

(No Model.)

H. F. HAYNES.
FOUNTAIN BRUSH.

No. 551,764.

Patented Dec. 24, 1895.

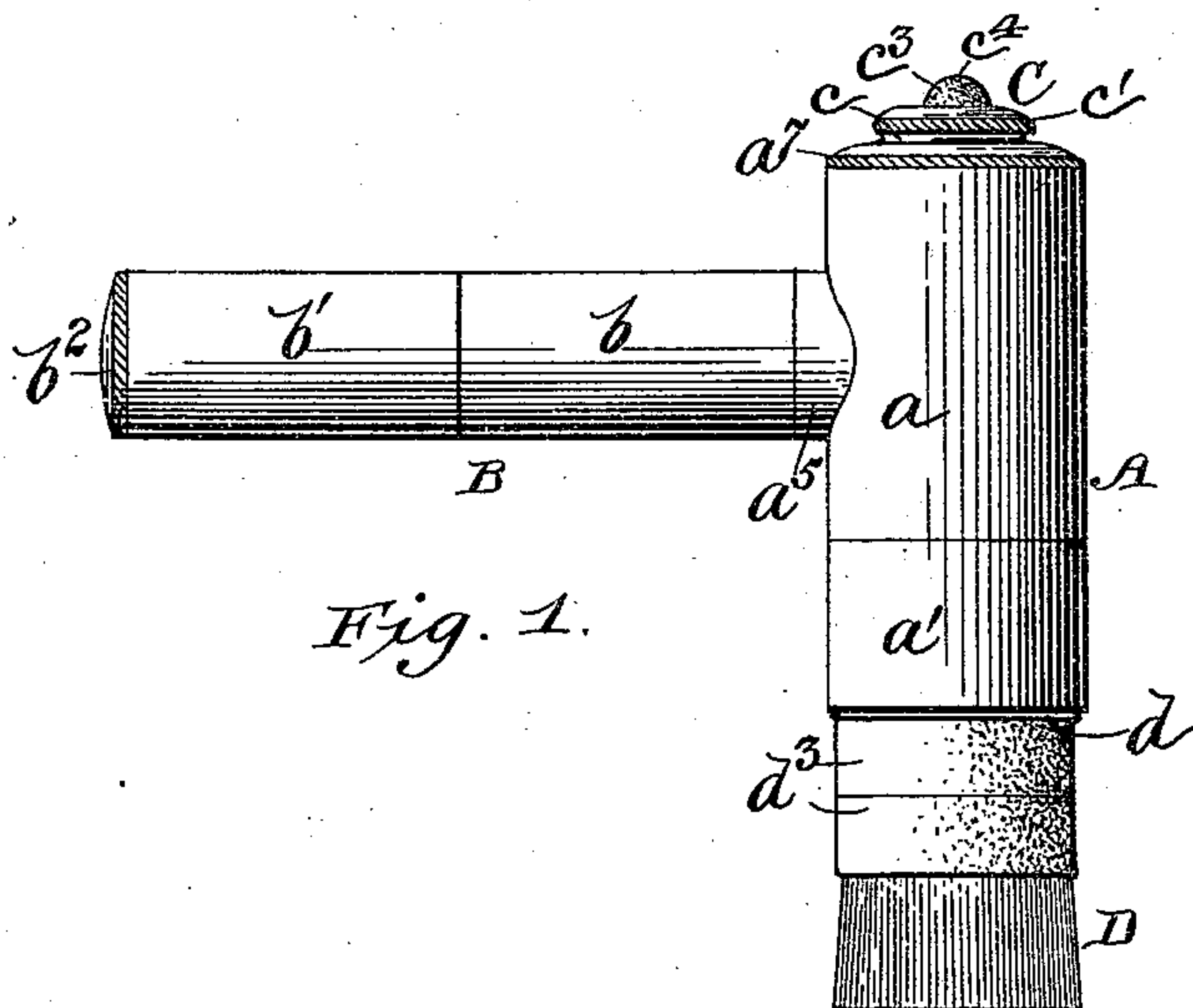


Fig. 1.

