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F. J. BAMBACH

2,162,907

FOUNTAIN BRUSH

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Fig. 1.

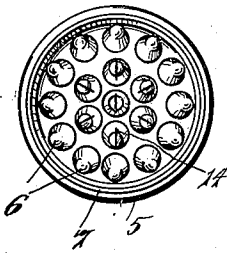


Fig. 2.

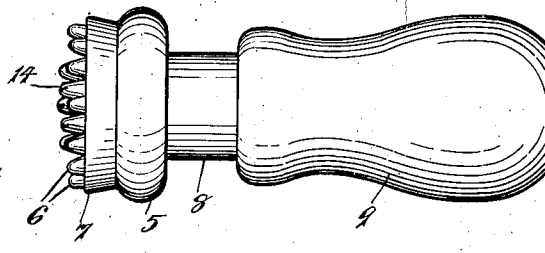


Fig. 3.

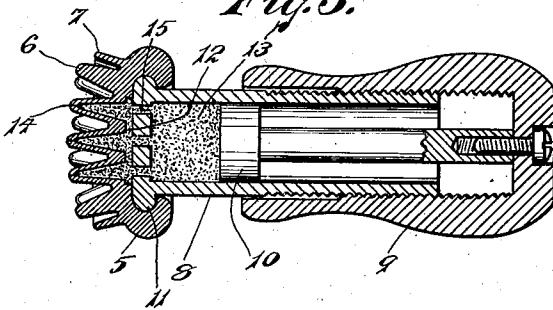


Fig. 4.

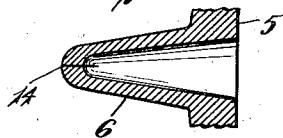
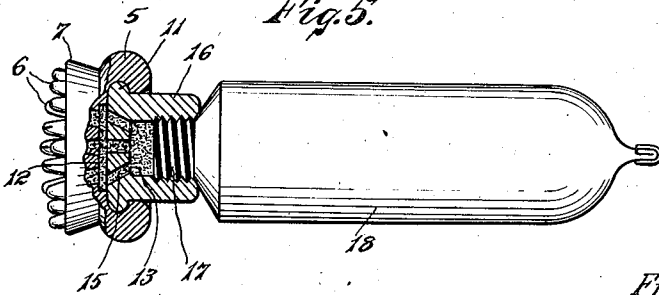


Fig. 5.



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# UNITED STATES PATENT OFFICE

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## FOUNTAIN BRUSH

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3 Claims. (Cl. 15—137)

This invention relates to fountain brushes and more particularly to that type which are adaptable for use as shaving brushes.

An object of my invention is to provide a device of this class which can be used as a combination brush and rubber by means of which a material, such as soap, may be applied directly on the beard and at the same time rubbed in, thereby eliminating the necessity of rubbing the soap by hand as now commonly done.

Heretofore, several attempts have been made to produce fountain brushes of this class, but such brushes have been found impractical for the reason that the soap remaining in the body of the brush will harden when exposed to the air and obstruct the passage provided therefor in such a manner that the device becomes inoperative.

A further object of my invention, therefore, is to provide for a fountain brush in which material, such as soap, is used; means whereby the container for the soap is automatically sealed while the brush is not in actual use.

Further objects of my invention may be clearly understood from the following description and the drawing in which:—

Figure 1 is a front view in elevation of my improved fountain brush.

Figure 2 is a side view thereof.

Figure 3 is a view in central vertical section.

Figure 4 is a detail view in section on an enlarged scale showing one of the bristles of my improved brush.

Figure 5 is a side view partly in section illustrating my invention in a modified form.

As illustrated in the drawing, the numeral 5 denotes a brush head which is composed of a flexible material such as rubber. The said head is provided with a plurality of bristles 6 and a confining flange or skirt 7.

A cylinder 8 is provided on which is threaded a handle 9. A piston 10 is located within the cylinder and attached to be movable with the said handle 9.

