

No. 772,217.

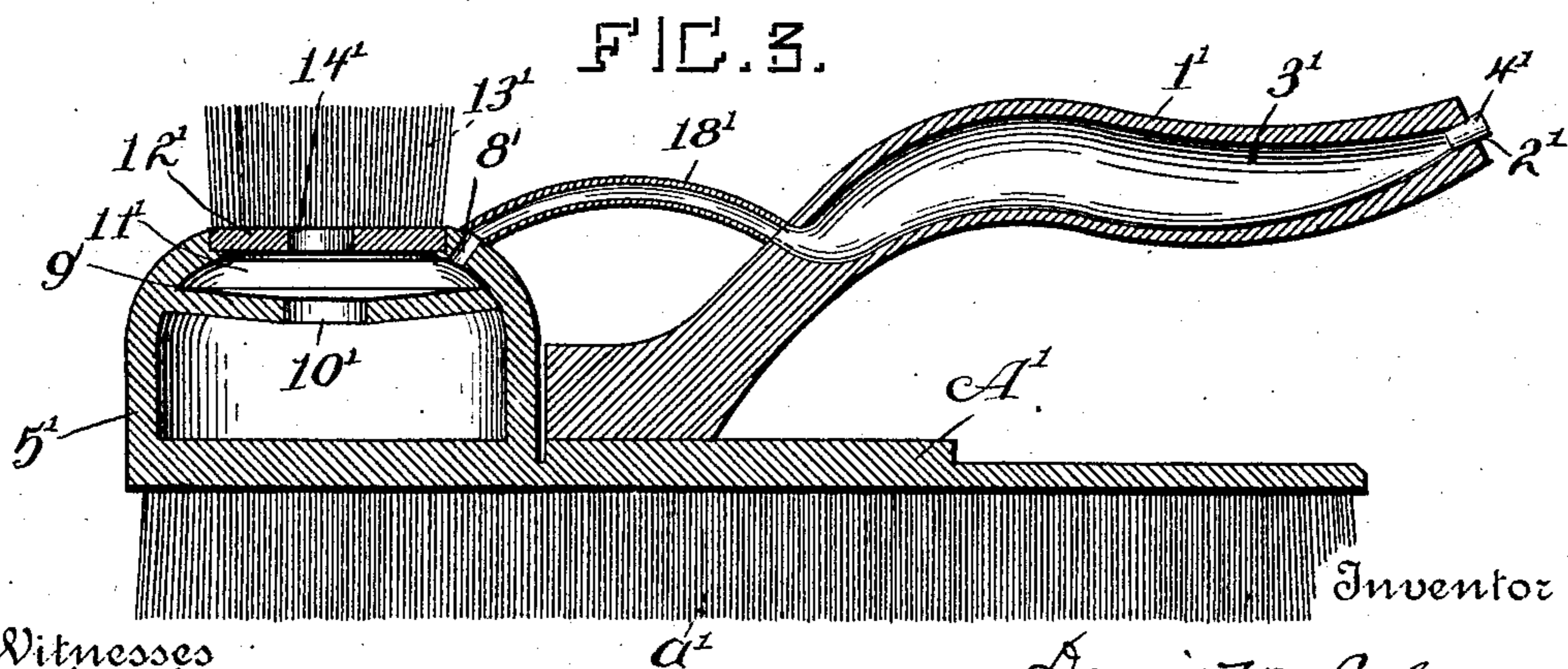