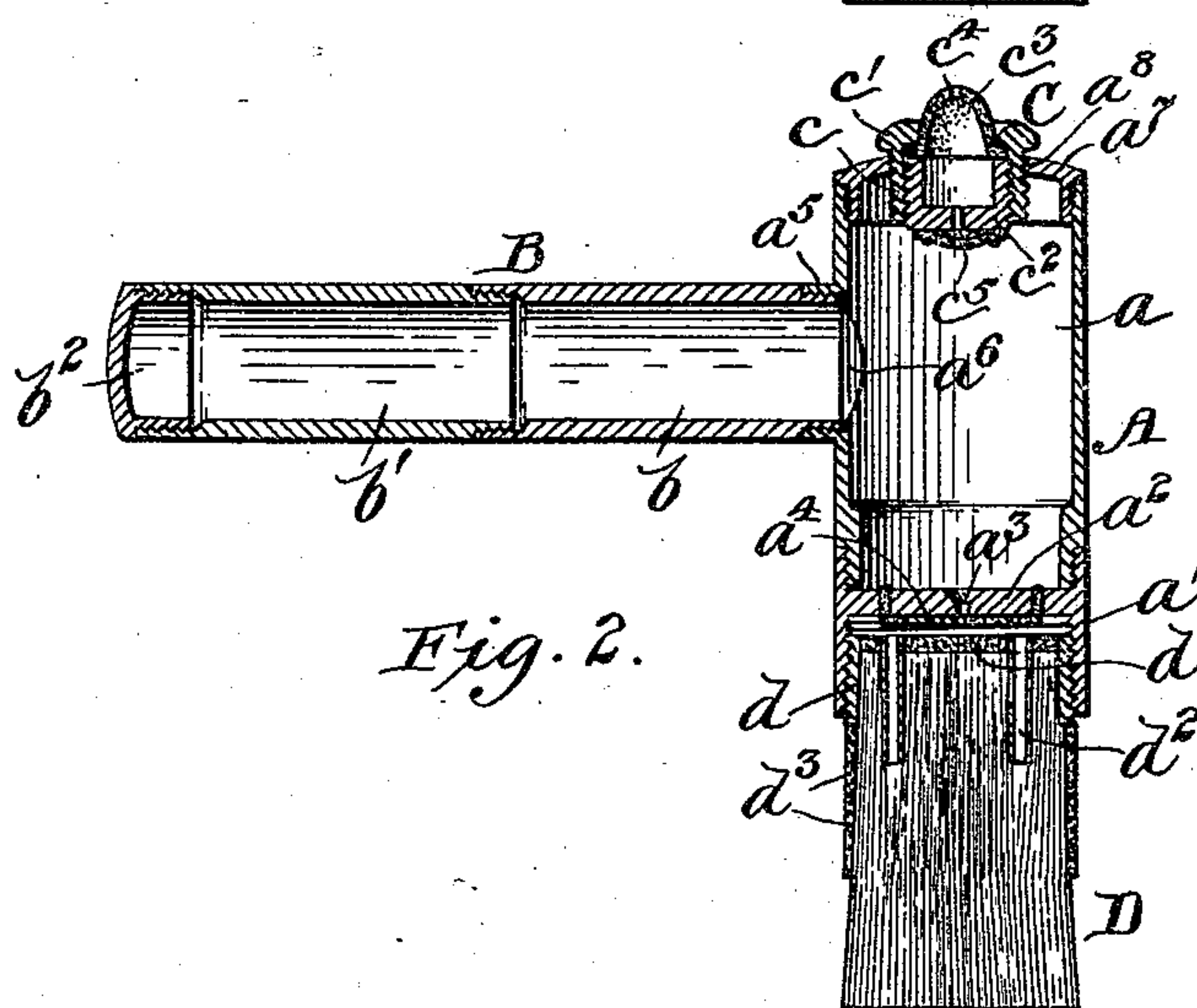


Fig. 2.

