(No Model.)

J. B. HARRIS.

FOUNTAIN MARKING BRUSH.

No. 438,622. Patented Oct. 21, 1890.

Fig. 1

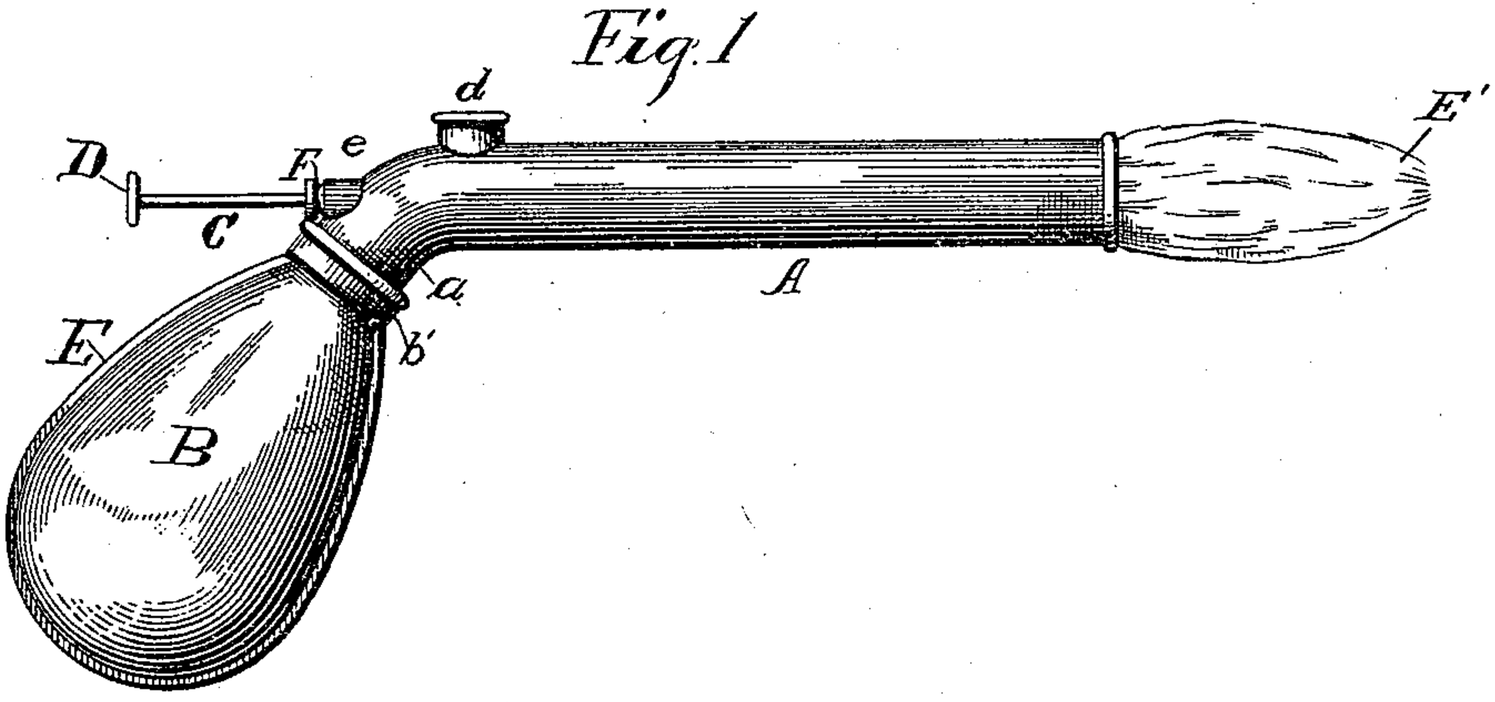


Fig 2

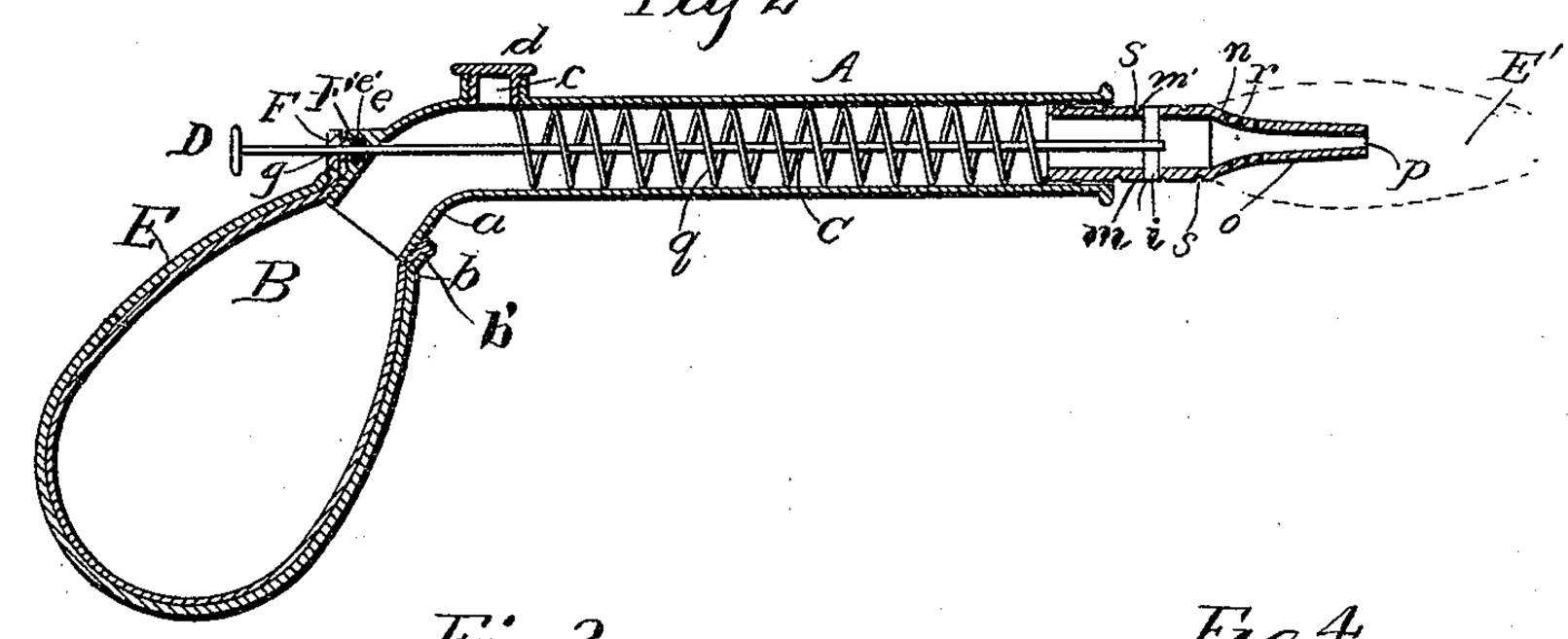


Fig. 3

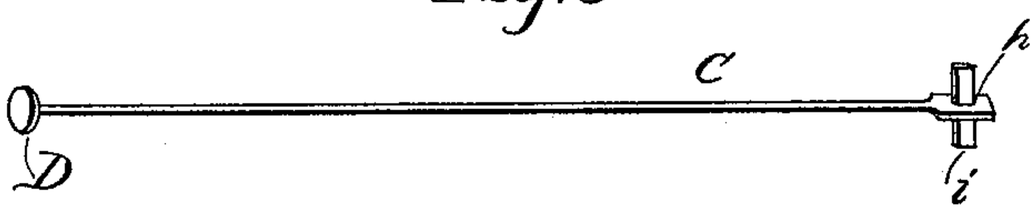
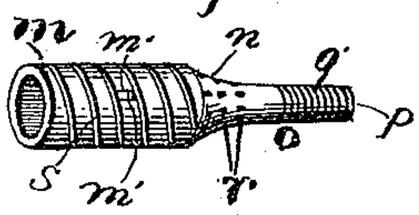


Fig 4



Witnesses
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per
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UNITED STATES PATENT OFFICE.

JOHN BROWN HARRIS, OF EUTAW, ALABAMA.

FOUNTAIN MARKING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 438,622, dated October 21, 1890.

Application filed February 21, 1890. Serial No. 341,275. (No model.)

To all whom it may concern:

Be it known that I, JOHN BROWN HARRIS, a citizen of the United States, residing at Eutaw, in the county of Greene and State of Alabama, have invented certain new and useful Improvements in Fountain Marking-Brushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of devices known as "fountain marking-brushes;" and it has for its object to produce a more simple, cheap, and compact article than has hitherto been in vogue.

With this end in view my invention consists in certain peculiarities of construction and combinations of parts, more fully described hereinafter, and particularly pointed out in the claims.

Referring to the accompanying drawings, making part of this specification, Figure 1 is a side elevation of my complete device; Fig. 2, a longitudinal section; and Figs. 3 and 4 detail views of the piston-rod, brush-bit, and key.

The body portion of the device consists of a hollow metallic cylinder or barrel A, having a downwardly-curved rear end *a*, provided with outside threads on its lower extremity, by means of which the bulb B is screwed onto the barrel. This bulb is made of rubber or other suitable elastic material, and its neck *b'* is provided with a metal ring *b*, having inside threads, which engage those in the lower end *a* of the barrel. A rigid metal rim or band E extends from said ring entirely around the bulb and serves as a handle by means of which the brush is manipulated.

