

1,207,121.

Patented Dec. 5, 1916.

Fig. 1.

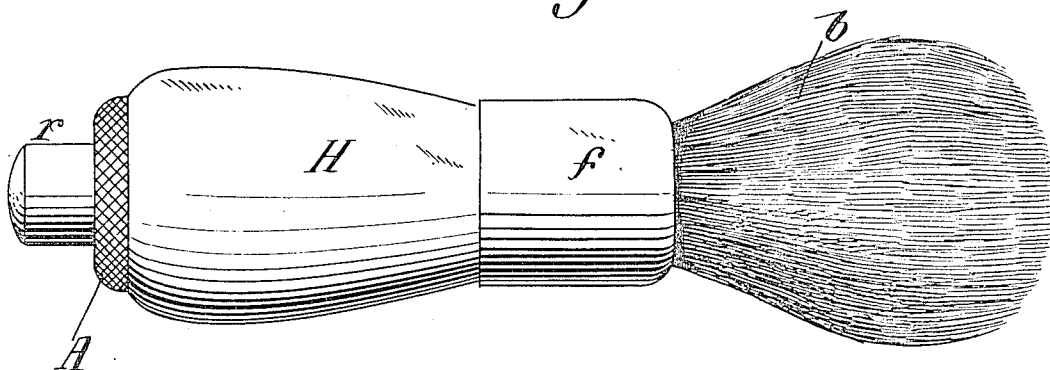


Fig. 2.

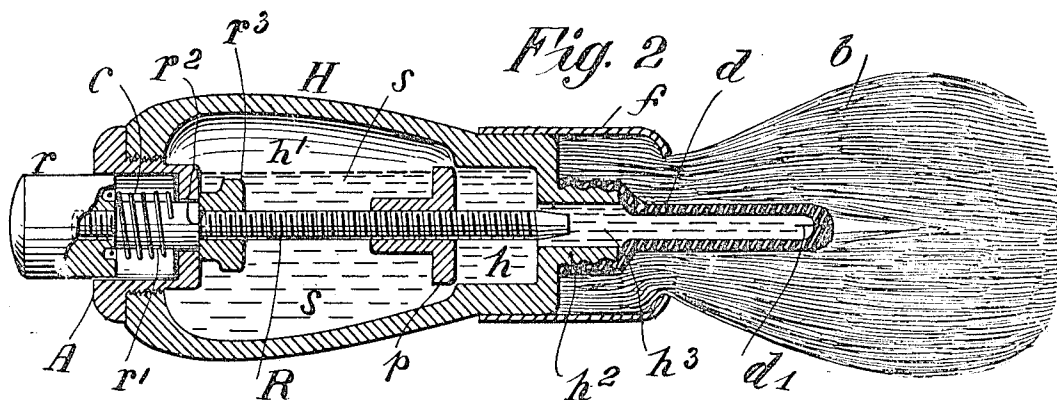
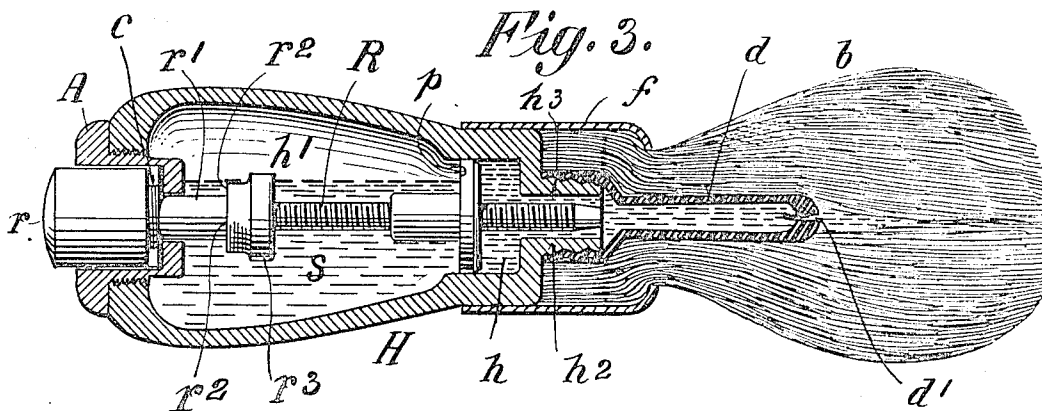


Fig. 3.



Witnesses:

Fred. Rogers.
Dorothy Miatt

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Frederick W. Zeidler
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UNITED STATES PATENT OFFICE.

FREDERICK W. ZEIDLER, OF JERSEY CITY, NEW JERSEY.

SHAVING-BRUSH.

1,207,121.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK W. ZEIDLER, a citizen of the United States, and a resident of Jersey City, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Shaving-Brushes, of which the following is a specification.

