Dec. 26, 1944. G. D. RUNNELS 2,365,908

COSMETIC POWDER CONTAINER AND DISPENSER

Filed Feb. 23, 1942

Fig. 2.

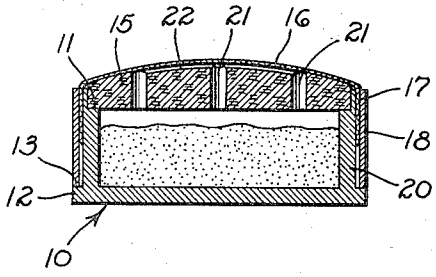


Fig. 3.

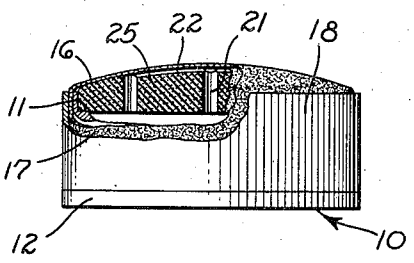


Fig. 1.

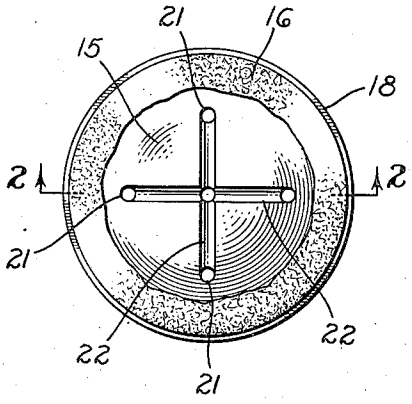


Fig. 4.

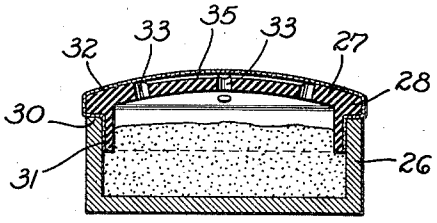


Fig. 5.

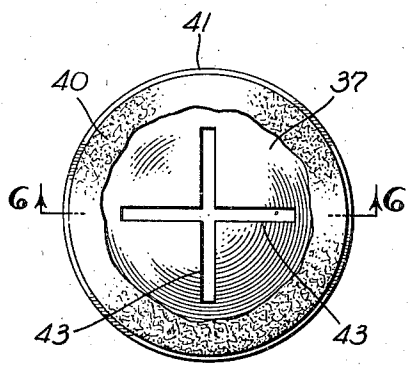
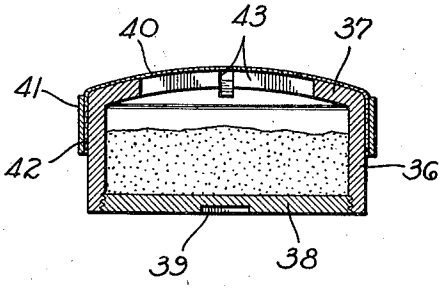


Fig. 6.



INVENTOR
GARLAND D. RUNNELS
BY
HARRIS, KIECH, FOSTER & HARRIS
FOR THE FIRM
ATTORNEYS.

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COSMETIC POWDER CONTAINER AND DISPENSER

Garland D. Runnels, Seattle, Wash.

Application February 23, 1942, Serial No. 431,918

8 Claims. (Cl. 15—131.1)

My invention relates to dispensing containers for powdered materials, and is particularly directed to an improved cosmetic container adapted for applying face powder, powdered rouge and the like to the user's skin.

The general object of the invention is to provide an attractive, inexpensive, and efficient device that may serve in the various capacities of a package for marketing cosmetic powder, compact container for the convenience of the user, and means for applying the cosmetic economically.

My cosmetic container involves the use of a powder-pervious sheet, such as a sheet of rayon velvet, as a medium for dispensing and spreading the powder, and one object of the invention is to limit the delivery of powder to the sheet to an economical rate and yet to favor widespread release through the dispensing sheet of the delivered powder. In this regard the invention is characterized by the provision of a suitable supply channel or channels for determining the rate of powder flow to the sheet and the provision of additional channels along the inner face of the sheet to favor distribution of the delivered powder.