The elastic bulb B serves as a reservoir for the fluid, which is introduced through a perforation *c* in the top of the barrel, said perforation being closed by a suitable screw-cap *d*.

Intermediate of the cap *d* and the bulb B the barrel is provided with a projection *e*, having a threaded aperture *e'*, in which fits a screw-plug F, a stuffing-box F' being left to be filled with leather or other suitable bushing.

Through the plug F and barrel A a perforation *g* extends, and through this perforation passes the piston-rod C, which is provided on its rear end with a thumb-piece D, and is of sufficient length so that when pushed home—that is, until the thumb-piece D engages the shoulder of the screw-plug—its outer end will project from the outer end of the barrel. This outer end is provided with a transverse slot or key-hole *h*, through which is inserted a corresponding key *i*, having a length equal to the inner diameter of the barrel. The bit consists of a hollow cylindrical portion *m*, from the outer end of which extends a tapering shoulder *n*, from which projects a reduced portion or brush-point *o*. This reduced portion or point *o* is ridged at *o'* and the brush E securely bound or wrapped upon it, the ridges serving to more surely hold the hairs of the latter in place and prevent them from slipping off. A supply-perforation *p* extends through the point *o* and opens into the center of the brush, and openings *r* are also made in the tapering shoulder *n*, through which the fluid flows.

The barrel A is provided the greatest part of its length with female threads *q* on its inside surface, and the bit has corresponding male threads *s* on the outside surface of its cylindrical portion *m*, which is also provided with registering apertures or key-holes *m'* on its opposite sides, for a purpose hereinafter set forth.

The preferred construction of my invention having been set forth, I will now proceed to describe the manner in which it is used. The elastic bulb or reservoir B is filled with the desired fluid by removing the cap *d* and introducing the liquid through the perforation *c*. The piston-rod C is pushed forward to its farthest extent and its front end will there project from the muzzle of the barrel. The key *i* is now removed from the key-hole *h*, and the bit inserted on the end of the piston-rod until the apertures *m'* register with the opening *h* in the piston-rod. The key *i* is now inserted through all three of the key-holes, and when shoved home its opposite ends will lie flush with the outer surface of the bit. The latter is next pushed into the muzzle of the barrel, and at the same time the piston-rod C is turned back—that is, to the left—by use of the thumb-piece, when the threads of the bit will engage those of the

barrel, and the bit can be secured back into the latter as far as desired.

When using the device in a horizontal position or when marking overhead, the bulb B is squeezed and the fluid thus ejected, when it will be forced through the barrel into the bit and through the perforations *p r* into the outer end of the same into the brush E.

When marking with the brush-point downward, the tendency to form a vacuum prevents the fluid from flowing too freely through the barrel.

All sizes of brush-points can be used, it only being necessary that they have a standard size body portion, so that the threads on the same will engage those of the barrel, and long brushes can be applied equally as well as short ones, as the barrel will confine the same and preserve their shape; also, when a long brush becomes somewhat worn down it can be pushed farther out of the barrel by turning the piston-rod.

Should the barrel become stopped up or the parts of the device need cleaning on the inside, the bulb can be readily unscrewed from the end of the barrel for this purpose.

It is evident that many slight changes which might suggest themselves to a skilled mechanic may be resorted to without departing from the spirit and scope of my invention. Hence I do not limit myself to the precise construction herein shown; but,

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fountain marking-brush, the combination of a barrel, a reservoir-bulb removably secured thereto, a piston-rod located in said barrel, and a brush-bit arranged to be removably connected to said piston-rod, substantially as described.

2. In a fountain marking-brush, the combination of a barrel, a piston-rod operating therein, a brush-bit fitting within the barrel, and suitable removable connections between the latter and said piston-rod, whereby the two parts turn together, substantially as described.

3. In a fountain marking-brush, the combination of a barrel, a reservoir removably secured thereto, a piston-rod in said barrel, a brush-bit, and a key running through the latter and said piston-rod, whereby they are removably secured together, substantially as described.

4. In a fountain marking-brush, the combination of a barrel having interior threads, a reservoir-bulb removably secured thereon, a piston-rod in said barrel, a brush-bit threaded to engage the threads of the barrel and provided with a brush-supply point, and a key arranged to removably fit in apertures in the bit and piston-rod to secure these parts to turn together, substantially as described.

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

JOHN BROWN HARRIS.

Witnesses:
JOHN CULLEN,
W. R. MCKERALL.