J. P. RAYMOND & C. E. BAKER.

SCRUBBING BRUSH.

APPLICATION FILED MAY 17, 1906.

954,542.

Patented Apr. 12, 1910.

FIG. 1

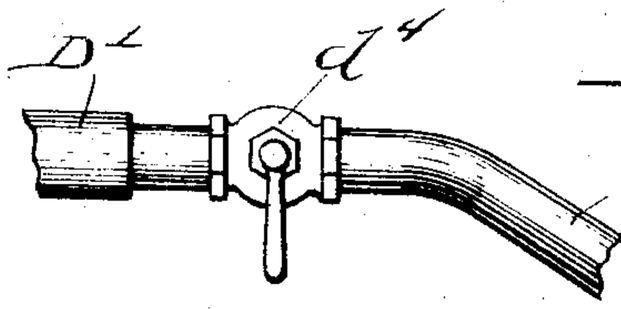


FIG. 2

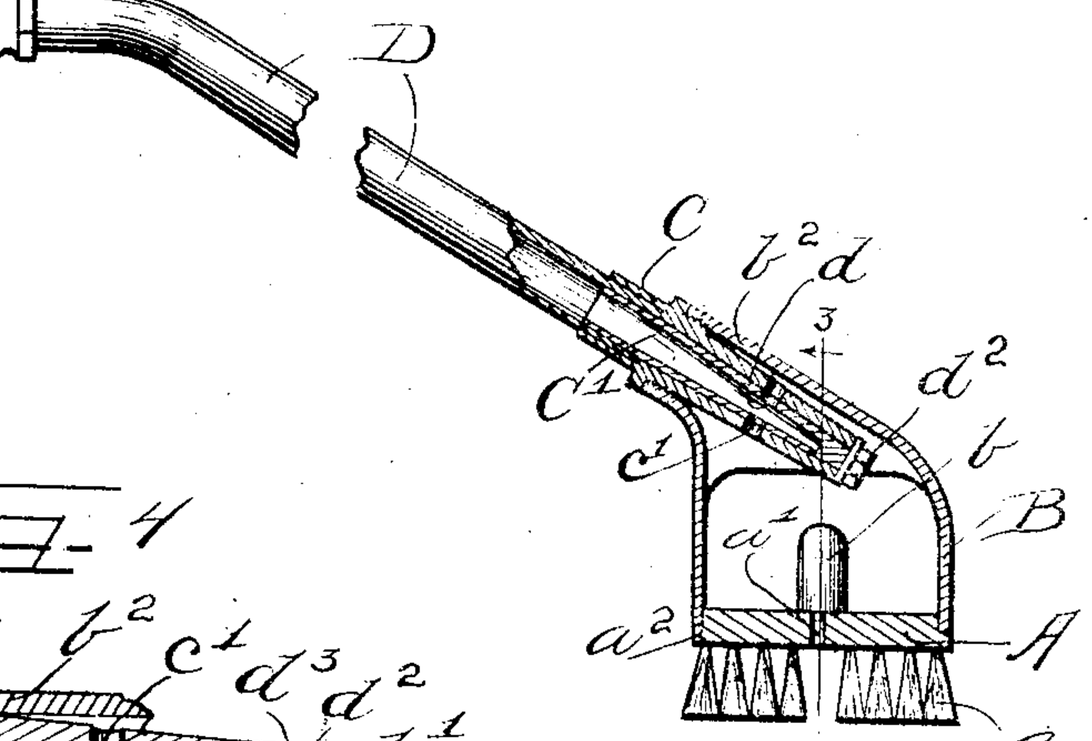


FIG. 4

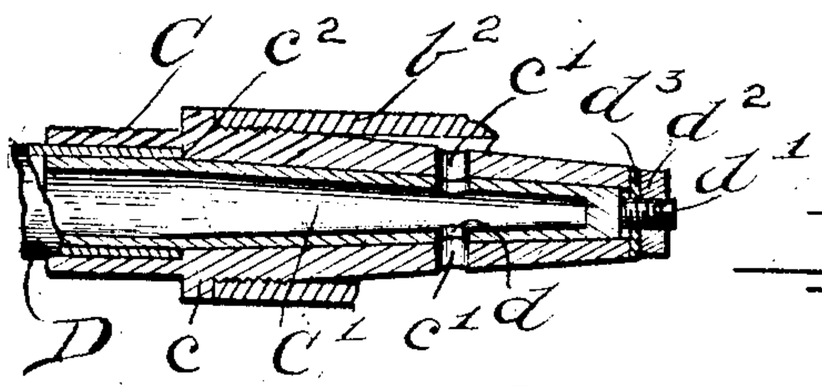
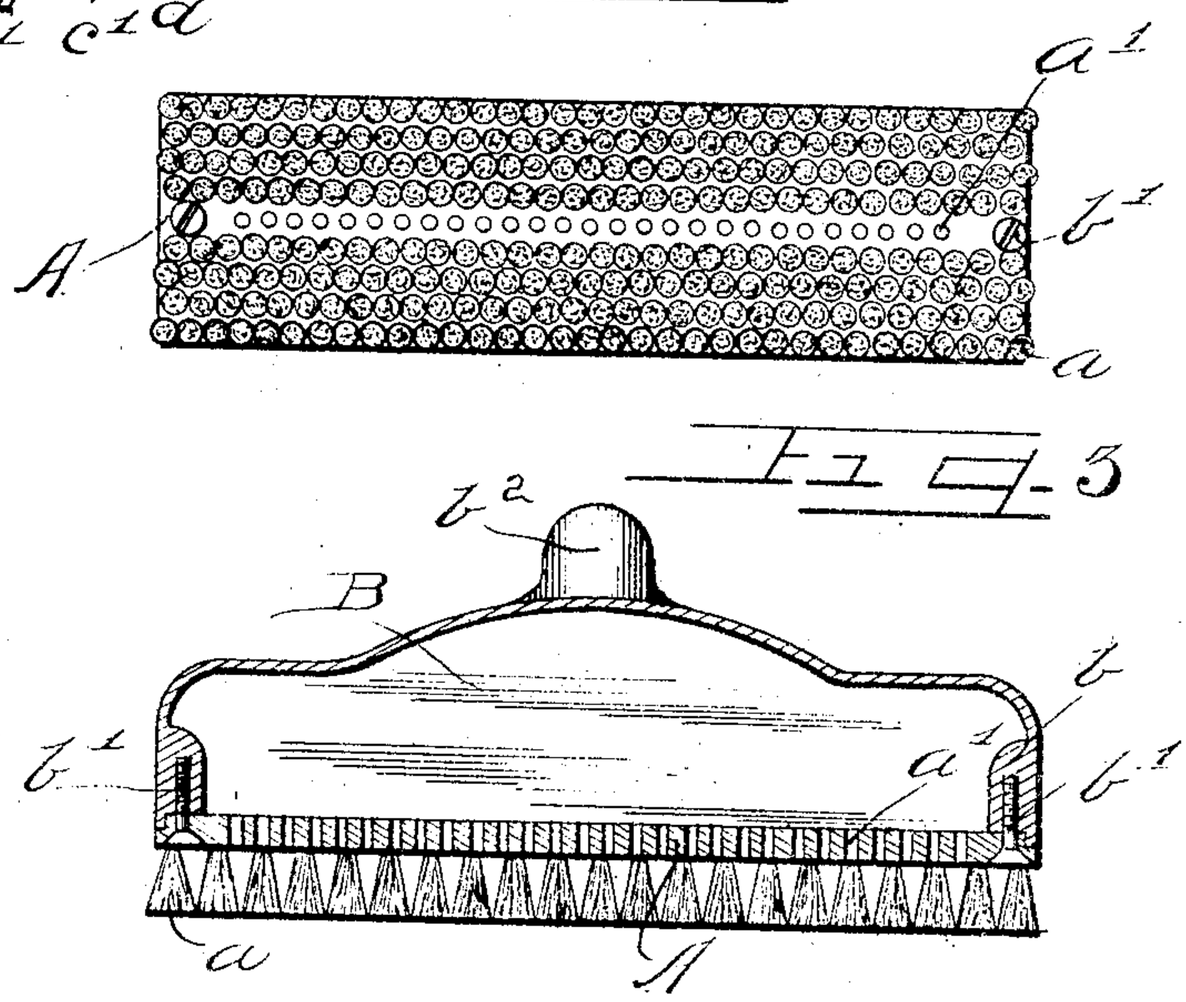


FIG. 3



Witnesses

J. W. Angell.

W. W. Wilkenbury

by

Inventors

John P. Raymond.

Charles E. Baker.

Charles E. Wills. Atty.

UNITED STATES PATENT OFFICE.

JOHN P. RAYMOND AND CHARLES E. BAKER, OF CHICAGO, ILLINOIS, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO THE VACUUM CLEANER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

SCRUBBING-BRUSH.

954,542. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed May 17, 1906. Serial No. 317,284.

To all whom it may concern:

Be it known that we, JOHN P. RAYMOND and CHARLES E. BAKER, citizens of the United States, and residents of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Scrubbing-Brushes; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in scrubbing brushes and more particularly to a scrubbing brush of that class adapted to permit a flow of water therethrough from any suitable hose connection.

In devices of this class it is desirable that the flow of water to the surface being cleaned be at all times within the control of the operator so that the desired quantity may be supplied without interrupting the scrubbing operation. It is also desirable that the water may be supplied at intervals or intermittently without necessitating the operator releasing his grip on the handle and consequently interrupting the movement of the brush.

The object of this invention is to provide a brush adapted to permit a flow of water therethrough and having means whereby the flow of water can be easily controlled by the operator without releasing his grip on the handle or stopping the motion of the brush.

It is also an object of the invention to provide a hollow brush head adapted to contain soap or any washing compound to facilitate the scrubbing.