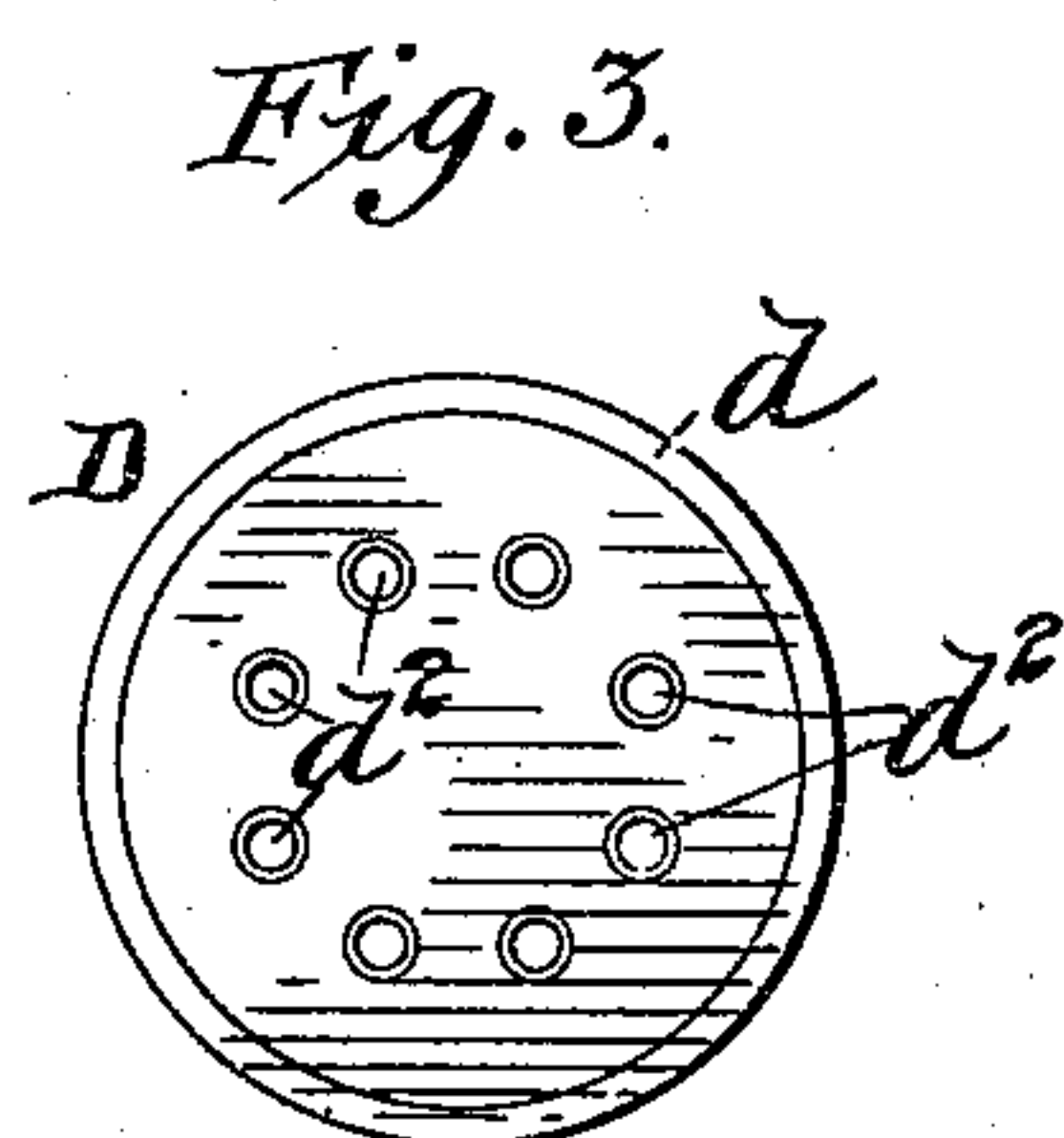


Fig. 3.



Fig. 4.

