

E. BUSCHMAN.  
 FOUNTAIN BRUSH.  
 APPLICATION FILED MAY 10, 1909.

1,030,383.

Patented June 25, 1912.

2 SHEETS—SHEET 1.

Fig. 1

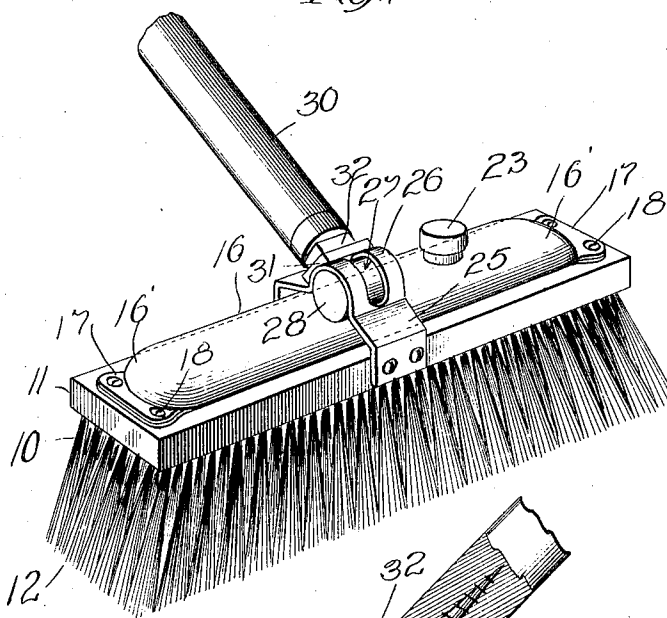


Fig. 7

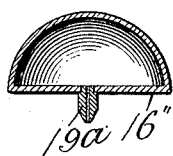


Fig. 2

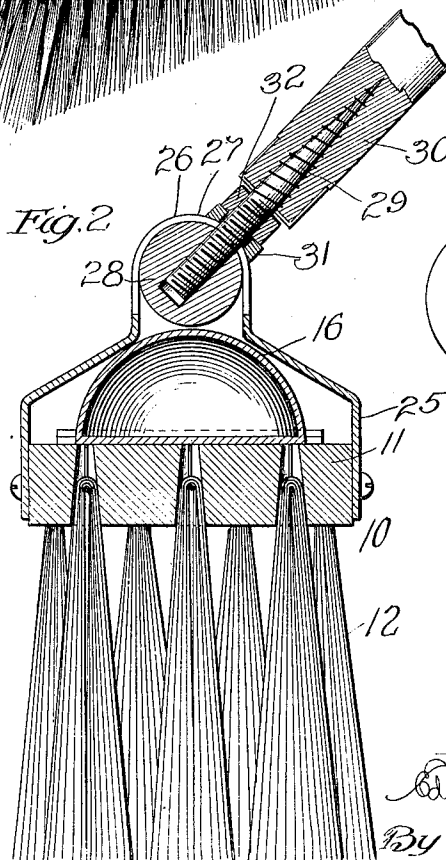
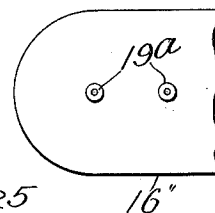


Fig. 8



Witnesses  
 H. R. L. White  
 R. A. White.

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 Attys.

