Oct. 27, 1959 W. W. MARION 2,909,798

FOUNTAIN BRUSHES

Filed July 22, 1957

FIG. 1

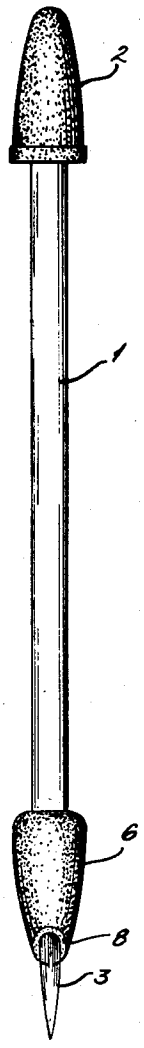
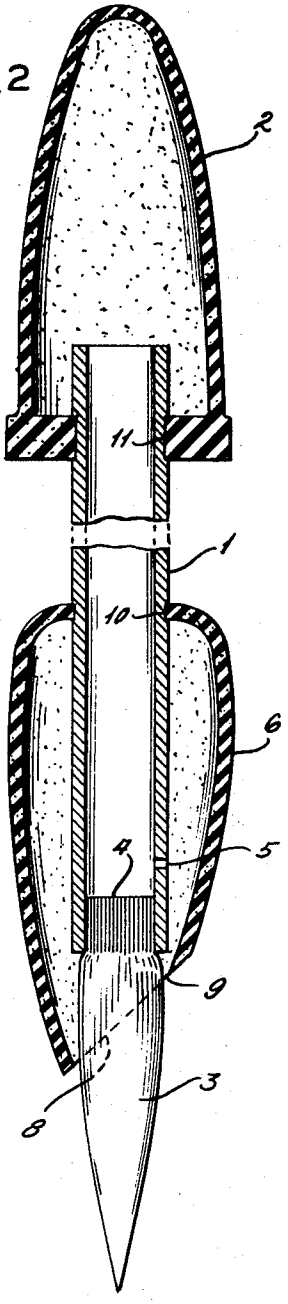


FIG. 2



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United States Patent Office 2,909,798
Patented Oct. 27, 1959

2,909,798

FOUNTAIN BRUSHES

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Application July 22, 1957, Serial No. 673,248

4 Claims. (Cl. 15—136)

This invention relates to fountain brushes adapted to supply a liquid to be brushed, such as dyes, paint, ink and other liquids, of any desired color.

Fountain brushes, as heretofore proposed, have comprised generallly a tube or reservoir (hereinafter descriptively referred to as "tube") for the liquid, and having a brush, usually in the form of bristles at the end. These are, however, open to the objections that the brush, where it enters the tube or reservoir, becomes clogged. It has also been proposed to place an outlet in a tube adjacent the brush for liquid to flow out of the tube onto the brush; however, such a construction is not satisfactory because there is liable to be an excess of liquid through the outlet onto the brush, resulting in dripping and blotting on the surface to be brushed.

One of the objects of this invention is to provide a fountain brush which will overcome the above objections.

Further objects will appear from the detailed description taken in connection with the accompanying drawing, in which will be described an illustrative embodiment of this invention; it is to be understood, however, that this invention is susceptible of various embodiments within the scope of the appended claims.

In the drawing:

Fig. 1 is a side view of a brush embodying this invention; and

Fig. 2 is an enlarged section at the brush end.

Referring to the drawing, 1 designates a reservoir in the form of a tube, which may have a bulb 2 at one end thereof, while the other end of the tube receives the brush or bristles 3. The end 4 of the bristles may be compressed to make a tight fit with the tube, because the liquid in the tube is not intended to pass through the brush. The tube adjacent the brush has an outlet opening 5 through which, when the tube is held vertical or on an incline with the brush extending downwardly, will permit liquid to flow through the outlet and over the brush. In order, however, to keep the liquid from flowing excessively over the brush and thus dripping or blotting, the brush end of the tube is provided with a housing 6, which may be of rubber or other suitable material, such as a plastic. The upper end of the housing fits tightly around the outer circumference of the tube at a position intermediate the outlet opening 5 and bulb receiving end of the tube 1. The brush extends beyond the housing 6, the lower end of the housing, is, however, contracted beyond the tube to fit the brush snugly, but not too tight so as to permit liquid to come out over the brush, but not in excess of that required. In Fig. 1 a snug fit is shown, but in Fig. 2 the space between the lower end of the housing and the brush has been exaggerated to show that there is a space, although the fit is actually snug. The bottom end of the housing is on a slant inclined to the axis of the tube as shown at 8, from left to right when the outlet 5 is vertically above the brush to cause the liquid to flow slantingly on the brush. The housing 6 can be moved upwardly so as to uncover the brush more or less, but to leave the outlet 5 inside of the housing. Shallow notches

10,11 are provided to retain the bulb 2 and the housing 6 on the tube 1.