The object of my invention is to afford a simple, compact, cheap and effective self-contained and self-feeding shaving brush in which liquid soap is stored in convenient form for immediate use, as hereinafter more fully set forth, the invention consisting in the specific construction and arrangement of parts described and claimed herein, distinctive features being the means for adjusting and regulating the discharge, as well as the means employed for delivering the liquid soap medially within the bristles of the brush.

In the accompanying drawings, Figure 1, is an elevation upon an enlarged scale of my shaving brush; Fig. 2, is a central longitudinal sectional elevation of the brush showing the parts in their normal position; Fig. 3, a similar view showing the operative parts depressed for the delivery of the liquid soap to the brush bristles.

H, represents the hollow handle of the brush formed with the cylindrical pocket or chamber h ,—the main chamber h' , being of greater diameter, and of sufficient capacity to act as a reservoir for the supply of liquid soap s . The inner end of the handle H, is made cylindrical externally adjacent to the cylindrical ejection chamber h , for the purpose of receiving the ferrule f , in which the inner ends of the brush bristles b , are secured in a manner well known in the art. The end wall of the ejection chamber h , is formed with a nipple h^2 , having the axial duct h^3 , and upon this nipple h^2 , fits the inner end of the flexible tube d , preferably made of rubber and formed with a slit d' , for the escape of the liquid soap under pressure,—said slit d' , closing automatically when the tube d , is relieved of internal pressure. The delivery tube d , extends well into the body of the bristles beyond the ferrule f , so as to deliver the liquid soap to the bristles in proximity to the free operative ends of the bristles. The delivery tube being thus flexible adapts itself readily to the manipulation of the bristles b , during the application of the latter without the least danger

of injury or discomfort to the face of the user.

The ejection of the liquid soap through the delivery tube d , is effected by means of a piston p , on the axially arranged rod R, the latter being male-screw-threaded and the piston p , being correspondingly female-screw-threaded so as to engage therewith and be longitudinally adjustable thereon, as will be readily understood by reference particularly to Fig. 2.

On the outer end of the piston rod R, is secured a push button r , and between this push button or head r , and the threaded portion of the rod the latter is formed with a cylindrical portion r' , of greater diameter than said threaded portion, thus forming an annular shoulder r^2 , against which rests the stop nut r^3 ,—said nut r^3 , in turn forming a shoulder to limit the inner thrust of the rod R, by contacting with the inner end of the hollow plug A, which screws into the outer end of the handle H, a spring c , being interposed between the head or push button r , and the inner end wall of the plug A.

Obviously when the push button r , is pressed inward against the resistance of the spring c , the piston p , will be forced into the cylindrical ejection chamber h , thereby displacing more or less of the liquid soap therefrom and ejecting it through the duct h^3 , and delivery tube d , in among the bristles b , and the quantity thus ejected for use will be governed by the extent to which said piston p , protrudes into said ejection chamber h . Hence, it is apparent that the flow of liquid soap s , may be gaged and regulated by the adjustment of the piston p , longitudinally on the rod R.

When the push button r , is released the spring c , returns the operative parts to their normal positions, and the slit d' , in the discharge tube d , automatically closes, thereby preventing drip or leakage, so that it will be seen that the flexible delivery tube d , with its discharge slit d' , performs an important function in that it not only acts as an automatic discharge valve or vent but also by its flexibility obviates any possibility of injury or discomfort to the skin to which the lather is applied.

In order to render the slit d' , at the outer end of the discharge tube d , more effective in sealing said tube in the absence of an excess of internal pressure therein, I thicken

and flatten the lips thereof as shown in Figs. 2, and 3, so that they will contact broadly with each other when closed, as shown in Fig. 2, thus enhancing the valvular function of the discharge tube *d*. When it is desired to recharge the reservoir *h'*, with liquid soap the screw plug A, is removed, with the piston *p*, and rod R, the handle being refilled while in a vertical position, and the piston *p*, rod R, and screw plug A, are then replaced.

It will be noted that externally my brush differs little if any in appearance from the ordinary shaving brush; and its internal construction and arrangement of parts is so simple and effective as to require little or no attention, while by removing the plug A, rod R, and piston *p*, as above set forth the parts may be readily cleansed and washed out as desired.

I have herein described the discharge tube *d*, as made of unvulcanized rubber, which is obviously a preferable material, although the essentials of the discharge tube are that

it shall combine flexibility and elasticity with resilience, for reasons hereinbefore stated.

What I claim as my invention and desire to secure by Letters Patent is,

A shaving brush of the character designated, comprising a hollow reservoir handle formed with a contracted cylindrical ejection chamber communicating with a flexible elastic resilient discharge tube protruding among the brush bristles, said flexible elastic resilient discharge tube being slitted at its outer extremity the edges of the slit being made in the form of flat contacting lips of greater width and thickness than the walls of the tube for the purpose set forth, and a spring push rod formed with a piston fitting into said cylindrical ejection chamber.

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Witnesses:

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