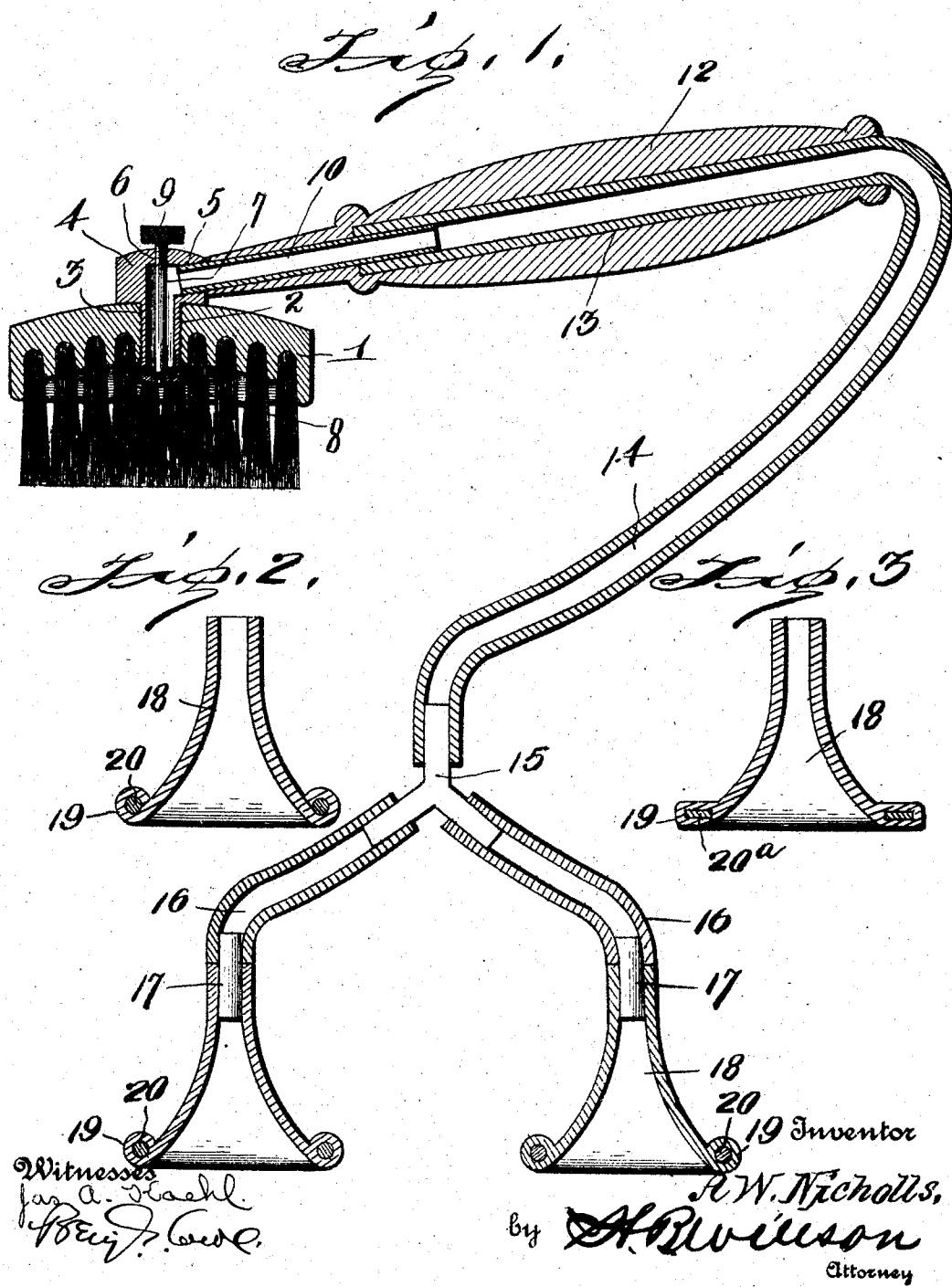


No. 786,985.

PATENTED APR. 11, 1905.

A. W. NICHOLLS.
FOUNTAIN BRUSH AND CONNECTIONS.
APPLICATION FILED AUG. 8, 1904.



UNITED STATES PATENT OFFICE.

ALBERT W. NICHOLLS, OF CHICAGO, ILLINOIS.

FOUNTAIN-BRUSH AND CONNECTION.

SPECIFICATION forming part of Letters Patent No. 786,985, dated April 11, 1905.

Application filed August 8, 1904. Serial No. 219,947.

To all whom it may concern:

Be it known that I, ALBERT W. NICHOLLS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Fountain-Brushes and Connections; and I do 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.