Furthermore it is an important object of the invention to provide a brush having fine wires of a resilient and non-rusting character such as fine brass wires which serve in lieu of bristles and under the action of water serve to abrade the floor or scrubbed surface slightly thus dressing the surface of the floor as well as scrubbing it.

It is a further object of the invention to provide a cheap, simple and durable construction in which the brush may be readily removed for the purpose of repair or renewal.

The invention consists in the matters hereinafter described and more fully pointed out and defined in the appended claim.

In the drawings: Figure 1 is a fragmentary view partly in section of a device embodying our invention. Fig. 2 is a bottom plan view of the brush. Fig. 3 is a section taken on line 3—3 of Fig. 1 with parts removed. Fig. 4 is an enlarged fragmentary longitudinal section of the controlling valve.

As shown in the drawings: The brush comprises a back, or plate A of any desired material, and shape but which, as shown, is rectangular and is provided on the under side thereof with the brush material *a* which may be secured thereon in any desired manner and which consists wholly or in part of fine resilient brass or other non-rusting wires. Said back is provided with a plurality of apertures *a'* therethrough which may be arranged in any desired manner to permit the water to flow downwardly through the brush material *a* to the floor or other surface being cleaned, but as shown, they are arranged in a longitudinal line centrally of the back.

An upwardly directed, peripheral shoulder a^2 is provided on the margins of said back, upon which is seated the margin of a downwardly opening casing or head B which fits closely to said back and is provided at each end thereof with an internal lug or boss *b* having a downwardly opening, threaded aperture or socket therein in which are secured the fastening screws *b'* which extend through said back.

The head B may be of any desired construction and material and is provided centrally with a laterally and upwardly directed apertured boss or socket b^2 which opens from said casing and which as shown is provided at its outer end with internal screw threads.

A tapered sleeve or valve casing C projects through said socket into said head and has threaded engagement in said boss b^2 and is provided with a peripheral flange *c* which abuts against the outer end of said boss to limit the inward adjustment thereof. Said valve casing as shown is provided with a plurality of apertures *c'* opening therethrough and into said brush head.

D indicates a tubular handle, the lower or inner end of which as shown is rota-

tively engaged in the outer end of said valve casing C and abuts against an inwardly directed shoulder c^2 therein. A hollow valve plug or closure C′ of any desired material is brazed or otherwise rigidly engaged at one end within the inner end of said handle and tapers toward the other end complementally with said valve casing C in which it rotatively engages and provides a controlling valve. Said plug or closure affords a close fitting joint with said valve casing and is provided with a plurality of apertures d adapted to register when in one position with the apertures c' in said casing.

Any preferred means may be employed to securely but rotatively engage the handle and closure in the valve casing C but as shown the outer end of said closure is provided with a longitudinally directed threaded stem or bolt d' which protrudes through the inner end of said valve casing and a binding nut d^2 is engaged on said bolt and bears against a packing washer d^3 of any desired material placed between the same and the end of said valve casing. The outer end of said handle as shown is connected with a supply pipe D′ leading from any desired source of supply for either hot or cold water and a valve d^4 of any desired construction is engaged in said end and by means of which the supply of water may be entirely cut off if desired.

The operation is as follows: When it is desired to operate the brush, the cut off valve d^4 is opened to permit the water to flow downwardly through the handle and when the apertures in the valve casing and closure are in register, the water passes into the head B and through the brush A to the floor. Inasmuch as the handle and valve closure are rotatively engaged in the valve casing C it is obvious that said closure may be rotated so as to bring the apertures therein and in said sleeve in exact register permitting a maximum flow through the brush, or it may be rotated so as to bring said apertures partially or wholly out of register and thereby partially or wholly cut off the flow thus supplying any desired quantity of water to the brush. Inasmuch as the brush lies flat upon the surface being cleaned it is evident that a twisting or rotary motion upon said handle while in operation is sufficient to rotate the handle to regulate the supply of water as desired without necessitating the operator releasing his grip on the handle or interrupting the movement of the brush.

If preferred soap or other cleaning material may be carried in said brush head B where it will be subjected to the flow of water to the brush and carried thereby to the surface to be scrubbed.

The brush when constructed wholly or partly of fine resilient wires acts to abrade or scour the floor while scrubbing, in consequence not only is all the dirt removed but as well the surface of the floor is dressed by the brush to some extent and is left fresh and bright.

Obviously the brush may be made of any desired shape or size and many details of construction may be varied without departing from the principles of our invention.

We claim as our invention:

The combination with a brush of a casing thereon provided with an apertured boss, an apertured valve case rigidly engaged in said boss and extending into the casing a hollow valve closure rotatively engaged in said valve casing and provided with apertures therein adapted to register with the apertures in said valve casing and a tubular brush handle rigidly engaged to said closure and adapted to rotate the same.

In testimony whereof we have hereunto subscribed our names in the presence of two subscribing witnesses.

JOHN P. RAYMOND.
CHARLES E. BAKER.

Witnesses:
W. W. WITHENBURY,
WM. C. SMITH.