C. A. FISHER.

FOUNTAIN BRUSH.

APPLICATION FILED APR. 18, 1917.

1,292,288. Patented Jan. 21, 1919.

Fig. 1.

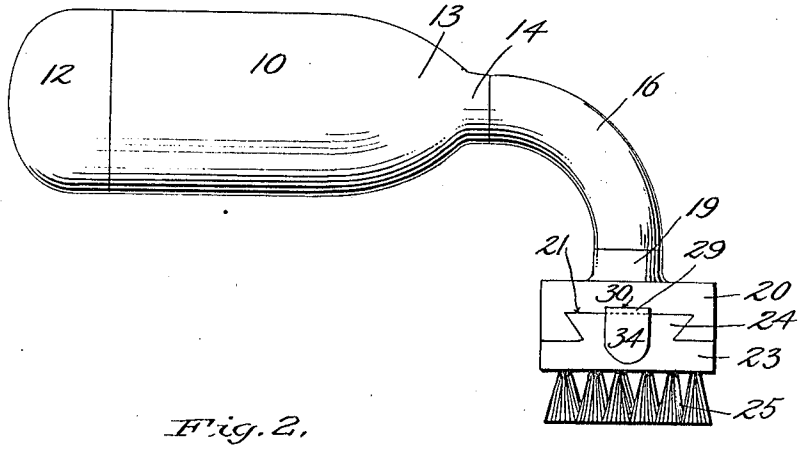


Fig. 2.

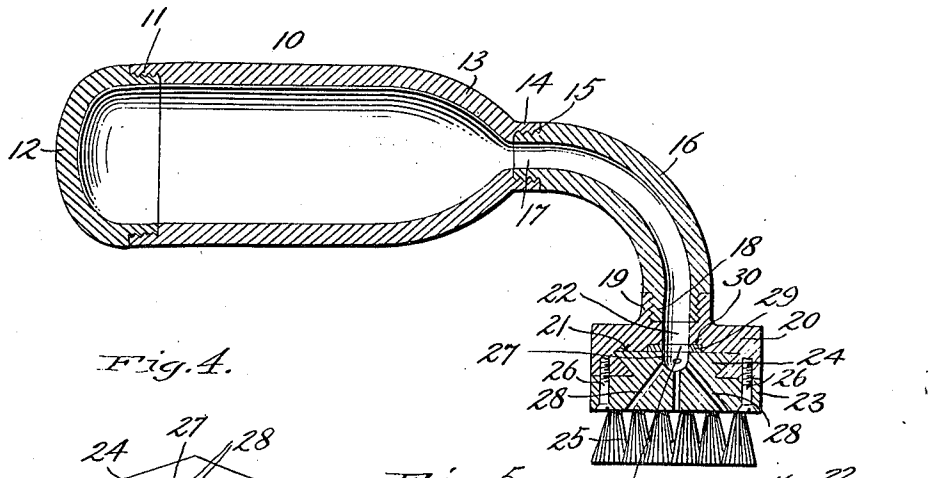


Fig. 4.

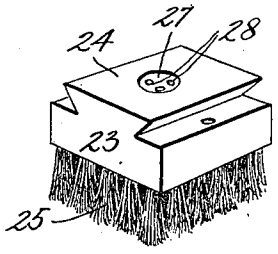


Fig. 5.

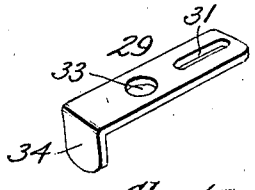
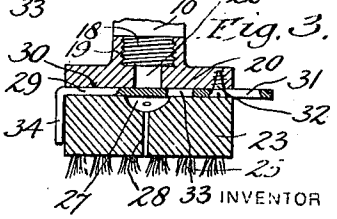


Fig. 3.



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FOUNTAIN-BRUSH.

1,292,288. Specification of Letters Patent. Patented Jan. 21, 1919.

Application filed April 18, 1917. Serial No. 163,054.

To all whom it may concern:

Be it known that I, CLAYTON A. FISHER, a citizen of the United States, residing at Berwick, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Fountain-Brushes, of which the following is a specification.

This invention relates generally to fountain brushes, and particularly to a fountain shoe brush, the principle, however, being applicable to brushes for other purposes, and has for its primary object to provide a simple, convenient and useful article for the application of a liquid color or polish to shoes and other articles and comprises a device of few parts, strong, and simple in construction and which upon destruction of the brush by use may be restored to its original condition by the substitution of a new brush head for the one so worn.

