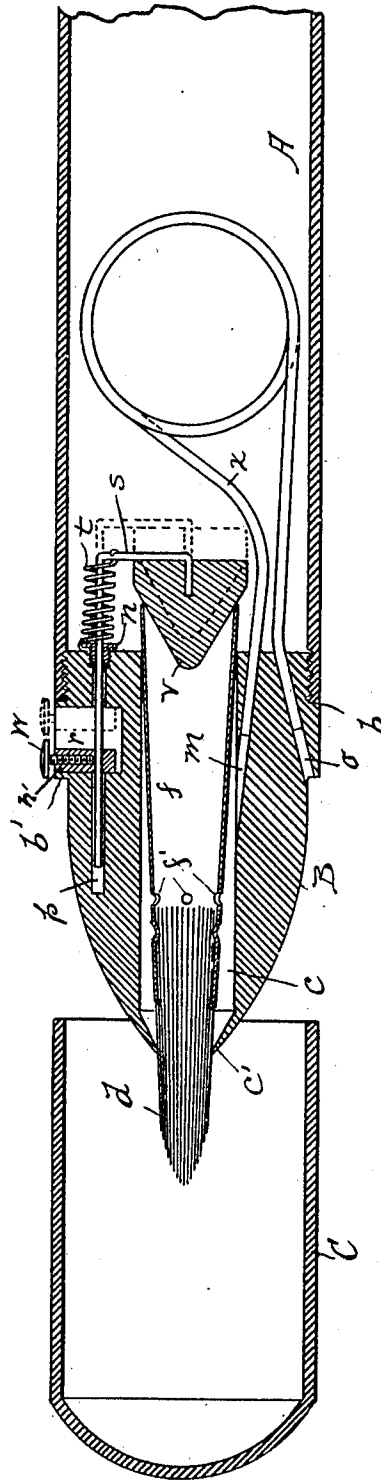


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 FOUNTAIN MARKING BRUSH.
 APPLICATION FILED OCT. 23, 1909.

950,483.

Patented Mar. 1, 1910.



Witnesses:
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Specification of Letters Patent.

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Application filed October 23, 1909. Serial No. 524,106.

To all whom it may concern:

Be it known that I, CHARLES W. HOWE, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Fountain Marking-Brushes, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to fountain marking brushes and its object is a fountain brush having a feed chamber separate from the reservoir and a means under the control of the operator whereby the chamber may be filled as required and that is non-leakable irrespective of the position in which the brush may be held. Its novelty consists in the peculiar design and arrangement of parts hereinafter more fully described and claimed.

In the drawing the figure is a much enlarged longitudinal section of a brush embodying my invention. A part only of the reservoir is shown.

The device consists principally of a reservoir A, a head or brush holder B, and a cap C. The reservoir may be of any desirable shape, as oval or cylindrical, and is closed at one end (not shown) and is threaded at the opposite end for the reception of the head B. The head is provided with an annular shoulder *b* against which the end of the reservoir seats when the parts are assembled. The cap C is adapted to fit over the brush end of the head and seat against the annular shoulder *b'*. The head B is provided with a cylindrical chamber *c* in which the brush *d* is held. The brush has a tapering ferrule *f*, the large end of which is adapted to close the end of the chamber *c* that would otherwise open into the reservoir A. The opposite end *c'* of the chamber has an opening which is of less diameter than the chamber. The brush *d* is of a proper size to fill said opening. The large end of the ferrule is provided with a spring seated valve *v* which effectually prevents the marking fluid in the reservoir from flowing into the ferrule. At a point just above the bristles are holes *f'* in the ferrule, providing a passageway between the hollow ferrule and the chamber *c* whereby any fluid in the hollow ferrule may flow into the chamber *c*

and around and through the brush *d*. The act of marking with the brush compresses the bristles against the edge of the opening in which it is located and allows a small amount of fluid to flow out of the chamber *c* on the brush *d*.

The valve is attached to the stem *s* and is held on its seat by the spring *t* as shown. The free end of the stem is inserted in the opening *p* in the head and is provided with a packing nut *n* which prevents leakage of the fluid around the stem. The stem is also provided with a thumb screw *w* threaded in a nut *n'* located in a recess *r* in the head by means of which the valve may be raised from its seat, as shown in dotted lines in the figure, and allow fluid in the reservoir to flow into the hollow ferrule. The brush is held in position in the chamber *c* by the valve *v* and the spring *t* as shown. The chamber *c* is provided with a vent to facilitate the flow of fluid therefrom. The vent is formed of two passageways *m* and *o* connected by a coiled tube *x*. The tube has a sufficient number of coils whereby it has a greater cubical content than the chamber surrounding the brush. This arrangement prevents a leakage of fluid from the chamber through the vent inasmuch as the relatively small amount of fluid in the chamber surrounding the brush would not fill the coils of the tube if the device were held with the brush end up.

While I have shown the coil tube as being on the lower side of the head B, it may be placed at any convenient point as on the upper side of the head but to one side of the recess *r* and stem *s*. This latter position would facilitate drainage of the coils whenever they might become filled with fluid from the chamber.

Having thus briefly described my invention, what I claim is—

1. In a fountain marking brush, a reservoir for marking fluid, a brush holder forming a closure therefor, said holder having a cylindrical chamber, a brush in said chamber, and a spring retained valve adapted to hold the brush in the chamber and control the flow of fluid thereinto, substantially as shown and described.

2. In a fountain marking brush, a reservoir for marking fluid, a brush holder forming a closure therefor, said holder having a cylindrical chamber, a brush in said chamber having a hollow ferrule forming a clo-

sure for one end of the chamber, the opposite end of the chamber being closed by the brush, and a valve carried by the holder adapted to hold the brush in the chamber and control the flow of fluid thereinto, substantially as shown and described.

3. A fountain marking brush, comprising a reservoir for marking fluid, a brush holder forming a closure therefor, said holder having a cylindrical chamber provided with a vent, a brush in said chamber having a hollow, tapering ferrule forming a closure for one end of the chamber, the opposite end of the chamber being closed by the brush, the ferrule being provided with openings whereby fluid may enter the chamber, and means controlling the flow of fluid from the reservoir into the ferrule; said means being adapted to retain the brush in the holder, substantially as shown and described.

4. A fountain marking brush, comprising a reservoir for marking fluid, a brush holder forming a closure therefor, said holder hav-

ing a cylindrical chamber, a brush in said chamber having a hollow, tapering ferrule adapted to close one end of the chamber, the opposite end of the chamber being closed by the brush, a vent channel for said chamber connected to atmosphere through a coiled tube having greater cubical content than the chamber surrounding the brush, said ferrule being provided with openings whereby fluid may enter the chamber, a spring retained valve normally closing the open end of the ferrule and holding the brush in position in the holder, and means for operating the valve to allow fluid from the reservoir to flow into the ferrule, said means comprising a nut attached to the stem of the valve by a thumb screw, located in a recess in the brush holder, substantially as shown.

In testimony whereof, I sign this specification in the presence of two witnesses.

CHARLES W. HOWE.

Witnesses:

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