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Fig. 3

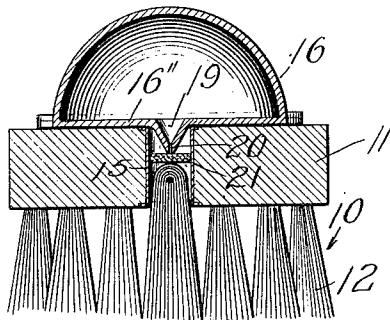


Fig. 4

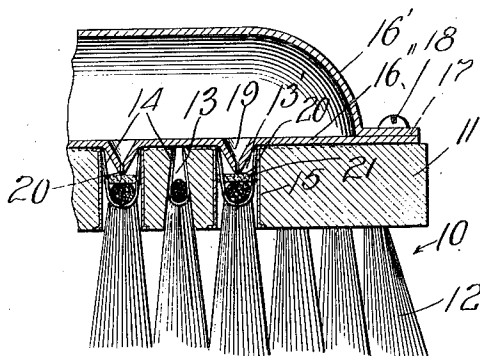


Fig. 5

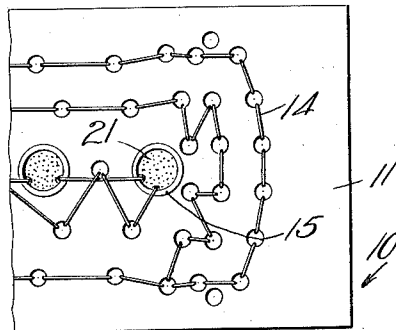
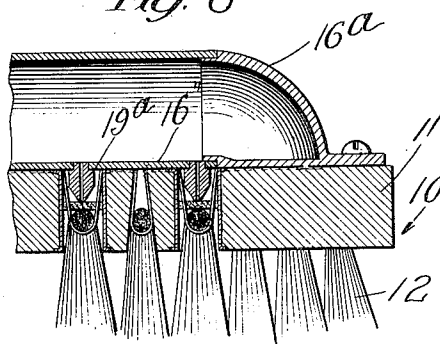


Fig. 6



Witnesses  
 H. R. L. White  
 R. A. White.

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 Edward Buschman  
 By Forcé Bain & May  
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# UNITED STATES PATENT OFFICE.

EDWARD BUSCHMAN, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO FREDERICK S. HUNT,  
OF MILWAUKEE, WISCONSIN.

## FOUNTAIN-BRUSH.

1,030,383.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed May 10, 1909. Serial No. 495,111.

*To all whom it may concern:*

Be it known that I, EDWARD BUSCHMAN, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Fountain-Brushes, of which the following is a specification.

My invention relates to improvements in fountain or self moistening brushes and has for its general object to provide a simple, cheap, and efficient reservoir brush constructed to permit a dust allaying fluid constantly to be fed to the bristles from the reservoir when the brush is in use.

One of the more particular objects of my invention is to provide a brush with a detachable reservoir; and other objects are to provide an improved metal reservoir construction; to provide improved fluid-delivery means in association with the bristles; and generally to improve the construction of brushes of the character described.

In the drawings, Figure 1 is a perspective view of the brush embodying my invention; Fig. 2 is a transverse vertical section there-through; Fig. 3 is a similar section through a portion of the brush showing one of the feeding nipples; Fig. 4 is a longitudinal vertical section through a portion of the brush; Fig. 5 is a plan view of a fragment of the brush with the reservoir removed; Fig. 6 is a view similar to Fig. 4 showing a modified construction embodying my invention; and Figs. 7 and 8 are a transverse sectional and an inverted plan view of the reservoir structure shown in Fig. 6.

In the embodiment of my invention I provide a suitable brush 10, of size and contour appropriate to the character of the work to be done, said brush comprising generally a back or base 11 and bristles 12 connected together in appropriate manner, the bristles, in the construction shown, being bunched and folded, and retained in suitable apertures 13 in the base by wires 14 looped through the folds of the bristle bunches. This manner of retaining the bristles in the base is well known and is here illustrated merely as a convenient construction, which is not, however, essential to my invention. It is advantageous, however, as providing secure retention of the bristles in location

in the base extending only part way through the apertures 13.

In practice, only a relatively small number of bristle bunches need be directly supplied with dust allaying fluid in order that the entire brush may quickly have its entire sweeping surface affected, and such of the bunches as are to receive the fluid are preferably mounted in specially constructed sockets. Thus, as shown in Figs. 4 and 5, only a limited number of the bristle bunches or tufts constituting the central row of the brush are arranged directly to receive liquid and each of the apertures 13', in which such selected bunches are secured, is provided with a metallic bushing or thimble 15 extending through the body 11 and flanged at its upper and lower ends to overlie the horizontal surfaces of the body 11 in a border about the aperture. By this arrangement the bristle body connected to receive fluid from the reservoir to be described is retained out of contact with the base 11, which may be made of wood and which would otherwise tend to absorb liquid from the bristle bunches.