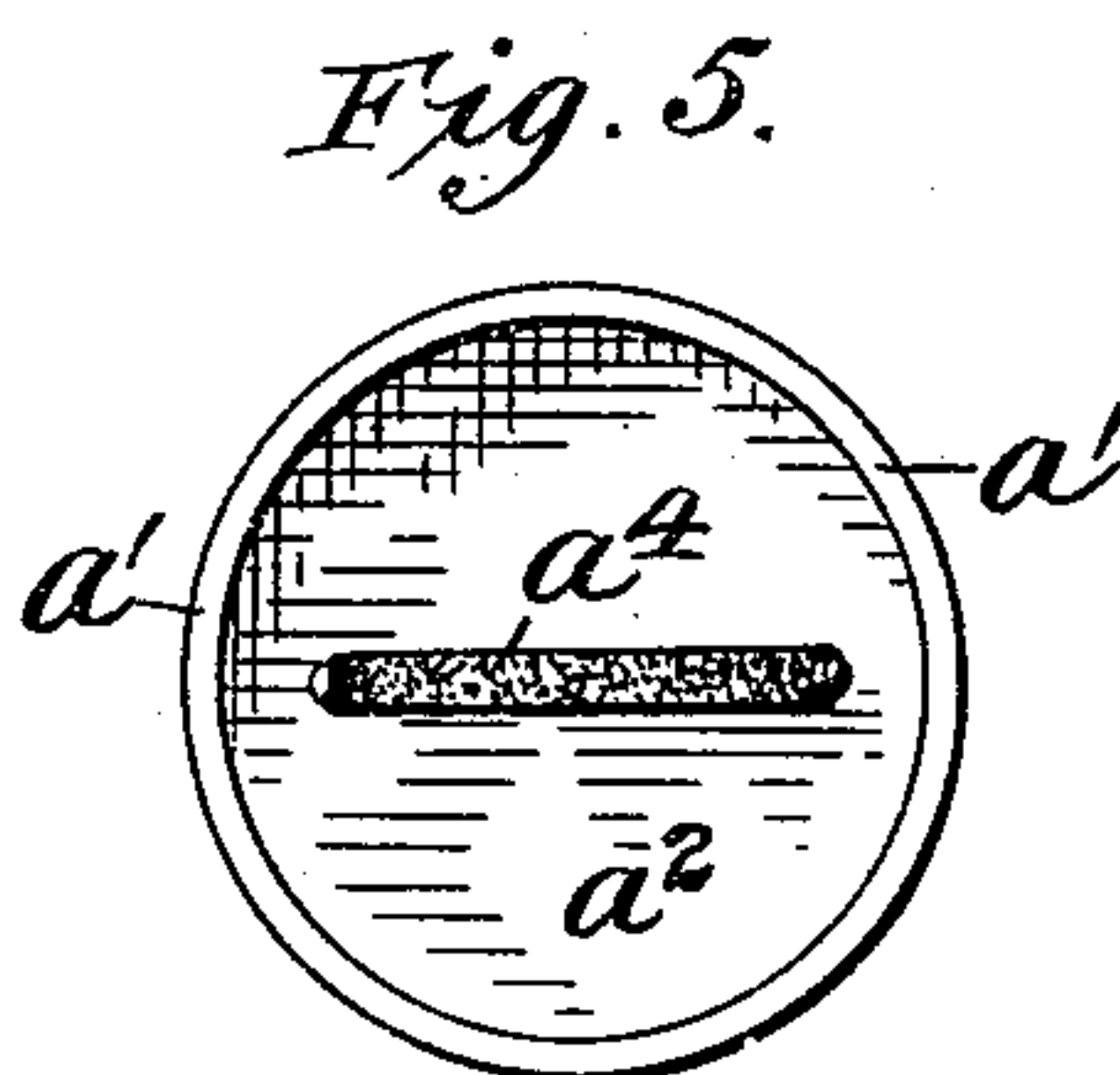


Fig. 5.

WITNESSES

Effervescence.
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UNITED STATES PATENT OFFICE.

HOBART F. HAYNES, OF NASHUA, NEW HAMPSHIRE.

FOUNTAIN-BRUSH.

SPECIFICATION forming part of Letters Patent No. 551,764, dated December 24, 1895.

Application filed April 8, 1895. Serial No. 544,898. (No model.)

To all whom it may concern:

Be it known that I, HOBART F. HAYNES, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Fountain-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 improvements in fountain-brushes, and has particular relation to stencil-brushes.

The invention consists of the combination of an ink or color containing receptacle, a brush connected thereto and means for forcing the ink or color from said receptacle through said brush at will.

It also consists of certain other novel constructions, combinations and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a side elevation of the devices embodying my invention. Fig. 2 represents a central vertical longitudinal section through the same. Fig. 3 represents a top plan view of the brush-holding sleeve. Fig. 4 represents a bottom plan view of the air-feeding cap, and Fig. 5 represents a bottom plan view of the sleeve containing the divided partition with its feeding-valve.

A in the drawings represents the hollow cylinder forming the ink or color chamber; B, the hollow handle attached to said cylinder; C, the air-feeding cap, also attached to said cylinder, and D the brush set in the lower end of said cylinder.

