adaptor for conventionally formed collapsible tubes as illustrated in Fig. 4. That is to say, the adaptor may include a hollow stem 16 which is inserted into the neck 17 of a conventional collapsible tube. Retention of the head is by means of integral lugs 18 which are press fit

into opposed slots 19 cut or provided in the neck 17. In this manner, existing supplies of conventional cream tubes may be easily converted into a construction conforming with the instant invention.

To seal or cover opening 11, a screw cap or closure, releasably mounted on threads 21, is provided; and said cap 20 preferably is provided with a centrally disposed plug 22 to occlude or close the port or aperture 11 by snugly fitting therein.

As many changes or substitutions could be made in the above described construction and as many apparently widely different embodiments of the invention within the scope of the claim could be constructed without departing from the scope and spirit thereof, it is intended that all matter contained in the accompanying specification shall be interpreted as being illustrative and not in a limiting sense.

I claim:

A combination dispenser and applicator adapted to dispense and apply form-retaining fluids and the like applied to the surface of the human anatomy and comprising a pressure ejection container adapted to store the fluid; a rigid applicator to engage the surface of the anatomy and fixed to said container, said applicator having a centrally disposed opening communicatively connected with the container interior, the outer surface of said applicator about said opening being imperforate and having a slightly convex radius of curvature, and a plurality of concentric, body-surface engaging rigid annular massager and spreader treads, each and every one of which treads has a smooth cross sectional radius of curvature much smaller than said convex radius of curvature, each of said treads integrally forming a part of said outer surface of the applicator and disposed about said opening to trap and apply the fluid as ejected from the container, one of said treads being located immediately about and defining the exit of the opening and located at the peak of said convex surface for massaging and fluid spreading contact with the anatomy surface nearest said opening, the remaining treads being disposed in progressively receding relation to said one tread and to one another conformable to said convex surface, said treads having annular troughs therebetween, said troughs each having a smooth cross sectional radius of curvature which blends smoothly with the adjacent treads.

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