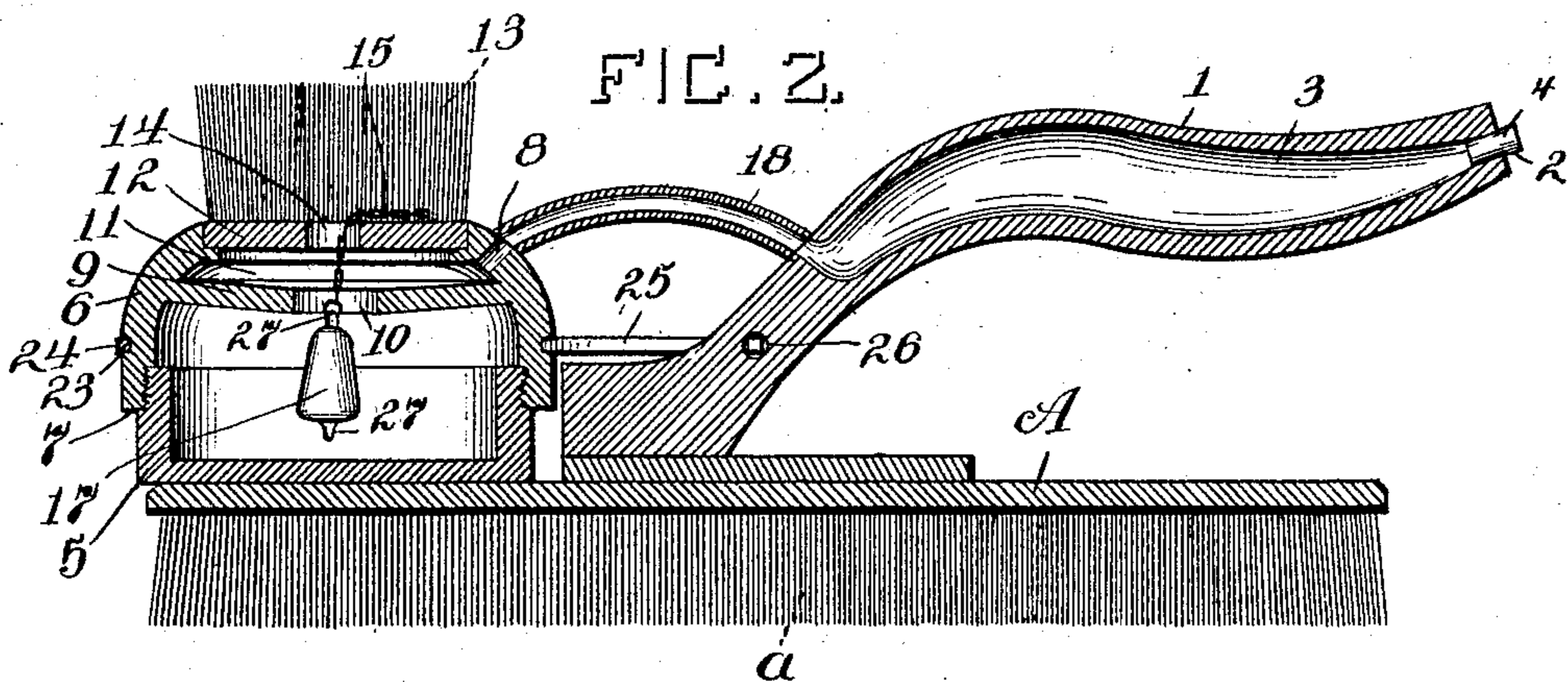
