

W. E. MILLER.
 FOUNTAIN BRUSH.
 APPLICATION FILED OCT. 14, 1908.

950,074.

Patented Feb. 22, 1910.

Fig. 1.

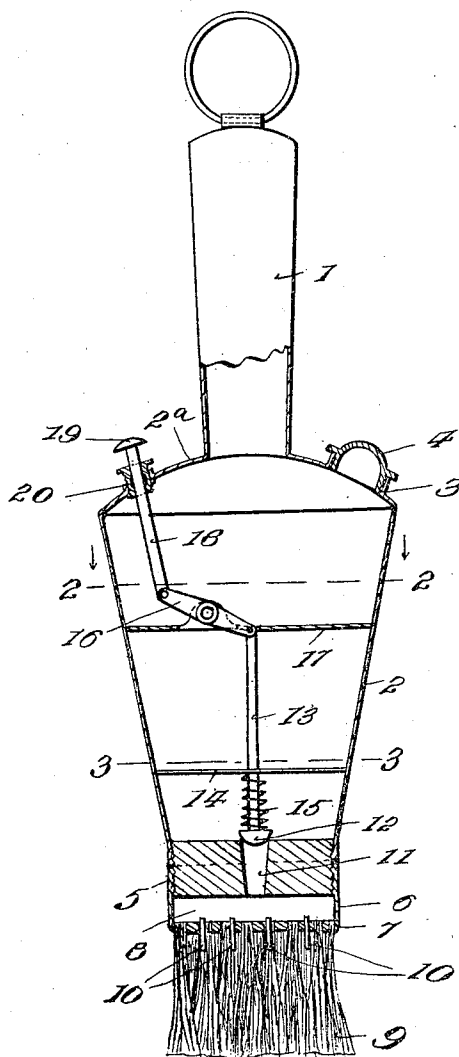


Fig. 2.

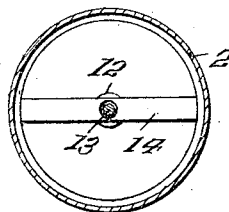
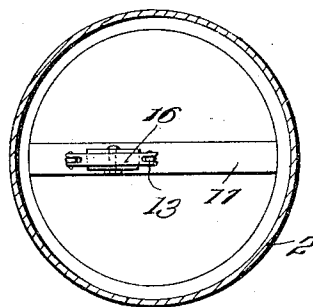


Fig. 3.

Witness

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UNITED STATES PATENT OFFICE.

WILLIAM E. MILLER, OF SAVANNAH, GEORGIA.

FOUNTAIN-BRUSH.

950,074.

Specification of Letters Patent.

Patented Feb. 22, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM E. MILLER, citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Fountain-Brushes, of which the following is a specification.

This invention comprehends certain new and useful improvements in fountain brushes, and the object of the invention is an attractive device of this character which is designed particularly for use in stenciling, although it is to be understood that it is not limited to any such use, but may be employed for any purpose where a device of this character is desirable; which is susceptible of being conveniently operated by the user so as to permit the supply of liquid for the brush to be controlled with facility, and which possesses certain other advantages, that will become at once apparent as the invention is hereinafter disclosed, over the ordinary brushes of this character in general use.

With this and other objects in view that will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of the parts that I shall hereinafter fully describe and then point out the novel features thereof in the appended claim.

For a full understanding of the invention and the merits thereof, and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a longitudinal section of a fountain brush constructed in accordance with my invention; Fig. 2 is a transverse section on the line 2—2 of Fig. 1; and, Fig. 3 is a similar view, the section being taken on the line 3—3 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

My improved fountain brush consists essentially of a body portion or reservoir 2 that is of frusto-conical form and is designed to contain a stenciling fluid or other desired liquid. A longitudinally extending handle 1 is disposed centrally at the larger end of the reservoir and is of less diameter than the same, so as to provide an annular out-

standing portion or shoulder 2^a which forms a guard to prevent the hand of the user from slipping out of position. The outstanding portion is preferably formed with an opening 3 extending therethrough to admit of the liquid being introduced into the interior of the reservoir, the said opening being closed by a screw cap 4. At its smaller end the body portion is open and interiorly threaded for engagement with an exteriorly threaded closure 5. The closure projects beyond the end of the reservoir and screws into an interiorly threaded coupling ring 6 formed on the brush head 7, whereby to detachably connect the latter to the reservoir and admit of the convenient separation of the parts for cleaning purposes or the like.