Broadly described, my cosmetic container comprises walls forming a receptacle or powder-storage chamber in combination with a powder-pervious dispensing sheet on the exterior of the chamber, suitable passages being provided for powder flow to and along the inner face of the dispensing sheet for release through the sheet. One object in preferred practices of my invention is to provide a body of advantageous configuration to serve as a wall in such a combination, the body being removable for access to the interior of the chamber and being adapted to shape the dispensing sheet to a predetermined configuration.

In certain practices of the invention it is my object to provide a novel combination of dispensing sheet and cushion to serve as a resilient dispensing medium, these particular practices being based on the discovery that a cushion of cork has peculiar and important advantages for such purpose.

A further object in some practices of my invention is to provide a novel arrangement for causing powder to be distributed along the inner face of the dispensing sheet, the arrangement being characterized by the use of a flexible dispensing sheet stretched against a suitably formed, substantially rigid wall. Powder reaches the inner face of the flexible sheet by supply passages or apertures through the rigid wall suitably dimensioned for supply at an economical rate, and the powder then flows laterally along the inner face of the sheet through channels provided by the rigid wall. From the areas of free flow provided by these passages the powder spreads over additional areas of the inner face of the dispensing sheet, the normal handling and use of the device causing the flexible sheet to move relative to the rigid wall to favor this further spreading of the powder.

A further object of the invention is to provide a container of the character described that may be readily assembled and subsequently readily dismantled whenever it is necessary to replenish the powder or it is desirable to replace the dispensing sheet.

The above and other objects of the invention will be apparent in my following detailed description, taken with the accompanying drawing.

In the drawing:

Fig. 1 is a plan view of a preferred embodiment of my invention, a portion of the dispensing sheet being removed to reveal the underlying structure;

Fig. 2 is a section taken as indicated by the line 2—2 of Fig. 1;

Fig. 3 is a side elevation of a second embodiment of the invention, parts being broken away to reveal the construction;

Fig. 4 is a sectional view similar to Fig. 2 showing another embodiment of the invention;

Fig. 5 is a view similar to Fig. 1 showing still another embodiment; and

Fig. 6 is a section taken as indicated by the line 6—6 of Fig. 5.

The form of the invention shown in Figs. 1 and 2 includes an open-top powder receptacle 10 of metal, plastic, or other suitable material, the rim of which may form an annular seat 11 and the base of which may form a circumferential rib 12 providing a circumferential shoulder 13. The open top of the receptacle 10 is spanned by a suitable wall element or body 15 resting in the seat 11. Overlying the body 15 is a powder-pervious dispensing sheet 16 of suitable material.

For the dispensing sheet 16 I prefer to employ a flexible sheet comprising a velvet fabric having an outwardly presented rayon pile. Unlike fibers of cotton and silk, rayon fibers have less affinity for skin oils and other oils than exist between such oils and cosmetic powder. As a result, the powder rather than the rayon fibers tends to be

soiled by application of the pile to the user's skin. Rayon fibers may be termed "self-cleaning," since rayon fibers in contrast to cotton fibers and silk fibers do not tenaciously retain soiled powder particles. In practice the continual passage of powder through the dispensing sheet retards the soiling of the dispensing sheet. Rayon pile is further desirable because the fibers tend to stand out individually even after being subjected to considerable pressure and the fibers do not break under continual bending.

The dispensing sheet 16 may be secured in place in any suitable manner. In the particular construction shown in Figs. 1 and 2, I extend the marginal portion 17 of the dispensing sheet 16 around the outside of the receptacle 10 and provide a suitable sleeve 18 to embrace the receptacle and cooperate with the receptacle to grip the dispensing sheet. The sleeve 18 may be dimensioned as indicated in Fig. 2 to abut the shoulder 13 and cause the circular wall 20 of the receptacle to be completely covered and concealed. Since the body 15 is confined in the seat 11 by the dispensing sheet 16, the sleeve 18 serves to hold both the dispensing sheet and the body in assembled positions.