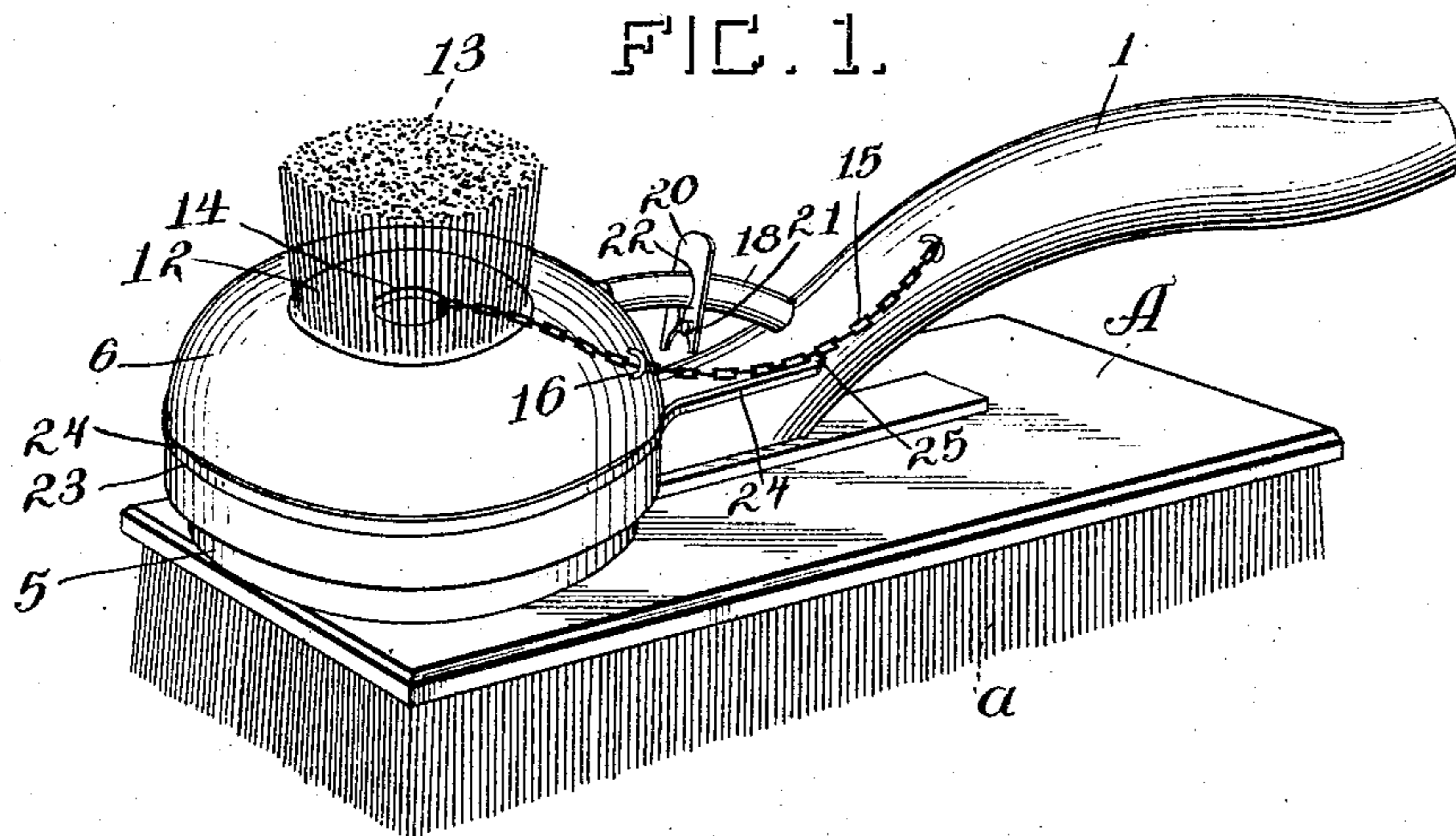
PATENTED OCT. 11, 1904.

