No. 753,593. PATENTED MAR. 1, 1904.

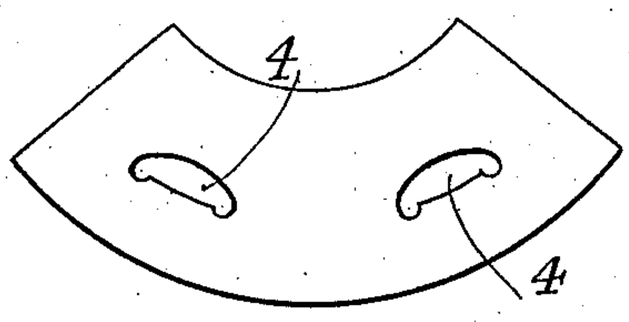
J. E. LANGILL.

FOUNTAIN MARKING DEVICE.

APPLICATION FILED SEPT. 18, 1903.

NO MODEL.

Fig. 4



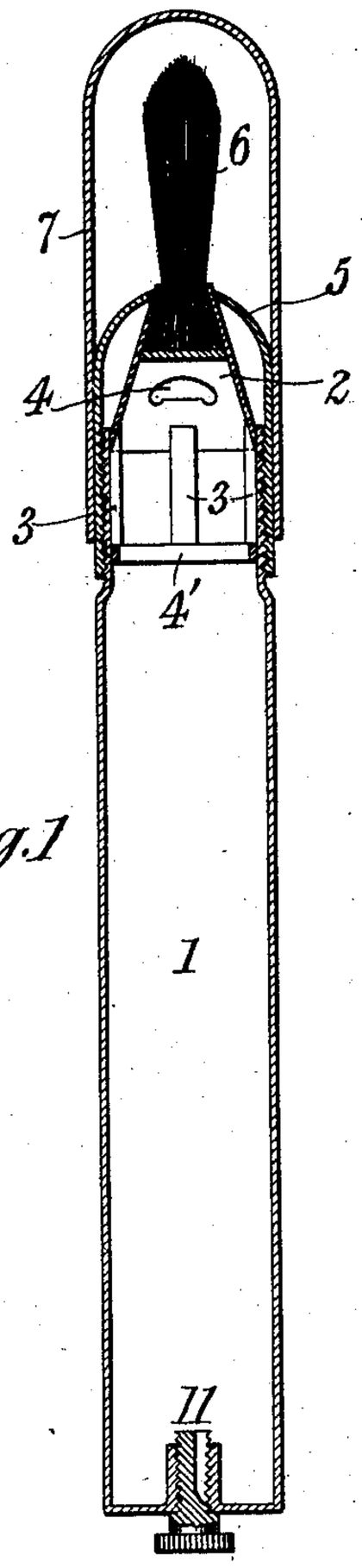


Fig. 1

Fig. 2

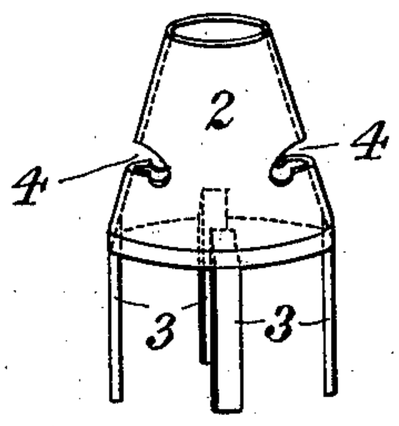
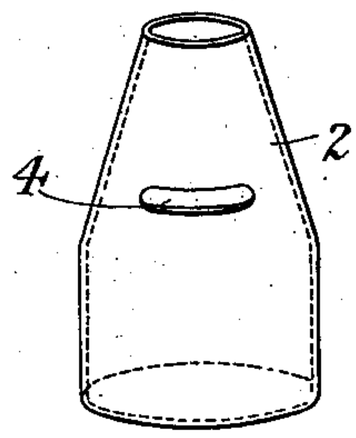


Fig. 3



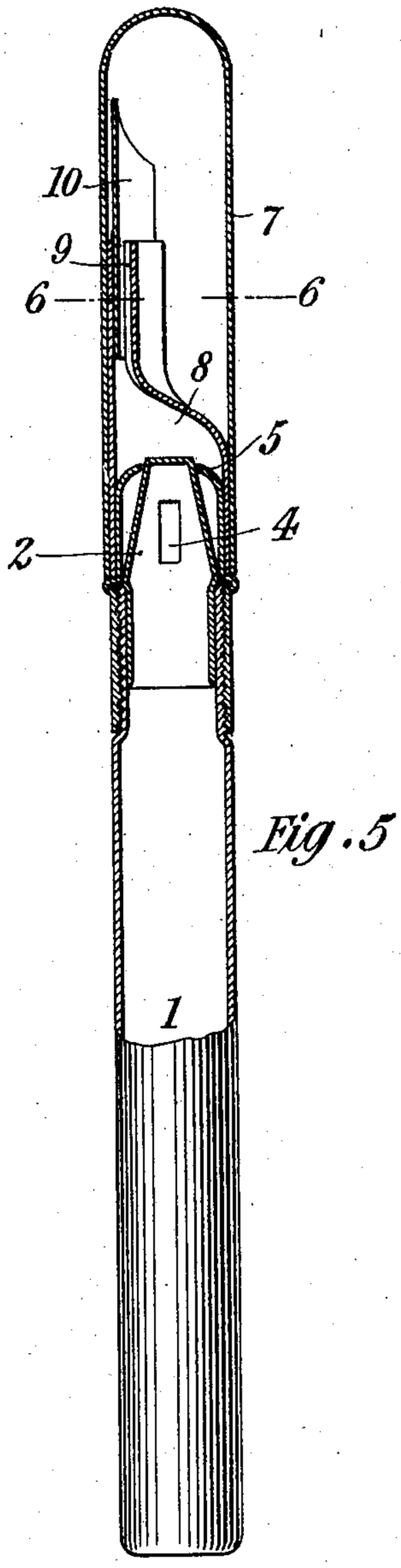


Fig. 5

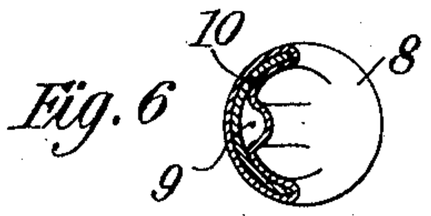


Fig. 6

Witnesses:
Raphael Netter
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John E. Langill, Inventor
by Kerr, Page & Cooper Atty's

No. 753,593. Patented March 1, 1904.

