N. ELLIS.

SANITARY SHAVING BRUSH.

APPLICATION FILED JUNE 1, 1912.

1,063,020. Patented May 27, 1913.

Fig. 1.

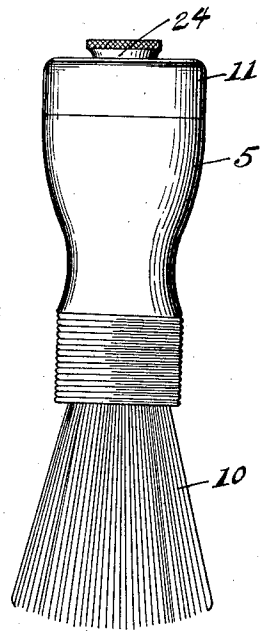


Fig. 2.

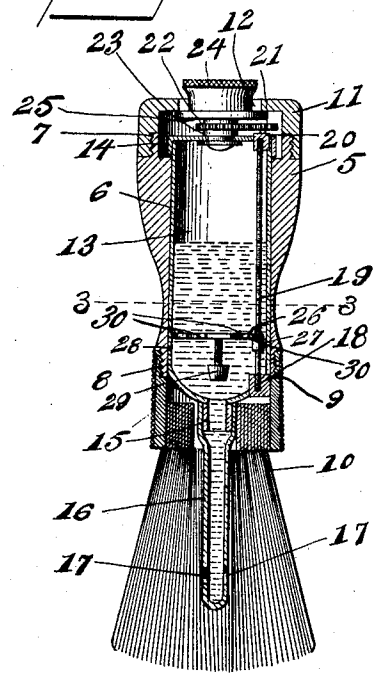


Fig. 3.

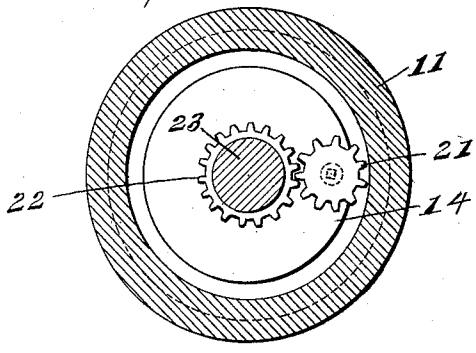
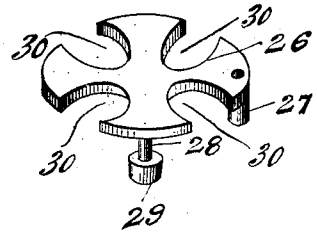


Fig. 4.



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SANITARY SHAVING-BRUSH.

1,063,020. Specification of Letters Patent. Patented May 27, 1913.

Application filed June 1, 1912. Serial No. 701,018.

To all whom it may concern:

Be it known that I, NATHAN ELLIS, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented new and useful Improvements in Sanitary Shaving-Brushes, of which the following is a specification.

The general object of this invention is the provision of a sanitary shaving brush which is an improvement upon the copending application bearing the Ser. No. 691,105, the brush being particularly adapted for use in connection with liquid soap, means being provided in a reservoir mounted in the handle of said brush for normally preventing the soap from being fed to the brush proper, said means being adapted to move longitudinally in the said reservoir whereby the soap therein will be permitted to flow to the brush.

In carrying out the objects of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible to changes in details and structural arrangements, one preferred and practical embodiment being shown in the accompanying drawing, wherein—

Figure 1 is a side elevation of the brush constructed in accordance with the invention. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a section on the line 3—3 of Fig. 2. Fig. 4 is a detail perspective view of the valve used in connection with the invention.

Referring more particularly to the accompanying drawing in which like reference characters designate similar parts, it will be seen that the invention comprises a handle 5 having a longitudinally extending opening 6 therein, said handle being provided at its ends with the exteriorly threaded extensions 7 and 8. An internally threaded ferrule 9 has a brush secured thereto in the ordinary well known manner and said ferrule is adapted to be threaded upon the extension 8 of the handle 5. Detachably secured to the extension 7 of the handle is an internally threaded cap 11 having a centrally located opening 12 for a purpose which will be hereinafter more fully described.

Mounted in the longitudinal opening 6 of the handle 5 is a soap containing reservoir 13 having a removable cap 14 at its outer end and a nipple 15 at its inner end which is adapted to project a distance into the brush and which has secured thereto a flexible tube 16 made of any suitable material such as rubber, said tube being provided adjacent its outer extremity with the oppositely disposed openings 17 through which the soap is adapted to be fed to the brush in a manner presently described. The reservoir 13 is provided at its inner end and adjacent the side wall thereof with a bearing 18 which is adapted to receive one end of a rotatable threaded shaft 19. The other end of the shaft 19 is mounted in a suitable bearing 20 in the cover 14, said bearing having a pinion 21 thereon.

The shaft 19 is adapted to be rotated in its bearings by means of a gear wheel 22 which meshes with the pinion 21 and which is mounted upon the extension 23 carried by a turning knob 24 which projects through the opening 12 formed in the cap 11. The extension 23 also projects through the cap 14 and is adapted for loose engagement therewith so that the knob 24 can be freely rotated without rotating the said cap. The knob 24 is provided with an annular flange 25 which is slightly larger in diameter than the opening 12 thereby preventing the withdrawal of said knob from engagement with the said reservoir until the cap 11 is removed from engagement with the handle 5.

A plate 26 having an internally threaded bearing 27 is adapted to engage the shaft 19 and upon rotation of said shaft said plate will be caused to move back and forth within the reservoir. The plate 26 is provided with a laterally extending centrally located stem 28 having at its free end a valve 29 which is adapted to normally close the opening through the nipple 15 thus preventing any liquid from the reservoir from flowing therefrom. The plate 26 is provided with a plurality of radial slots 30 which are adapted to permit the soap above said plate to flow therethrough into the inner end of said reservoir so that upon the raising of the valve 29 by means of the rotatable knob 24, said soap will be permitted to flow through the nipple 15 and tube 16 to the brush 10. When sufficient soap has been applied to the brush the knob 24 may be rotated in a reverse direction thereby again seating the valve 29 and preventing undue flow of the soap from the reservoir. It will also be seen that the several parts of the brush may be readily removed after unscrewing the cap 11 from the handle 5

whereby the reservoir may be thoroughly cleansed thus rendering the brush sanitary.

From the foregoing description taken in connection with the accompanying drawing, it will be seen that the invention contemplates providing a sanitary shaving brush which is simple in construction thus reducing the cost of manufacture of the same to a minimum and which is durable and effective in operation.

What is claimed is:—

1. A brush comprising a handle, a reservoir mounted in said handle and having an opening at one end thereof, a shaft rotatably mounted in said reservoir and having a bearing in each end thereof, means movable upon said shaft for normally closing the opening in said reservoir, and means connected to said shaft for rotating the same whereby the last named means will be moved from engagement with said opening.

2. A brush comprising a handle, a reservoir mounted in said handle and having an opening at one end thereof, a shaft rotatably mounted in said reservoir and having a bearing at each end adjacent the side wall thereof, means movable upon said shaft for normally closing the opening in said reservoir, and means connected to said shaft for rotating the same whereby the last named means will be moved in engagement with said opening.

3. A brush comprising a handle, a reservoir mounted in said handle and having an outlet opening at one end, a shaft rotatably mounted in said reservoir and having a bearing in each end thereof, a plate having radial slots therein movable upon said shaft, and means carried by said plate for normally closing said outlet opening.

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

NATHAN ELLIS.

Witnesses:
L. M. JENSEN,
M. SIMON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."