C. W. SAUER, Jr.

FOUNTAIN SHAVING BRUSH.

APPLICATION FILED SEPT. 1, 1915.

1,183,680. Patented May 16, 1916.

Fig. 1.

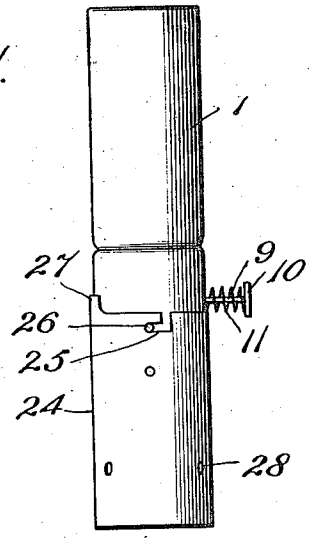


Fig. 2.

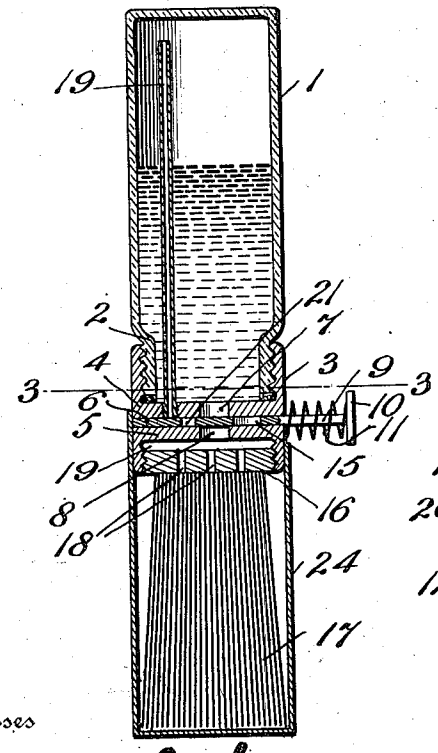


Fig. 3.

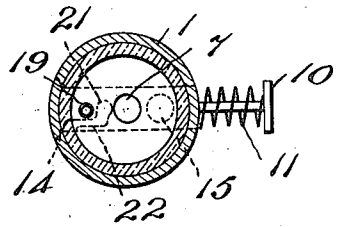
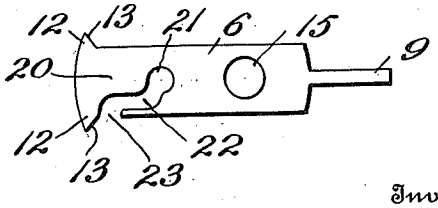


Fig. 4.



Witnesses

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FOUNTAIN SHAVING-BRUSH.

1,183,680. Specification of Letters Patent. Patented May 16, 1916.

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To all whom it may concern:

Be it known that I, CHARLES W. SAUER, Jr., a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented new and useful Improvements in Fountain Shaving-Brushes, of which the following is a specification.

This invention relates to fountain brushes and particularly to shaving brushes and has for its primary object the provision of a container for the liquid soap and means operable to permit any desired quantity of the liquid to be quickly conveyed to the bristles of the brush, causing the same to instantly become saturated and ready for application to the face.

A further object of the invention resides in the provision of a brush structure generally consisting of comparatively few parts which are capable of convenient separation from each other or an assemblage of said parts as the occasion may demand, thus permitting the user of the device to properly maintain a sanitary condition thereof, by thoroughly subjecting the parts to the action of any suitable cleansing and sterilizing bath.

A still further object of the invention resides in the provision of means for normally cutting off communication between the bristles of the brush and the liquid container and for positively preventing the liquid from flowing to the bristles during transportation of the brush, such as at the time of carrying the same in a grip, suit case or the like, and for also protecting the bristles against unsanitary exposure by substantially housing the same when the brush is not in use.

A further and essential object of the invention relates to the provision of a means for venting the liquid container and for delivering the liquid to the bristles of the brush simultaneously and through slight effort on the part of the user.

A still further object of the invention relates to the provision of a liquid feeding and venting valve which, when closed will seal the container against atmospheric exposure.

In the drawings forming a part of this specification and in which like reference numerals indicate similar parts throughout the several views:—Figure 1 is a side view of the brush. Fig. 2 is a vertical section therethrough. Fig. 3 is a horizontal section therethrough on the line 3—3 of Fig. 2. Fig. 4 is a plan view of the valve.

The brush is shown to consist of a liquid container 1, which constitutes the manipulating handle, being of any desired or suitable configuration which will permit of its being properly grasped in the hand of the user. The container is made of glass, preferably, but I do not desire to limit myself to the use of such material. It is desired that it be made of glass in order that it may be maintained in a proper sanitary condition.

The neck 2 of the container 1 receives a threaded coupling member 3 having walls 4 and 5 which are separated from each other so as to define therebetween a valve chamber 5 for a sliding valve 6. The wall 4 is provided with an axial passage 7 which alines with a similar axial passage 8 in the wall 5. These passages 7 and 8 are normally closed against communication with each other by the valve 6 shown in Fig. 2. The valve carries a stem 9 having a finger piece 10 which is adapted to be manipulated by the hand of the operator.