The body 15 is suitably apertured to permit powder to flow at an economical rate from the interior of the receptacle 10 to the inner face of the dispensing sheet 16, and the body 15 is formed, furthermore, to provide passages for relatively free movement of the powder along certain portions of the inner face of the dispensing sheet. Thus, the body shown in Figs. 1 and 2 has a plurality of apertures 21 for powder flow to the inner face of the sheet and has a plurality of grooves 22 for relatively free flow along the inner face of the sheet. Since the grooves 22 provide relatively free movement of powder, the grooves may be said to define zones of free flow along the inner face of the dispensing sheet, the zones in this instance being radially disposed. The wall element or body 15 is indicated in Fig. 2 as made of cork and may be said to have medium resiliency in comparison to the low resiliency of hard rubber and the high resiliency of sponge rubber. I have found that leather may be used as a suitable substitute for cork to attain substantially the same medium degree of resiliency.

Since the dispensing sheet 16 is flexible and resilient, the sheet is movable relative to the underlying body 15 in response to stresses encountered in normal service of the device and a feature of my invention is the concept that such relative movement may be relied upon for spreading the powder laterally along the inner face of the sheet away from the zones of free flow. Maximum relative movement between the dispensing sheet 16 and the underlying body 15 may be sought under this concept by making the body 15 of relatively rigid material such as hard rubber or some hard plastic. The cork body 15 of Figs. 1 and 2 favors such relative movement and yet serves as a cushion when the device is pressed against the user's skin.

The manner in which the device shown in Figs. 1 and 2 may be employed will be readily understood from the foregoing description. In assembling the device a suitable quantity of powder is placed in the receptacle 10, the body 15 is placed in the seat 11, the dispensing sheet 16 is spread over the body, and, finally, the sleeve 18 is forced downward into position, thereby binding the flexible sheet in place. If desired, the receptacle may be made from a transparent plastic to permit prospective purchasers to view the enclosed powdered material. In service the container may be applied to the user's skin in the same manner as a powder puff, it being necessary to merely rub the skin lightly with the surface presented by the dispensing sheet 16 to cause the powder to be applied freely without waste. No vigorous rubbing is required and it is not necessary to pat the device against the skin. The light rubbing action causes sufficient flexing and stretching of the fabric sheet 16 to cause the powder to travel laterally of the sheet away from the grooves 22 so that in practice the powder is dispensed uniformly through substantially all of the exposed area of the dispensing sheet.

While I prefer to use cork to fabricate the body 15 for reasons given above, I may in some practices of the invention employ more yielding material as indicated in Fig. 3. The device shown in Fig. 3 is, for the most part, identical with the previously described device shown in Figs. 1 and 2, corresponding numerals being used to indicate corresponding parts. In the device shown in Fig. 3, however, I employ a body 25 that has the same shape and dimensions as the previously described body 15 but is formed of sponge rubber, airfoam rubber, or material of similar character.

The embodiment of my invention shown in Fig. 4 includes a plain open-top receptacle 26 that may be of cylindrical or other configuration. A wall element or body 27 of the cross-sectional configuration shown provides an annular shoulder 28 to rest on the rim 30 of the receptacle and provides a cylindrical flange 31 to telescope inside the receptacle. A dispensing sheet 32 of the character previously described is spread over the outer surface of the body 27 and is marginally tucked into the receptacle to be gripped between the receptacle and the cylindrical flange 31. The body 27 may be of relatively rigid material such as hard rubber and, like the previously described body 15, may be formed with apertures 33 for powder flow to the dispensing sheet and further formed with radial grooves 35 for relatively free flow of the passage along selected zones of the dispensing sheet.