The reservoir structure, generally indicated at 16, is a liquid tight tank, preferably segmental in cross section, and formed of sheet metal, mounted upon the top of the brush body 11 and having protruding from its flat lower side nipples extending into the thimbles 15 to supply oil to the selected bunches of bristles 12.

In the construction shown in Figs. 1 to 4, the metal reservoir or tank 16 is formed from a tubular blank, flattened along one side, and having the extremities of its arcuate portion formed as at 16' into downwardly trending end walls meeting and secured, as by soldering or other means, to the flat bottom wall 16''. The flange 17, formed by the juncture of these walls is secured as by screws 18 to the body 11 of the brush. If preferred, however, the ends of the tank may be formed of separate sections, cast or otherwise shaped, as shown at 16<sup>a</sup> in Fig. 6, and brazed, soldered, or otherwise secured to the tubular segment-shaped portion.

The bottom 16'' of the tank has protruding therefrom a suitable number of nipples 19 each provided with a central aperture 20,

one of such apertured nipples, when the reservoir is in place, extending into each of the thimbles 15. As illustrated in Figs. 3 and 4, the nipples may be formed directly in the base of the tank or, as indicated at 19<sup>a</sup> in Fig. 6, they may be separate, apertured studs suitably secured in the bottom of the tank.

As a means for restricting the flow of liquid from the tank to the bristles I preferably provide between each nipple 19 and the associated bunch of bristle an absorbent pad or body 21, preferably a piece of felt or like material completely filling an area of the thimble 15 between the bristles and the nipple. This body 21 acts as a wick to conduct liquid to the bristles. At a suitable point on the tank 16, a closable filling mouth may be provided, as at 23.

In connection with the brush I provide a cheap and convenient handle construction, and to this end I attach to the body 11 a transverse bridge strap or band 25, arched to pass over the reservoir 16, provided with an upwardly extending transverse bow 26, slotted transversely as at 27.

Within the bow 26 is placed a cylindrical nut 28 having its bore extending therein from its cylindrical surface to receive a machine screw 29, the opposite extremity of which is firmly secured in the handle proper 30. The screw 29 passes through the slot 27 and exteriorly through the bow 26 and carries a washer 31 loose upon the screw and preferably having its under side cylindrically dished or curved corresponding to the outer surface of the arcuate bow 26. A jam nut is provided, as at 32, upon the screw 29 between the washer 31 and handle 30.

In the operation of the device it will be obvious that the handle may be set at any angle at either side of the brush, it being necessary, to this end, only to turn the handle 30, and with it the screw 29, in such direction that the screw retreats from the cylindrical nut 28, thereby to loosen the handle with respect to the bridge 25, and after adjusting the handle at the desired angle, to turn it in the direction which will cause the screw 29 to penetrate the nut 28, thereby forcing the dished washer 27 down upon the

bow 26 and in conjunction with the nut 28 to clamp the handle tightly in place upon the bridge.

The reservoir is filled with the liquid for allaying the dust, such for instance as a kerosene mixture, or water, or any desired liquid, through the mouth 23, and the liquid feeds down through the nipples 19 upon the retarding pad 21 of felt, gradually to seep through the felt by capillary action to moisten the subjacent bristles. The arrangement of the nipples 19 and the bristles to be supplied with liquid, within the thimbles 15, protects the body 11 of the brush against absorption of the moisture to a material extent; and the penetration of the nipples into the thimbles brings them into contact with the felt pads 21 to prevent possible flooding of the thimbles.

While I have herein described in some detail specific constructions embodying my invention and for purposes of full disclosure, it will be obvious to those skilled in the art, that many changes in the details of construction might be made without departure from the spirit of my invention and within the scope of the appended claims.

What I claim is:

1. A reservoir brush construction providing a plurality of tufts and a separable detachable reservoir provided with independently restricting means for separately supplying variable quantities of fluid to each of a selected number of tufts.

2. In a reservoir brush, a base having bristle-receiving apertures therethrough, bristles secured in said apertures and extending only partially through the base, a reservoir mounted upon the said base having nipples provided with an opening extending into said apertures, and an independent absorbent body interposed between the bristles and the nipples, in each aperture.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

EDWARD BUSCHMAN.

In the presence of—

EMMA RICHTER,

FERDINAND PARINGER.