D. W. COLE.

BRUSH.

APPLICATION FILED FEB. 2, 1904.

NO MODEL.



Witnesses
Milton Lenoir,

Walter T. Estabrook

Inventor
David W. Cole
by Thea G. O'Brien & Co.
His Attorneys

UNITED STATES PATENT OFFICE.

DAVID W. COLE, OF JACKSON, PENNSYLVANIA.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 772,217, dated October 11, 1904.

Application filed February 2, 1904. Serial No. 191,737. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. COLE, a citizen of the United States, and a resident of Jackson, in the county of Susquehanna and State of Pennsylvania, have invented a new and useful Improvement in Brushes, of which the following is a specification.

My invention relates to an improvement in brushes, and more particularly to fountain blacking-brushes, wherein the blacking or other substance is retained within and carried by the brush, it being supplied to the dauber for application as desired and the supply cut off when necessary.

The objects of my invention are to provide a brush of the above character which will constitute both a reservoir and holder for the blacking in combination with a means for applying it to the shoe or other surface to be polished; and such article as constructed by me is simple and easy to use, constructed of few parts, durable, and capable of being refilled with blacking from time to time, so that it is serviceable until completely worn out.

My invention also comprises a means for assisting in the mixture of the blacking or other material with the liquid supplied thereto, so that the blacking will be of the proper consistency and fluidity.

To these ends my invention comprises certain novel features of construction and combinations of parts, such as will be more fully described hereinafter and particularly set forth in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a longitudinal central sectional view, parts being shown in full lines; and Fig. 3 is a longitudinal sectional view of a slight modification.

A indicates the back of my improved brush, provided with the usual bristles *a*. A hollow handle 1, shaped to conform to the curves of the hand, is provided, one end of the handle being rigidly secured to the back A and the upper free end of the handle provided with an opening 2 to the reservoir 3 in the handle, the opening being closed by means of a removable cap or plug 4.

Supported upon but unsecured to the back A is a blacking-receptacle 5, preferably circular in conformation and adapted to receive and contain a cake of blacking, or fluid blacking may be used, if desired. This receptacle is screw-threaded to removably engage the brush-head 6, the lower portion of which is also screw-threaded. The receptacle is provided with a shoulder 7 to limit the amount of engagement between the cup and the brush-head.

The brush-head is itself hollow, as shown, the recessed interior of which is provided with a partition 9, which latter has a central aperture 10, the partition dividing the interior of the brush-head into two chambers or compartments, the upper one, 11, of which is adapted to receive the head 12 of the dauber carrying the bristles 13. The dauber-head is also apertured, as at 14, which aperture is in alinement with the aperture 10 of the flange. Secured to the handle 1 is a chain 15, which extends loosely through a guide 16 on the brush-head and passes through the apertures 10 and 14, the inner end of the chain having attached thereto a combined valve and mixer 17, comprising a weighted member of a tapering or conical shape, the largest diameter of which is greater than the diameters of the apertures 10 and 14. The mixer is provided with oppositely-extending teats or extensions 27 27, to one of which is secured the chain, the other extension serving to agitate the blacking.

Extending from a point on the handle 1 intermediate its ends is a flexible tube 18, one end of which is in communication with the reservoir 3 in the handle, the opposite end of the tube communicating through an aperture 8 in the brush-head with the hollow interior thereof and with the blacking-receptacle 5, the aperture in the brush-head being located, preferably, at a point above the partition 9 in the head and communicating with the upper chamber 11, from whence the water or other liquid passes through the aperture 10 in the flange to the blacking-receptacle beneath. The tube 18 may be secured to the brush head and handle by means of nipples (not shown) mounted on each member.

The flexible tube 18 projects normally in an inclined direction from the handle to the brush-head and is provided with a spring-clip 20, which is of a general U shape and comprises two resilient arms passing astride the flexible tube, one of the arms being provided with a catch-pin 21, past which the opposite arm is adapted to be moved and behind which it is received to pinch the walls of the tube and close the communication between the reservoir and brush-head when the article is not in use or when sufficient water has been supplied to the blacking. The clip is normally retained on the tube by friction, the inner walls of the arms being provided with recesses 22 22 for the reception of the tube.

The brush-head 6 is further provided with a circumferential groove 23, in which is received a hinge member 24, the ends 25 25 of which are pivotally received in bearings 26 26, formed in the handle, the object of which is to permit a movement of the brush-head 6 with regard to the base A and handle 1, as when resupplying the blacking-receptacle, and to allow the brush-head to be raised in order to permit the removal and replacing of the section or cup 5 from the head 6 with ease, while preventing the entire separation or disengagement of the brush head and handle, which might result in the loss of the head, such movement being in the arc of a circle, the flexible tube of course lending itself readily to such purposes and serving by its resilience to automatically return the brush-head to its normal position.