In the embodiment of the invention shown in Figs. 5 and 6 a receptacle 36 is formed with a convex top 37 and is provided with a removable bottom 38. In the particular construction shown, the removable bottom 38 is threaded into the lower end of the receptacle and is provided with a suitable recess 39 for engagement by a screwdriver or similar device. If it is desirable to make the receptacle 36 non-refillable, the bottom 38 may be sealed or fixed in place in some permanent manner. A dispensing sheet 40 of the character previously described is held stretched over the convex top 37 by a suitable sleeve or clamping ring 41, the ring cooperating with the receptacle to grip the marginal portion 42 of the sheet. In this particular practice of the invention the convex top 37 is provided with two intersecting slots 43 that form a radial arrangement of passages for powder flow to the inner face of the dispensing sheet as well as for flow laterally along the inner face of the sheet. Powder spreads over the inner face of the dispensing sheet from these radial passages or zone of free flow in the manner heretofore described.

The specific forms of the invention disclosed herein suggest various changes and substitutions that may be made in practicing the invention, and I reserve the right to all such departures from

my description that lie within the scope of my appended claims.

I claim as my invention:

1. A cosmetic powder dispenser of the character described, comprising: a receptacle having an opening; a powder-pervious dispensing sheet secured across said opening; and a body supported by the receptacle across said opening, said body lying against the inner face of said sheet and being formed with a plurality of radially disposed passages in the outer face of said body for powder movement laterally of said sheet along the inner face of the sheet, said body having at least one aperture therethrough in communication with said radially disposed passages to permit powder to flow through the body and along said radially disposed passages for release through said sheet.

2. A cosmetic dispenser of the character described, comprising: a generally cup-shaped receptacle for the powder to be dispensed; a yieldable body supported by said receptacle and extending across the open end thereof; a powder pervious dispensing sheet overlying said yieldable body, said yieldable body having intersecting grooves formed in the surface thereof adjacent said sheet and having apertures communicating at one end thereof with said grooves and at the opposite end with the interior of said receptacle; and means maintaining said sheet in assembled relation with said receptacle.

3. A cosmetic dispenser of the character described, comprising: a receptacle for the powder to be dispensed, having a closed end; wall means extending across the other end of said receptacle; a powder pervious dispensing sheet overlying said wall means, said wall means having intersecting grooves formed in the surface thereof adjacent said sheet and having apertures establishing communication between said grooves and the interior of said receptacles; and means maintaining said sheet in assembled relation with said receptacle.

4. A cosmetic dispenser as defined in claim 3, in which an aperture is provided at the point of intersection of the grooves.

5. A cosmetic dispenser as defined in claim 3, in which an aperture is provided at the extremities of the intersecting grooves.

6. A cosmetic dispenser as defined in claim 3, in which an aperture is provided at the point of intersection of the grooves and an additional aperture is provided at the extremities of each of the intersecting grooves.

7. A cosmetic dispenser of the character described, comprising: a generally cup-shaped receptacle for the powder to be dispensed and having an open end; an outwardly convex yieldable body supported by said receptacle and extending across the open end thereof; a powder pervious dispensing sheet overlying said yieldable body, said yieldable body having intersecting grooves formed in the surface thereof adjacent said sheet and having apertures communicating at one end thereof with said grooves and at the opposite end with the interior of said receptacle; and a ring element adapted to fit down over the periphery of said receptacle to clamp said sheet thereto for maintaining said sheet in assembled relation with said receptacle.

8. A cosmetic dispenser of the character described, including the combination of: a generally cup-shaped receptacle for a powder to be dispensed, having an annular outer wall defining an open end of said receptacle, the upper inner end of said wall being provided with an annular recess; a disk-like body adapted to be supported by said receptacle and to extend across said open end, said disk-like body being adapted to fit into said recess so as to be supported thereby, said disk-like body being provided with at least one aperture communicating between the inner and outer surfaces of said body to provide a means of egress of said powder from said receptacle to the outer surface of said disk-like body, said disk-like body being provided on its outer surface with means for distributing said powder laterally across said outer surface of said body; a powder pervious dispensing sheet overlying said disk-like body in face-to-face engagement therewith and having a marginal portion extending downwardly over the periphery of said wall; and means for maintaining said sheet in assembled relation with said receptacle, said means comprising a ring adapted to fit down over said marginal portion to clamp said marginal portion to said receptacle.

GARLAND D. RUNNELS.