As illustrated in Fig. 1 the brush head is spaced apart from the closure to provide a feed chamber 8 that communicates with the reservoir 2 by means of an opening 11 extending centrally through the closure 5. The liquid admitted to the feed chamber 8 through the opening 11 is conducted to the bristles 9 of the brush through the instrumentality of a plurality of tubes or ducts 10 passing through the brush head 7.

The opening 11 constitutes a valve seat for a preferably semispherical valve 12 that is mounted within the reservoir. This valve is carried at one end of a valve stem 13 which extends longitudinally of the reservoir and has a sliding movement in longitudinally spaced cross braces 14 and 17 secured within the same. An expansion spring 15 encircles the stem 13 and is interposed between the valve 12 and the cross brace 14, whereby to exert its force to maintain the former closed against the valve seat. At its opposite end the valve stem is pivoted to one arm of a lever 16 which is fulcrumed at an intermediate point between spaced ears outstanding from the cross brace 17. The other arm of the lever is pivotally connected to the inner end of a reciprocatory plunger 18 that passes outwardly through an opening formed in the shoulder 2^a and terminates beyond the same in a head or push button 19. As a precautionary measure to preclude possible leakage, the plunger 18 is mounted in a stuffing box 20 of any conventional form.

In the practical use of my improved fountain brush, when it is desired to supply liquid to the bristles 9, it is only necessary for

the operator, grasping the handle 1, to bear against the press button 19 and force the plunger 18 inwardly into the reservoir. This movement manifestly effects the rocking of the lever 16 in such a manner as to retract the valve stem 14 against the compression of the spring 15 and hold the valve 12 off of its seat. The liquid from the reservoir is thus permitted to escape through the valve seat 11 and is admitted into the feed chamber 8 from which it passes into the various tubes or ducts 10 and is distributed among the bristles 9 and thence over the surface to which it is to be applied.

From the foregoing description, in connection with the accompanying drawing, it will be apparent that I have provided an improved fountain brush in which the mechanism for controlling the supply of liquid for the bristles is arranged in proximity to the handle so that the user may operate the same without the necessity of shifting his hand upon the handle, said brush embodying to a marked degree the elements of simplicity and durability, and consisting of comparatively few parts that may be easily and cheaply manufactured and readily assembled.

Having thus described the invention, what I claim is:

A fountain brush comprising a reservoir, a longitudinally extending handle secured

centrally to one end of the reservoir and of less diameter than the same to provide a shoulder forming a guard, the opposite end of the reservoir being open and interiorly threaded, an exteriorly threaded closure screwed into the said end of the reservoir and formed with an opening extending therethrough and constituting a valve seat, a brush head provided with a coupling ring having a threaded engagement with the closure and detachably connected thereby to the reservoir, a valve mounted within the reservoir and having a stem extending longitudinally in the same, longitudinally spaced cross braces secured within the reservoir and having the valve stem slidably mounted therein, a spring encircling the stem and interposed between the valve and the adjacent cross brace to hold the former normally closed against its seat, a lever fulcrumed on the other cross brace and pivotally connected to the stem, and a reciprocatory plunger pivoted at its inner end to the lever and projecting outwardly through the aforesaid shoulder in close proximity to the handle.

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

WILLIAM E. MILLER. [L. s.]

Witnesses:

J. C. SLATER,
J. W. SCOTT.