A. B. BRIGGS.

FOUNTAIN BRUSH.

APPLICATION FILED APR. 25, 1921.

1,413,827. Patented Apr. 25, 1922.

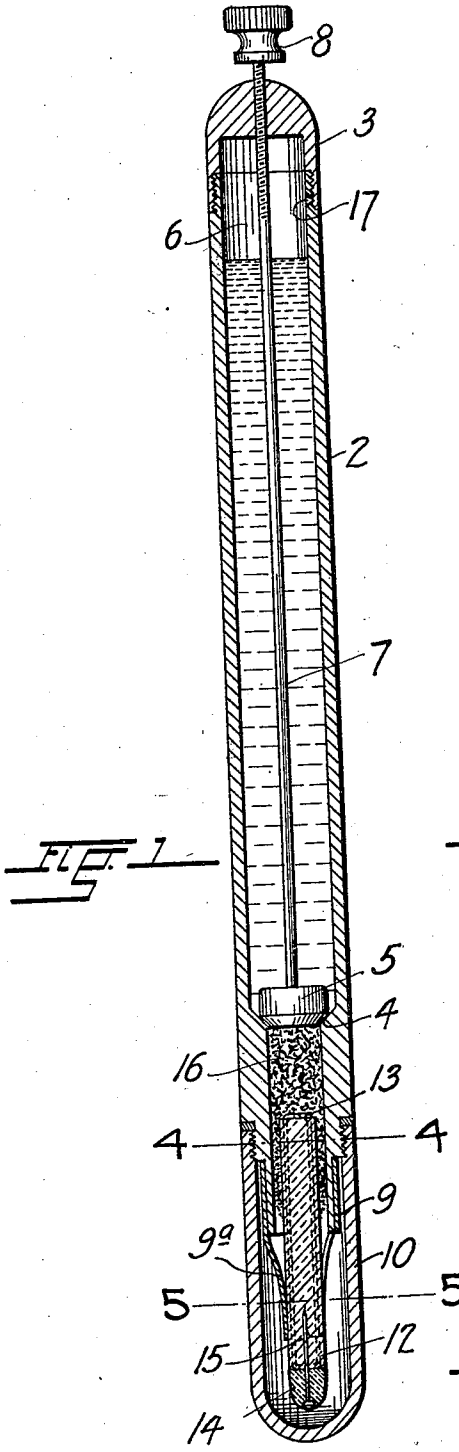


FIG. 1

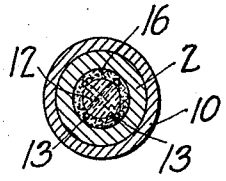


FIG. 4



FIG. 6.

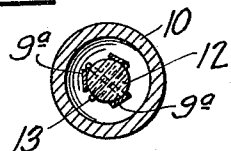


FIG. 5.

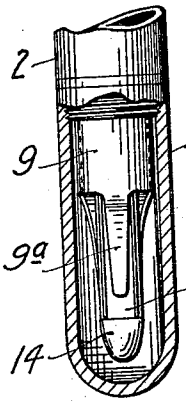


FIG. 2

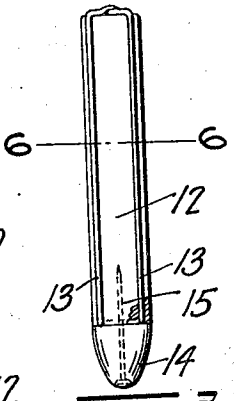


FIG. 3.

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FOUNTAIN BRUSH.

1,413,827. Specification of Letters Patent. Patented Apr. 25, 1922.

Application filed April 25, 1921. Serial No. 464,130.

To all whom it may concern:

Be it known that I, ARIE B. BRIGGS, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Fountain Brushes, of which the following is a specification.

This invention relates to fountain brushes and its primary object is to provide a brush fed from a reservoir in its handle, which is particularly adapted for writing, drawing or marking on packing cases, sign boards, show cards and other large surfaces.

Another object of the invention is to provide a fountain brush which constantly supplies writing fluid from its reservoir proportionate to the quantity required in its operation.

A further object is to provide in an instrument of the above described character, a resilient brush-member the tip of which is removable and readily renewed in case of wear or other impairment of its function and which is suitable for writing and drawing as well as for printing, marking or stenciling, and still other objects reside in details of construction and the arrangement of parts hereinafter described with reference to the accompanying drawings in the various views of which like parts are similarly designated and in which

Figure 1 is a longitudinal sectional elevation of the fountain brush, drawn to a somewhat exaggerated scale;

Figure 2, a fragmentary elevation of the working end of the brush showing the protective cap thereon in longitudinal section;

Figure 3, an elevation of the flexible brush member of the instrument drawn to an enlarged scale;

Figure 4, a transverse section on the line 4—4, Figure 1;

Figure 5, a similar section taken on the line 5—5, Figure 1, and

Figure 6, an enlarged section along the line 6—6, Figure 3.

