(No Model.)

# W. H. MILLER.

## FOUNTAIN OR HYDRAULIC BRUSH.

No. 524,448. Patented Aug. 14, 1894.

Fig: 1

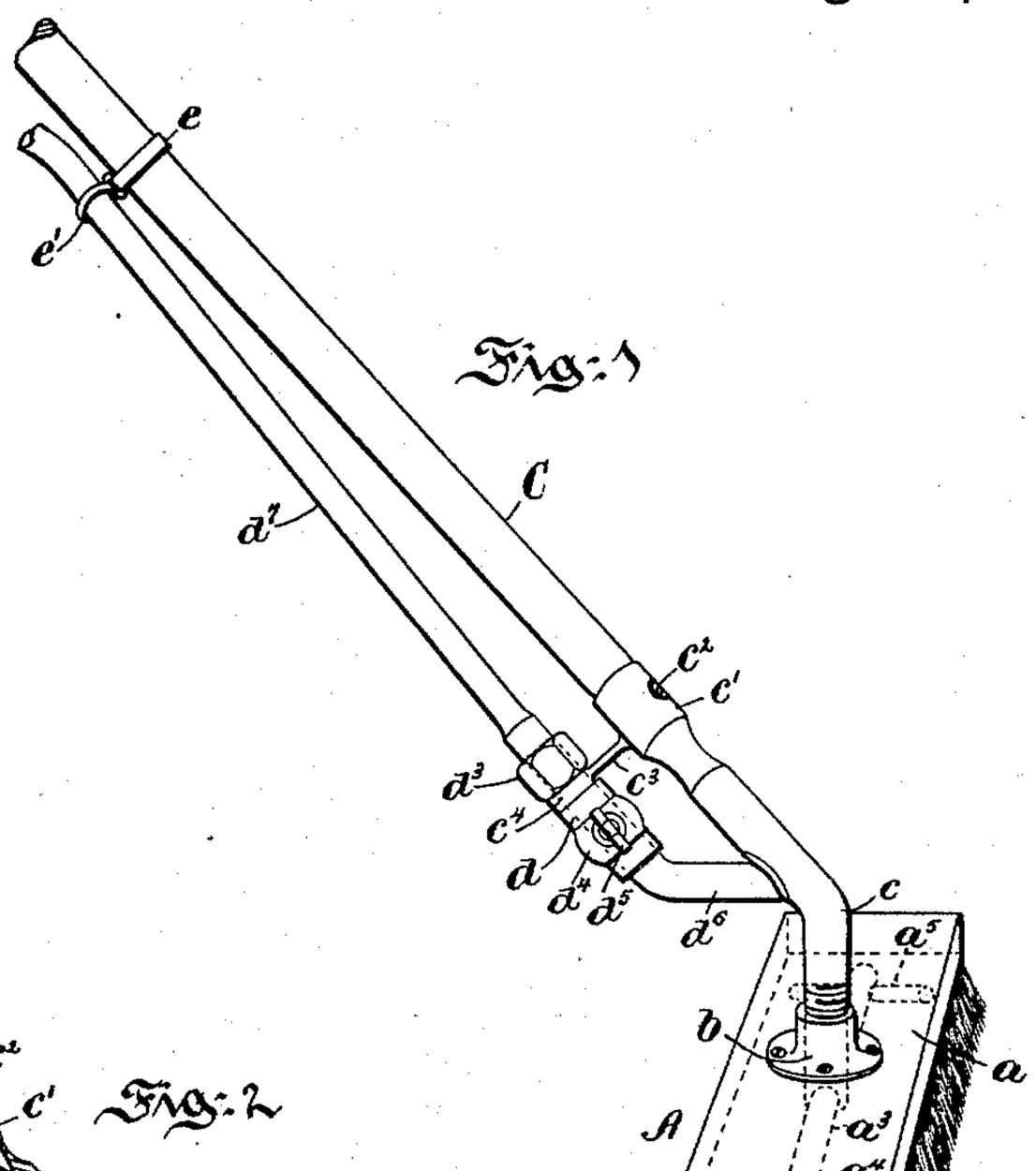



Fig: 2

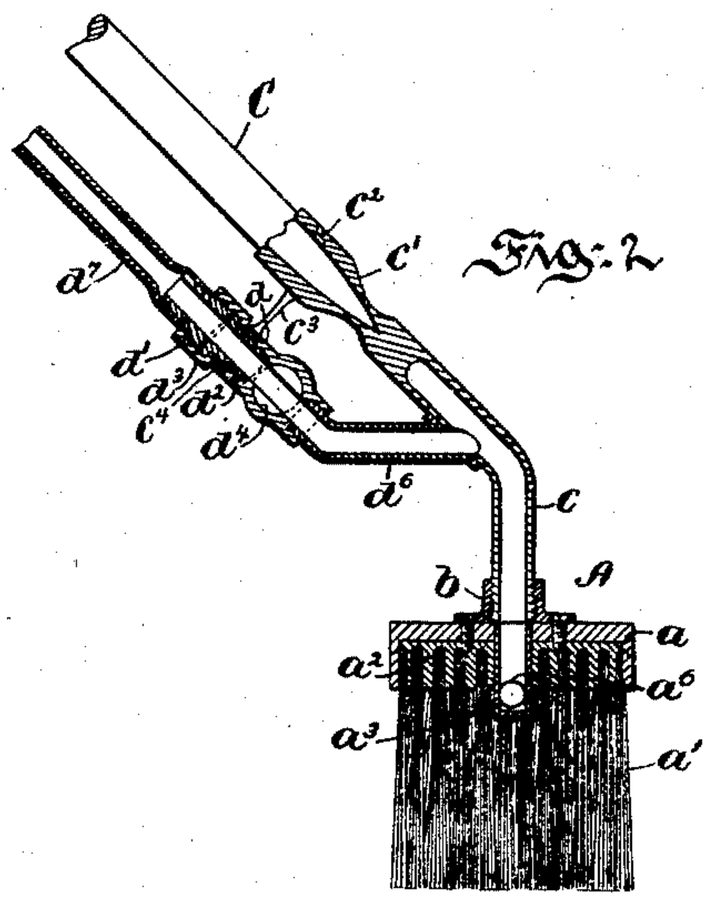
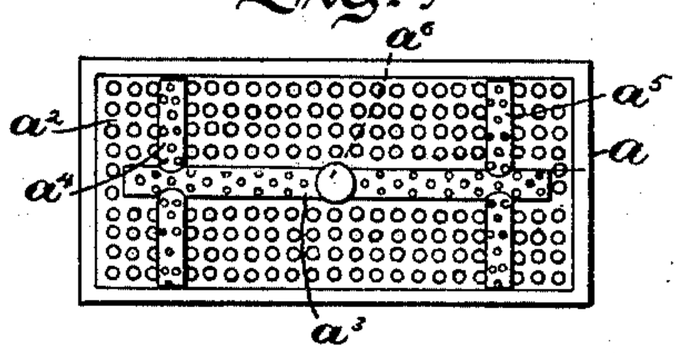



Fig: 3




Witnesses:
Thomas M. Smith.
Richard C. Maxwell.

Inventor.
Wm H. Miller,
By J. Walter Douglas
Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM H. MILLER, OF CAMDEN, NEW JERSEY.

## FOUNTAIN OR HYDRAULIC BRUSH.

SPECIFICATION forming part of Letters Patent No. 524,448, dated August 14, 1894.

Application filed December 12, 1893. Serial No. 493,471. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. MILLER, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Fountain or Hydraulic Brushes, of which the following is a specification.

My invention relates to brushes adapted for cleaning in general; and to that class known as fountain or hydraulic brushes.

The principal object of my invention is to provide a comparatively simple, durable and effective brush adapted for cleaning and scrubbing operations.