A spring 11 is interposed between the coupling member 3 and the finger piece 10 and under the normal action of the spring, pressure is exerted against the finger piece 10 and the valve 6 is made to intercept the alined passages 7 and 8. At one end the valve is provided with lateral lugs 12—12, having seat forming surfaces 13 which are adapted to bear against correspondingly formed seats 14 on the coupling member 3, under the action of the spring 11, and its dual function will be fully seen and appreciated. The valve is provided with a passage 15 which is adapted to register with the passages 7 and 8 on applying pressure against the finger piece 18, as normally the passages are closed by the valve.

The brush head 16 is in the form of a disk having the bristles 17 secured thereto in any well known and preferred manner. This disk is provided with a plurality of perforations 18 whose lower ends open on to the bristles, while the upper ends open into a liquid chamber 19. The chamber 19 is produced by simply threading the brush head part way into the coupling and thereby causing the said head to be retained in spaced relation to the wall 5 of said coupling member. This chamber is designed

and provided to permit of a free and uninterrupted circulation of the liquid soap onto the bristles when the valve is opened.

Extending from the wall 4 of the coupling member 3 is a vent tube 19, one end of which being normally sealed or closed by the seat 20 of the valve 6, while the opposite end thereof is normally open and spaced from the adjacent end of the container 1, see Fig. 2. The valve is stamped from a piece of flat sheet material and longitudinally alined with the passage 15 in the valve is a vent passage 21, having a sinuous branch 22 which opens at 23 onto one side of the valve at a point adjacent to one of the seat surfaces 13. Through this construction, it will be observed that the passage 21 will be brought into registration with the vent tube 19 when operative pressure of the fingers is applied to the finger piece 10. At the same time, the sinuous branch 22 of the vent passage 21 will be opened to the outer air through the fact that the mentioned adjacent seat surface 13 will be moved away from its co-acting surface 14 on the coupling member 3. At this time, the container is opened to the atmosphere and the liquid is free to circulate in the direction of the bristles 17.

The brush described herein, is not only desirable for ordinary purposes but above all it is found very nicely adapted for the use of travelers. Its compactness in form will permit of its being arranged in a comparatively small space, so that if desired, it may be carried upon the person. At any event it may be conveniently arranged within a suit case or traveling bag and for this reason as well as for the purpose of preventing accidental discharge of the liquid on to the bristles of the brush, I provide a housing or protecting cap 24 which is adapted to fit around the bristles of the brush as illustrated in Fig. 2 and it is desired that the cap be provided, at diametrically opposite points with bayonet slots 25, to receive locking studs 26 which extend from the sides of the coupling member 3. This protecting cap or housing is provided with locking elements 27 which is designed to present directly in advance of the sliding valve when the housing or cap is in the position shown in either Fig. 1 or 2. The engagement of the housing against the walls of the brush head will prevent casual rotation of the housing, while the bayonet slots serve to hold the housing against longitudinal adjustment. Air circulating passages 28 are formed in the housing to keep the bristles in a dry and sanitary condition.

The parts as arranged herein are capable of being quickly separated from each other for the purpose of filling the container with liquid soap and for the further purpose of permitting all of the parts of the structure to be thoroughly subjected to a suitable cleansing and sterilizing bath.

The handle forming liquid container may form the original package for the soap and when purchased may be quickly applied to the device as will be understood.

What is claimed as new is:—

1. A brush structure comprising, a member having a valve chamber opening laterally to the atmosphere, bristles extending from the member, a liquid container opening into the chamber, and a valve movable in the chamber and normally closing communication between the bristles and said container and provided with a vent passage adapted when the valve is opened to lie exteriorly of the member and to establish communication between the atmosphere and said container.

2. A brush comprising, a member having bristles, a liquid container carried by the member and provided with a vent tube, the said member having a valve chamber, and a sliding valve operating in the chamber and normally closing communication between the bristles and the container and provided with a vent passage having a branch terminal in line with the longitudinal center of the valve and a second branch communicating with the first branch and adapted, when the valve is opened to establish communication between the container and the bristles to permit air from the outside to enter the said vent tube.

3. A brush, comprising, a member having bristles, a liquid container carried by the member and provided with a vent tube, the said member having a valve chamber, and a sliding valve operating in the chamber and normally closing communication between the bristles and the container and provided with a vent passage having a branch terminal in line with the longitudinal center of the valve and a second branch communicating with the first branch and adapted, when the valve is open to establish communication between the container and the bristles to permit air from the outside to enter the said vent tube, seats formed on the member, seats formed on the valve, the latter co-acting with the former to seal one end of said valve chamber, and a spring operatively connected with the valve and serving to hold the seats of the valve against the seats of said head.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES W. SAUER, Jr.

Witnesses:
James A. Koehl,
Geo. A. Byrne.