This invention relates to improvements in fountain-brushes and connections for the same.

One object of my invention is to effect improvements in the means for regulating the supply of water to the brush and for directing the water to the bristles of the brush.

A further object of my invention is to effect improvements in the means for connecting the feed-tube of the brush to a faucet.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a sectional view through a brush and the connections whereby the same is attached to the faucets of a hot and cold water supply, and Figs. 2 and 3 are detail sectional views showing modified constructions of attaching sockets.

Referring more particularly to the drawings, 1 denotes a brush-head through which is formed a centrally-disposed vertical aperture 2. Said aperture 2 is provided with screw-threads and is adapted to receive a threaded thimble 3, on the upper end of which is formed an enlarged head 4. In one side of said head 4 is formed a threaded aperture 5, which communicates with the thimble-opening.

In the upper end of the head 4 is formed a centrally-disposed threaded aperture 6, into which is adapted to be screwed a threaded valve-stem 7. On the lower end of the valve-stem 7 is secured a concave valve plate or disk 8, and on the upper end of said valve-stem is formed a thumb-nut 9, by which said stem may be screwed inwardly or outwardly to open or close the valve disk or plate 8 against the

lower end of the thimble 3, thereby regulating the flow of water to said thimble. The concave shape of the valve-disk 8 tends to throw or deflect the water laterally and upwardly against the inner ends of the bristles of the brush-head.

Adapted to be screwed into the threaded aperture 5 of the head 4 is a short metallic tube 10. The tube 10 is adapted to be inserted into the end of a hollow handle 12, in the outer portion of which is formed an enlarged bore 13. Into the bore 13 is adapted to be inserted the outer end of a flexible tube 14, said inserted end being adapted to engage the end of the metallic tube 10, which projects into the enlarged bore 13 of the handle 12, thereby forming a water-tight coupling or connection between said tubes. The flexible tube 14 may be of any suitable length, and into the opposite end of the same is inserted one branch of a three-way coupling 15, to the other two branches of which are connected short flexible branch pipes 16. In the outer end of the branch pipe 16 are inserted short metallic coupling-tubes 17, with which are adapted to be engaged the inner ends of flexible faucet connections 18. The flexible connections 18 consist of conical-shaped rubber sockets, the free ends of which flare outwardly and are each formed with a beading 19. The beading 19 strengthens and forms a finish for the edges of said sockets. In order to further strengthen the outer edges of the connecting-sockets 18, a metallic ring or band 20 is arranged in said beading. In Fig. 1 of the drawings said ring is shown in the form of round wire, which is cast into the beading 19 when said socket connection is formed. In Fig. 2 of the drawings is shown a similar-shaped wire ring; but in this instance said ring is forced or sprung into the beading after the coupling is molded or cast, said beading being formed in such manner as to form a seat for said ring. In Fig. 3 of the drawings is shown a flat ring or band 20^a, which is cast or molded into the bead when the socket is formed as described in connection with the ring shown in Fig. 1.

A brush constructed as herein shown and described may be quickly attached to the hot and cold water faucets of a water-supply sys-

tem, thereby enabling the temperature of the water-supply to the brush to be controlled, while the valve arranged in said brush-head will permit the flow of such water to be regulated. The peculiar construction of the valve tends to direct the flow of said water against the upper ends of the bristles of the brush, thereby keeping the entire brush wet.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A fountain-brush having a brush-head provided with a duct extending therethrough, means to cause the flow of liquid to and through the duct, and a regulator for the duct, movable to open and close the same, located among the bristles of the brush and having means to deflect the liquid discharged from the brush laterally among the brush-bristles.

2. A fountain-brush having a brush-head

provided with a duct extending therethrough, means to cause the flow of liquid to and through the duct, a regulating-disk at the discharge end of the duct and located among the bristles of the brush, and a screw to operate said regulating-disk to close the duct or open the same to any desired extent, said disk also forming a deflector to deflect the liquid discharged from the brush laterally among the brush-bristles.

3. A fountain-brush comprising an apertured brush-head, a hollow handle removably connected to said brush-head, a flexible tube connected to said handle, means whereby said tube is connected to water-supply faucets, a screw-threaded valve-stem mounted in said brush-head to work through the aperture in said brush-head and a valve arranged on the lower end of said stem to open or close the lower end of said aperture, to a greater or less degree thereby regulating and directing the flow of water onto the bristles of said brush, substantially as described.

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

ALBERT W. NICHOLLS.

Witnesses:

BENJ. G. COWL,
S. A. TERRY.