With the above as the principal objects in view the invention consists in the novel construction, combination, and arrangement of parts hereinafter described, pointed out in the appended claim and illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the fountain brush,

Fig. 2 is a central longitudinal sectional view of the brush and its reservoir,

Fig. 3 is a detail sectional view through the brush head at right angles to Fig. 2,

Fig. 4 is a perspective view of the brush head, and

Fig. 5 is a similar view of the valve slide.

In the drawings, 10 indicates the reservoir for containing the fluid that is to be applied by the device, this reservoir being of any suitable size, material and configuration but here shown as being of cylindrical form for the greater part of its length, the larger end being open and having an interior screw thread 11 into which is screwed a cap closure 12. The opposite end of the reservoir 10 gradually curves to a smaller size 13 terminating at the extremity with a neck 14 through which is an opening communicating with the reservoir 10 and provided interiorly with a screw thread 15.

Extending from the neck 14 is a delivery tube 16 which may be of any length and shape desired, but in the drawing it is conveniently shown as a quadrant shaped tube having a reduced upper end 17 threaded into the neck 14 and a similar reduced opposite end 18 threaded exteriorly and screwed into a neck 19 projecting upwardly from a brush holder 20. The brush holder 20 is in the form of a square block in the under side of which is cut a dove-tail groove 21 that extends from side to side thereof and to a depth of about one-half the thickness of the holder. Through the center of the holder is an opening 22 continuous with the bore of the tube 16 through which the liquid from the reservoir passes to the brush.

The brush head 23 is formed of a block of similar size to the brush holder with a dove tail rib 24 on its upper face extending from side to side and adapted to fit snugly in the dove-tail groove 21 of the brush holder. Bristles 25 are inserted in the under side of the brush head and the latter secured to the brush holder by screws 26 passing upwardly through the brush head into the brush holder. In the center of the upper surface of the dove-tail rib 24 is a cavity 27 in line with the opening 22 in the brush holder and from which a plurality of small divergent channels 28 pass downwardly to deliver the liquid from the reservoir to the bristles.

To regulate the flow of liquid to the bristles there is provided a valve 29 in the form of a sliding or cut off plate illustrated in Fig. 5 which is seated in a shallow depression or channel 30 in the bottom of the groove 21 in the brush holder 20 immediately above the dove-tail rib 24 and bearing on said rib. One end of the valve plate has a longitudinal slot 31 formed therein through which a screw 32 is passed upward into the brush holder and serves to limit the longitudinal sliding movement of the plate and also to prevent its loss when the brush head is removed. There is also a circular perforation 33 in the valve plate 29 which in one position of the valve registers with the opening 22 in the valve head and permits the fluid to flow therefrom into the cavity 27 and through the channels 28 to the bristles. The end of the valve plate opposite the one containing the slot 31 is preferably bent downwardly as at 34 to provide a finger piece 34 by which the valve may be moved to open and close communication between the reservoir and the brush.

In using the fountain brush the valve plate 29 is moved to the position indicated in Fig. 3, the cap 12 removed and the reservoir filled with the fluid to be applied. After

returning the cap, the brush is ready for use. The reservoir being grasped in one hand, the valve plate 29 is drawn outwardly to cause the opening 33 therein to register wholly or in part with the opening 22 in the brush holder, the extent of this movement of the valve plate being governed by the degree of fluidity of the liquid and the quantity needed for application to the article desired. The brush is now rubbed over the article and the liquid flowing through the channels 28 to the bristles will be at once spread thereover. If the flow be too great, the valve plate may be closed, whereas if not sufficient liquid is being received, it may be drawn outwardly and a larger opening provided for the fluid.

What I claim is:

In a fountain brush, the combination with a hollow handle constituting a reservoir, a delivery tube leading therefrom, a brush holder connected with the outer end of the tube and having across its lower face a dove-tailed groove and in the bottom of said groove a channel, a cut-off valve plate slidable in said channel and having a finger piece at one end, its body provided with an opening adapted to aline with the inlet in the brush holder and the bore of said tube, the body of the plate also being provided with a longitudinal slot, and a screw passing upward through said slot into said valve holder; of a brush head having a dove-tailed rib on its upper side to fit said groove and provided with a cavity adapted to register with the inlet in the holder and diverging channels leading therefrom and a screw passing upward through said brush head into the holder, all for the purpose set forth.

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

CLAYTON A. FISHER.

Witnesses:
C. E. SUEPPENHISE,
L. S. JACOBY.