In using my device, the blacking-receptacle and reservoir having been filled, a sufficient quantity of the liquid in the reservoir is permitted to flow into the brush-head, whereupon the spring-clip is operated to close the flexible connection. The weighted mixer being loose on the chain, the brush is moved in a horizontal rotary direction, causing the mixer to engage the cake of blacking and disintegrate or rub off particles thereof with the aid of the liquid in which the blacking is dissolved. When the mixture has acquired the necessary consistency—that is to say, when it is thick enough—the brush is inverted, whereupon the blacking flows out through the apertures 10 and 14 to the bristles of the dauber by means of which the blacking is applied to the shoe or other surface. When a sufficient amount of blacking has been supplied to the bristle, the mixer is drawn up by means of the chain into the orifice 10, where it is frictionally retained, preventing the issuance therefrom of any more blacking, and the mixer normally occupies this position to prevent the blacking in the receptacle from drying out. The aperture 8 is thus located in the chamber 11 rather than in the lower chamber of the brush-head to prevent any danger of its being closed or clogged by the blacking. The pur-

pose, therefore, of the partition 9, having the aperture 10 therein, is to separate the blacking from the water-chamber 11, and the aperture 10 coöperates with the plug 17 to close the blacking-chamber to prevent the evaporation of the moisture in the blacking as well as to control the passage of the blacking to the dauber.

The modification discloses substantially the same features as are shown in Figs. 1 and 2, except that the hollow brush-head is secured fixedly with relation to the handle and back, the handle, brush-head, and receptacle all being formed integral with one another. In this modification all parts corresponding to parts in the other figures are primed for the purpose of distinguishing them. In the form thus shown the liquid blacking is received and contained in the reservoir, as well as in the receptacle, and is supplied to the bristles of the dauber in the manner hitherto set forth.

It is evident that many changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

1. As an article of manufacture, a brush, the head of which is hollow and provided with an apertured partition, and an agitating-valve which is adapted to close the aperture and to agitate the contents of the lower chamber of the head.

2. As an article of manufacture, a brush comprising a hollow head and handle, a flexible tube leading from one to the other for supplying liquid from the handle to the head and a spring-clip for closing this tube when the supply is to be shut off, the head being relatively movable with respect to the handle.

3. As an article of manufacture, a brush comprising a handle and hollow head, a partition across the latter whereby it is divided horizontally into two compartments, the partition having a hole therein, a tapering valve adapted to control the latter and provided with means for agitating the contents of the head, and a flexible connection attached to the valve by means of which it is controlled.

4. In a brush, the combination with a base and handle, of a head made in two sections and a hinge member hinged to the handle, one of the sections being swiveled in the hinge member.

5. A brush comprising a handle having a reservoir formed therein, a hollow brush-head connected with the handle, an apertured partition in the brush-head dividing the head into a plurality of chambers, a receptacle removably secured at one end of the brush-head, a dauber mounted on the brush-head and means

connecting the reservoir with one of the chambers in the brush-head.

5 6. A brush comprising a handle having a reservoir therein and a hollow brush-head connected with the handle, a flexible tube extending between and connecting the reservoir and interior of the brush-head and a spring-clip mounted on the tube for controlling the communication, the clip comprising a pair of
10 resilient arms, and a catch on one of the arms for engaging and retaining the remaining arm.

15 7. A brush comprising a handle, a hollow brush-head connected therewith, a receptacle closing one end of the head, an apertured dauber located at the other end thereof, a valve-plug loosely received within the brush-head, a flexible connection secured to the valve-plug and extending out through the

aperture in the dauber, the valve-plug adapted to close the aperture in the plug. 20

8. A brush comprising a handle, a hollow brush-head connected therewith, a receptacle at one end of the brush-head, a dauber at the opposite end of the brush-head and in communication with the interior thereof, and a 25 valve - plug being loosely received in the brush-head, the valve-plug being provided with an extension for agitating material located in the brush-head.

In testimony whereof I have signed this 30 specification in the presence of two subscribing witnesses.

DAVID W. COLE.

Witnesses:

M. A. COLE,

W. W. POPE.