The cylinder 8 is provided with a flange 11 on which fits the brush head by being stretched thereon. The said brush head is provided with a depression by means of which a portion thereof is spaced from the wall of the cylinder 8 to form a distributing chamber 12 leading into the bristles 6. It will be noted that the said bristles are distributed on the head in annular rows and that the said bristles of the outer row are solid while those located in the central portion of the head are hollow in order to provide a passage for the

soap material, indicated at 13, to pass there-through. The said hollow bristles are also provided with a passage in the form of a slit 14 at their ends.

The operation of my improved brush is as follows:—

When the cylinder is filled with the soap material and it is desired to use the brush; the handle 9 is rotated on said cylinder. This causes the piston 10 to be moved inwardly, forcing the soap material through openings 15 in the front wall of the cylinder into the distributing chamber 12 and through the hollow bristles until a small quantity of soap oozes out through the slits 14, in the tips of the said bristles. The said soap is then applied to the face and rubbed into the beard by a rubbing operation with the brush head. The outer row of bristles 6, which are solid, being stronger than the hollow bristles tend to make the said rubbing operation more effective.

The skirt 7 confines the lather caused by the soap to that portion of the face which is covered by the brush head. Through the pressure of the brush on the face, the fingers 6, being flexible, permit the said skirt to contact with the surface of the face thereby more effectively confining the lather inside of said skirt.

When pressure is applied, the soap is forced into the bristles until it just begins to pass through the slits in the tips thereof. Then, upon the application of pressure between the head and the face, the soap in the bristles is caused to work out through the slits 14.

When pressure of the brush head on the face is released, the slits 14 will automatically close, thus sealing the soap remaining within the bristles and the cylinder against the air and thereby preventing hardening or drying thereof.

In the modification shown in Figure 5 of the drawing, the brush head is attached to a cap 16 which is adapted to be threaded to the tip 17 of a common type of collapsible tube 18 which may contain the soap. When it is desired to use the brush in this modified form, the tube is squeezed until the soap is forced into the hollow bristles in the same manner as it is forced therein by the plunger 10 of the preferred form.

If desired, the tube 18 may also be used as a handle, for holding the brush, although this is not necessary as the cap 16 provides sufficient gripping means.

It will be clearly understood that although I have shown my invention in a form to be used in connection with a shaving brush, the same may be used for other purposes where application of

a material which is to be rubbed into a surface is desired.

I claim:

1. In a device of the character described, the combination of a holder comprising a cylinder having a perforated wall in the end thereof, a flange surrounding said end, a brush head of flexible material adapted to be attached to said cylinder by means of said flange, a plurality of hollow bristles in said brush head having self-closing slits directly in the ends thereof; the said head being spaced from the said perforated wall to provide communication between the said cylinder and bristles through the perforations and a handle portion operable to cause material to be forced out of said cylinder into said bristles.

2. A device of the character described comprising a container having openings in the ends thereof, a brush head of flexible material attachable to said end and having hollow bristles each provided with a material retaining chamber and a normally closed slit communicating said chamber with the extreme end of the bristle; a row of solid bristles surrounding said hollow bristles and a flexible skirt surrounding all of said bristles; that portion of said head on which said hollow bristles are mounted being spaced from the end of

said container to provide a separately defined distributing chamber between said end and the said retaining chambers in the bristles and whereby the material in said distributing chamber is forced into said bristles upon the flexing of said head inwardly towards the end of said container.

3. In combination, a brush head of the character described comprising bristles, tapered recesses extending from the back of said head towards the tips of said bristles, a recess in the back of said head of an area including the entrances to said tapered recesses and an adapter for securing said head to the threaded end of a collapsible container; said adapter comprising a substantially flat end having a flange surrounding the same whereby the said brush head is secured thereto, a threaded recess in said adapter whereby the same is secured to the collapsible tube, perforations extending from said tapered recess to the said substantially flat end thereof; the said recess in the back of said brush head providing a chamber between the said end and the brush head for retaining a material therein to be forced through said bristles upon manipulation thereof.

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