My invention consists of the improvements hereinafter described and claimed.

The nature and general features of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, and in which—

Figure 1, is a perspective view of a fountain or hydraulic scrubbing brush embodying features of my invention. Fig. 2, is a vertical central section through the brush of Fig. 1; and Fig. 3, is a plan view from the under side of the stock or block of the brush, showthe bottom plate thereof with perforations therein for the reception of the bristles, and also showing the longitudinal and transverse communicating channels or tubes connected with the fluid supply for distributing the same uniformly throughout the area of the block or stock of the brush onto the bristles thereof for insuring effective action in application of the brush to an article.

Referring to the drawings A, represents the brush provided with a rectangular chambered block or stock $a$, having suitably applied thereto a perforated diaphragm $a^2$, for receiving and securing the bristles $a'$ thereto. The diaphragm or perforated plate $a^2$, has a centrally arranged perforated longitudinal channel or tube $a^3$, in direct communication with transverse channels $a^4$ and $a^5$, and the longitudinal tube $a^3$, is provided with an inlet $a^6$, for a purpose to be presently more fully explained.

$b$, is a flanged socket or cap suitably secured to the top of the block or stock $a$, of the brush and having the wall thereof threaded for the reception of preferably a curved hollow stem $c$, provided with a socket $c'$, for the reception of the handle C, of the brush, which is secured thereto by means of rivets, screws or the like at $c^2$. Projecting from the socket $c'$, is an arm $c^3$, provided with a yoke $c^4$, surrounding a coupling device $d$, having threaded nipples $d'$ and $d^2$, engaged by a tightening nut $d^3$.

$d^4$, is a stem valve provided with a stop cock $d^5$, one end of the stem of which valve $d^4$, engages the threaded nipple $d^2$, and the other end is engaged by the threaded portion of a short section of pipe $d^6$, secured into the hollow stem $c$.

$d^7$, is a flexible tube sprung onto the nipple $d'$.

$e$, is a collar surrounding the handle C, and provided with a detachable clip or clasp $e'$, embracing the flexible tubing or hose $d^7$, for holding the same to required position adjacent to the handle C, of the brush A.

In using the brush, the fluid, such as water or the like, is poured in at the end of the flexible tube or hose $d^7$, and flows in a downwardly inclined direction therethrough and by opening the stop-cock $d^5$, of the stem valve $d^4$, the fluid is thereby permitted to flow through the curved section of pipe $d^6$, into and through the hollow stem $c$, and in a downward direction passes through the central inlet $a^6$, and is distributed therefrom through the longitudinal perforated tube $a^3$ and transverse tubes $a^4$ and $a^5$, connected therewith onto the bristles of the brush uniformly throughout the entire area of the stock or block $a$, of the brush A, thereby copiously supplying the bristles with their quota of fluid for effective action of the brush.

It may be here remarked that the construction and arrangement of the brush as hereinbefore described is such, that the quantity of fluid admitted to and distributed from the bristles onto the article to be cleaned can be regulated. Moreover, the arrangement of the brush is such, that in case of clogging of the fluid supply appliances of the same, it may be readily taken apart for cleaning out, should any sediment have collected around the walls thereof so as to interfere with the perfect working of the device; and furthermore, the

brush can be readily taken apart so as to occupy a compact space for shipment or other purposes, when not in use.

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

The combination of a fountain brush having a chambered block, a perforated diaphragm therein for the reception of bristles and perforated pipes under said diaphragm and concealed by said bristles and having an inlet pipe passing through said diaphragm and into said block with an internally threaded cap *b*, secured to said block, a rearwardly bent tubular handle C having one end open and inserted into said cap and the other end closed and provided with a socket and a wooden handle and a pipe $d^6$ entering the side of said tubular handle, substantially as and for the purposes described.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

WM. H. MILLER.

Witnesses:
J. WALTER DOUGLASS,
RICHARD C. MAXWELL.