UNITED STATES PATENT OFFICE.

JOHN E. LANGILL, OF NEW YORK, N. Y., ASSIGNOR TO LANGILL FOUNTAIN PEN AND BRUSH COMPANY, OF JERSEY CITY, NEW JERSEY, A CORPORATION OF NEW JERSEY.

FOUNTAIN MARKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 753,593, dated March 1, 1904.

Application filed September 18, 1903. Serial No. 173,737. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. LANGILL, a citizen of the United States, residing at New York, in the county of Kings, State of New York, have invented certain new and useful Improvements in Fountain Marking Devices, of which the following is a specification, reference being had to the drawings accompanying and forming part of the same.

My invention relates to that class of devices for applying ink or liquid pigment, in which the marking liquid is contained in a "fountain" or reservoir and supplied to the brush or pen automatically, as required. Numerous devices for this purpose have been proposed, and while certain of these may have been successful in practice it is the object of my invention to provide a fountain-marker which shall be simple in construction, positive and efficient in operation, and of low cost.

To these ends the invention consists in the novel features and combinations hereinafter described, and more particularly pointed out in the claims.

Referring now to the drawings, Figure 1 is a longitudinal section of a fountain-brush embodying my invention. Fig. 2 shows in perspective the combined valve and brush-holder, and Fig. 3 is a modified form of this part. Fig. 4 shows a blank from which the carrier shown in Fig. 2 is made. Fig. 5 shows the invention with a pen used as the marker in place of a brush. Fig. 6 is a section on line 6 6 of Fig. 5.

The reservoir 1 is preferably of cylindrical form, as shown, and may be made of metal, hard rubber, or other suitable material. In the open end of the same is a removable valve-plug 2. This is preferably conical in form, as shown, and when made of metal may be conveniently formed by bending into a truncated cone a blank like that illustrated in Fig. 4 and providing it with legs 3, as shown in Fig. 2. The latter fit closely in the barrel or reservoir and abut against a ring 4. This construction renders the valve readily removable; but if such a feature is not desired the cone may be secured to the barrel by brazing, soldering, or in any other suitable way. Openings, as 4, are provided in the hollow cone for a purpose hereinafter explained.

On the outside of the barrel, at the valve end, are screw-threads, as shown, which engage an interiorly-threaded cap 5, preferably rounded, as appears in Figs. 1 and 5, having an opening slightly larger than the outer end of the valve-cone.

From the above description the operation of the valve will be readily understood. When the cap is screwed down, so that the edge of the opening fits closely on the cone, a liquid-tight closure is secured, which effectually prevents escape of the contents of the barrel. When it is desired to use the device, the cap is unscrewed, whereupon the ink flows out through the openings in the cone and around the apex upon the brush 6. The supply to the latter may be easily and accurately regulated by adjusting the cap to vary the size of the space around the apex of the cone, as will be readily understood. The removable cap 7 protects the operative parts of the device when not in use. An air-valve 11 may be provided at the lower end of the barrel, if desired.

Fig. 5 shows the invention embodied in a structure specially adapted for use with a pen instead of a brush. In this case the small end of the cone is closed, as shown, and over the valve-cap is a closely-fitting pen-section 8, having its free end reduced to a semicircular pen-socket, as shown in Fig. 6. The inner wall of the socket has an open-ended feed-channel 9, which carries ink to the pen 10.

The operation of the form just described is precisely the same as that of the form illustrated in Fig. 1 except that the ink after escaping through the valve flows through the hollow pen-section and feed-channel to the pen.

In Fig. 5 the valve-cone is shown slightly different in form from that of Fig. 2, in that the part which fits into the barrel is a cylindrical tube instead of a plurality of legs or guides, and is therefore like that shown in Fig. 3. It is obvious, of course, that the two forms are equivalents.

From the foregoing it will be seen that my

device is very simple in construction, and therefore may be carefully constructed of the best materials at comparatively slight cost. The valve is such that wear at the joint is always taken up and is always perfectly tight, thereby effectually preventing the annoying leakage so commonly met with.

The invention is of course capable of embodiment in various forms, and I therefore do not consider myself limited to that herein specifically described; but

What I claim is—

1. In a fountain marking device, the combination with a barrel or reservoir, of a tapered valve-plug in one end having openings in the side, an adjustable cap over the valve, having an opening adapted to engage the tapered valve-plug between the outer end of the same and the openings, and an ink-applying device adapted to be fed from the valve, as set forth.

2. In a fountain marking device, the combination with a barrel or reservoir, of a hollow, tapered valve-plug in one end having openings in the side, a screw-cap having a spherical end with an opening therein adapted to form a valve-seat to engage the valve-plug between the outer end of the same and the openings, an ink-applying device arranged to be supplied through the valve, and a removable protecting-cap over the ink-applying device, as set forth.

JOHN E. LANGILL.

Witnesses:
M. LAWSON DYER,
S. S. DUNHAM.