The cylinder A is composed of a main portion a and a screw-threaded sleeve a' adapted to screw thereon and form a continuation thereof. This sleeve is provided with a horizontal partition a^2 provided with a central feeding-aperture a^3 covered by a flexible band-valve a^4 . This sleeve a' is also adapted to receive the screw-threaded brush-holding sleeve d . The upper end of this sleeve is closed by a horizontal disk d' , preferably of rubber, and provided with a series of small pendent metallic tubes d^2 adapted to extend down among

the bristles of the brush inclosed by said sleeve d and thus convey the ink well into the brush before its passage is obstructed by the close impact of the bristles of said brush. The said tubes by their arrangement also serve to distribute the ink evenly through the brush, feeding an equal quantity to every part thereof.

The bristles are confined in any suitable manner within the sleeve d , but preferably by cement. Said bristles extend considerably below the edge of the sleeve d so as to be very flexible. The bristles are confined below the said sleeve d by a suitable number of elastic confining-bands d^3 . As the bristles wear away these bands are removed, one at a time, to bring into action an additional length of bristles.

The handle B is composed of two hollow cylindrical sections $b b'$ and a closing-cap b^2 , all of the same being provided with screw-threads by means of which they are secured together. The said handle is screwed to a screw-threaded flange a^5 , which surrounds an aperture a^6 in the wall of the cylinder a , and thus the communication between the hollow handle and the cylinder A is established.

The top of the chamber or cylinder A is closed by a screw-cap a^7 having a screw-threaded aperture a^8 in its center. The air-feeding devices C are adapted to screw within this last-mentioned aperture. These devices consist of a screw-threaded sleeve c having a milled head c' and a screw-threaded plug c^2 having a central feeding-passage and adapted to screw within the said sleeve c , a rubber bulb or nipple c^3 having its edges secured between the top of said plug and the under sides of the head c' . Said bulb is provided with an air-port c^4 at its apex, whereby air is admitted when the finger is removed from said bulb, said port being closed by the pressure of the finger and thus forcing the air through the passage in the plug c^2 into the cylinder A and thus forcing a portion of the contents of said cylinder into the brush D.

The lower end of the passage in the plug c^2 is closed by an elastic valve c^5 , which prevents the air from passing outward, also the ink from accidentally passing into the nipple c^3 and becoming hard therein and rendering it useless. This valve also prevents the atmosphere from reaching the interior of the cylinder

der when it is not in use and thus drying the ink therein.

The ink may be put into the cylinder A through any of the openings into the same and
5 will fill both the handle B and said cylinder.

If so desired, the air-feeding devices C can be screwed into the flange a^5 and the handle into the passage a^8 , as the screw-threads are the same in each instance. In some instances
10 this becomes desirable, as a laterally-extending handle would be an obstruction to the free manipulation of the brush in a confined space.

The partition a^2 is not essential and can be omitted if so desired.

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

1. The combination of an ink or color containing receptacle, a hollow detachable handle
20 connected to the same at right angles thereto, a brush connected to said receptacle and provided with a plurality of feeding tubes extending from the upper end down into the bristles, an apertured partition in said recep-
25 tacle above the upper ends of the feeding tubes, a flexible valve covering said aperture and comprising an elastic band secured at both ends and passing over said apertures, whereby the contents of the receptacle is nor-
30 mally prevented from reaching the tubes, and means for forcing the ink or color from said receptacle through said partition into said brush at will, substantially as described.

2. The combination of an ink or color con-
35 taining receptacle, a brush detachably connected to said receptacle, a screw threaded

cap screwing into the top of said receptacle, a screw threaded sleeve screwing into said cap, a screw threaded plug screwing into said sleeve and provided with a valve, a rubber
40 bulb having its edges clamped between the upper edge of said plug and the top of said sleeve whereby air may be forced into said receptacle, substantially as described.

3. The combination of an ink or color con-
45 taining receptacle, a screw threaded detachable handle connected to the same at right angles thereto, a brush, a detachable screw threaded air feeding device in the upper end of said receptacle, the construction being such
50 that the handle and said air feeding device can be interchanged so as to bring the handle in line with the receptacle, substantially as described.

4. The combination of an ink or color con-
55 taining receptacle, a brush connected to said receptacle, an apertured partition in said receptacle above the upper ends of the feeding tubes, a flexible valve covering said aperture and comprising an elastic band secured at
60 both ends and passing over said aperture whereby the contents of the receptacle are normally prevented from reaching the brush, and means for forcing the contents of the receptacle through said valved partition at will,
65 substantially as described.

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

HOBART F. HAYNES.

Witnesses:

R. T. SMITH,
ELMER M. MUNDIGO.