Referring to the drawings the numeral 2 designates a hollow handle closed at one end by a screw cap 3 and having at its other end a seat 4 for a valve 5 which controls the outflow of writing or marking fluid supplied to its reservoir 6. The valve 5 is fastened at the end of a slender stem 7 which extends through a threaded aperture in the end of the cap 3 and which has a knurled knob 8 at its extremity to facilitate rotation.

The end of the handle opposite to that closed by the cap, is reduced in exterior diameter for the application of a brush holder 9 and a screw cap 10 which encases the brush when the instrument is not in use.

The holder 9 consists of a thimble which snugly fits upon the extremity of the handle and a plurality of laterally spaced resilient fingers 9^a which extend convergently from an edge thereof.

The brush of the instrument consists of an elongate body 12 of felt, cork or other flexible material which is adjustably clamped between the fingers of the holder and extends into the cavity of the handle below its valve seat in spaced relation to the wall thereof.

The resilient body provides a support for a plurality of cotton fibers 13 which in the operation constitute the feed lines along which a constant supply of writing fluid is conveyed from the reservoir in the handle to a pointed tip 14 at the outer end of the brush.

The fibers extend longitudinally upon the surface of the body and are connected at opposite ends of the same by tying them together and the tip of the brush which is made of felt or other suitable soft and absorbent material is by means of a pin 15 detachably fastened at the end of the body in constant contact with the fibers.

The cavity of the handle below the valve is occupied by a filling 16 of cotton or other suitable absorbent material in which the end of the brush is embedded. A vent hole 17 in the threaded portion of the handle at the upper end thereof is normally closed by the screw cap 3 and provides a convenient means for admitting air to the reservoir above its liquid contents.

In the operation of the instrument the valve is opened by rotation of its threaded stem to permit a liquid or semi-liquid marking fluid contained in the reservoir to pass to the absorbent filling in the cavity below the valve seat. The liquid in the saturated filling passes to the fibers 13 which by gravity and capillary attraction convey a constant supply thereof to the absorbent tip at the end of the flexible brush. The pointed

tip provides a convenient and practical medium to transfer the writing liquid to a surface with which it is brought in engagement and it is evident that owing to its peculiar form and composition it is adapted for writing, sketching and painting as well as for ordinary marking.

Flooding of the brush by an excessive supply of liquid is prevented by the arrangement of the absorbent filler and the feed lines as hereinbefore described and the flexibility of the brush is readily adjusted by changing its position between the resilient clamping fingers of the holder.

The absorbent tip of the brush is easily removed and replaced by another when worn or otherwise impaired and when the instrument is not in use the supply of liquid to the brush is discontinued by readjustment of the valve while air is excluded from the brush by replacing the protective cap 10 on the end of the handle.

When after a period of use a decrease of air pressure in the upper end of the reservoir diminishes the outflow of the liquid, air is readily admitted through the vent hole 17 by partially unscrewing the cap 3 which normally covers the same, and by proper adjustment of the valve 5 the flow of liquid from the reservoir may be regulated to insure a constant and sufficient supply to the absorbent tip of the brush through the medium of feed lines.

Having thus described my improved marking and writing brush, it will be apparent that variations in details of construction may be resorted to within the spirit of my invention as defined in the following claims.

What I claim and desire to secure by Letters Patent is:

1. In a fountain brush, a brush member comprising a resilient body, feed fibers supported thereon, and an absorbent tip at an end of the body, engaging with said fibers.

2. In a fountain brush, a brush member comprising a flexible body, a tip detachably fastened at an end thereof, and conductive means on said body, engaging with the tip.

3. In a fountain brush, a handle having a reservoir, an absorbent filling at an end thereof, and a brush member on the handle, comprising a flexible body, an absorbent tip at an end thereof, and feed fibers on said body engaging with the filling and the tip.

4. In a fountain brush, a handle having a reservoir, an absorbent filling at an end thereof, a valve controlling the flow of liquid from the reservoir to the filling, and a brush member on the handle, comprising a flexible body, an absorbent tip at an end thereof, and feed fibers on said body engaging with the filling and the tip.

5. In a fountain brush, a handle having a reservoir, an absorbent filling at an end thereof, a brush holder on the handle, and a brush comprising a flexible body adjustable in the holder, an absorbent tip at an end of the body, and feed fibers on the body, engaging with the filling and the tip.

In testimony whereof I have affixed my signature.

ARIE B. BRIGGS.