In the vertical position and with the housing 6 moved up to uncover the opening 5, the brush and tube can be dipped into the liquid so that the outlet or opening 5 will be below the liquid level, and at that time, the bulb 2 can be compressed and then released to draw liquid into the tube. However, the bulb 2 may be replaced by an ordinary closure, which can be like the bulb 2 itself, and which can be removed from the tube, and then liquid can be poured into the tube. After the tube has been filled to the desired extent, the housing is slid back to about the position shown in Fig. 1 with the end 8 of the housing positioned, so as to fit rather snugly but not too tight on the brush 3.

Brushing can now be proceeded with, holding the tube vertical or on a downward slant, but with the outlet 5 at the top and with the bottom 9 of the housing at the bottom. Liquid can then flow onto the brush, the flow of liquid being controlled by the size of the outlet 5 and by the closeness of the fit of the housing 6 on the brush itself. If the outlet 5 should become clogged, the housing can be retracted to uncover the outlet opening 5, which can then be readily opened by a pin or other suitable tool. The housing 6 is compressible, so as to be in the form of a bulb. This is advantageous because it enables the flow of liquid through the brush to be accelerated and is also useful in cleaning the brush.

It will therefore be seen that this invention accomplishes its objects. A highly useful fountain brush is provided, in which the flow of liquid to the brush, can be controlled so to avoid dripping or blotting. The brush can, of course, be of any suitable shape and the tube 1 may be of a shape to fit the brush. The term "tube" is used descriptively and not limitatively, because its function is to provide a reservoir or chamber for the liquid. The brush may be employed for general purposes for applying liquids such as dye, paint, ink and other liquids to various surfaces such as wood, glass, ceramics, leather, etc.

Having thus described the invention, what is claimed and desired to be secured by Letters Patent is:

1. A fountain brush, comprising, a liquid-receiving tube, a brush at the lower end of and closing said tube, a housing attached at its upper end to said tube above its brush end, said housing therebelow surrounding and being laterally spaced from said tube and extending downwardly beyond its brush end and partially over said brush, the lower end of said housing being contracted and in loose contacting engagement with the periphery of said brush and a liquid outlet in the side of said tube adjacent the tube-closing end of said brush and opening to the inside of said housing, whereby liquid from said opening is caused to flow inside of said housing and is guided onto said brush beyond the brush end of said tube.

2. A fountain brush, comprising, a liquid-receiving tube, a brush at the lower end of and closing said tube, a housing attached at its upper end to said tube above its brush end, said housing therebelow surrounding and being laterally spaced from said tube and extending downwardly beyond its brush end and partially over said brush, the lower end of said housing being contracted and in loose contacting engagement with the periphery of said brush, the lower end of said housing being inclined to the axis of said tube, and a liquid outlet in the side of said tube adjacent the tube-closing end of said brush and opening to the inside of said housing, whereby liquid from said opening is caused to flow inside of said housing and is guided onto said brush beyond the brush end of said tube.

3. A fountain brush, comprising, a liquid-receiving tube, a brush at the lower end of and closing said tube, a resilient housing attached at its upper end to said tube

above its brush end, said housing therebelow surrounding and being laterally spaced from said tube and extending downwardly beyond its brush end and partially over said brush, the lower end of said housing being contracted and in loose contacting engagement with the periphery of said brush, and a liquid outlet in the side of said tube adjacent the tube-closing end of said brush and opening to the inside of said housing, whereby liquid from said opening is caused to flow inside of said housing and is guided onto said brush beyond the brush end of said tube.

4. A fountain brush, comprising, a liquid-receiving tube, a brush at the lower end of and closing said tube, a housing movably attached at its upper end to said tube above its brush end, said housing therebelow surrounding and being laterally spaced from said tube and extending downwardly beyond its brush end and partially over said brush, the lower end of said housing being contracted and in loose contacting engagement with the periphery of said brush and a liquid outlet in the side of said tube adjacent the tube-closing end of said brush and opening to the inside of said housing, whereby liquid from said opening is caused to flow inside of said housing and is guided onto said brush beyond the brush end of said tube, said housing being movable along said tube away from said brush to expose said outlet.

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