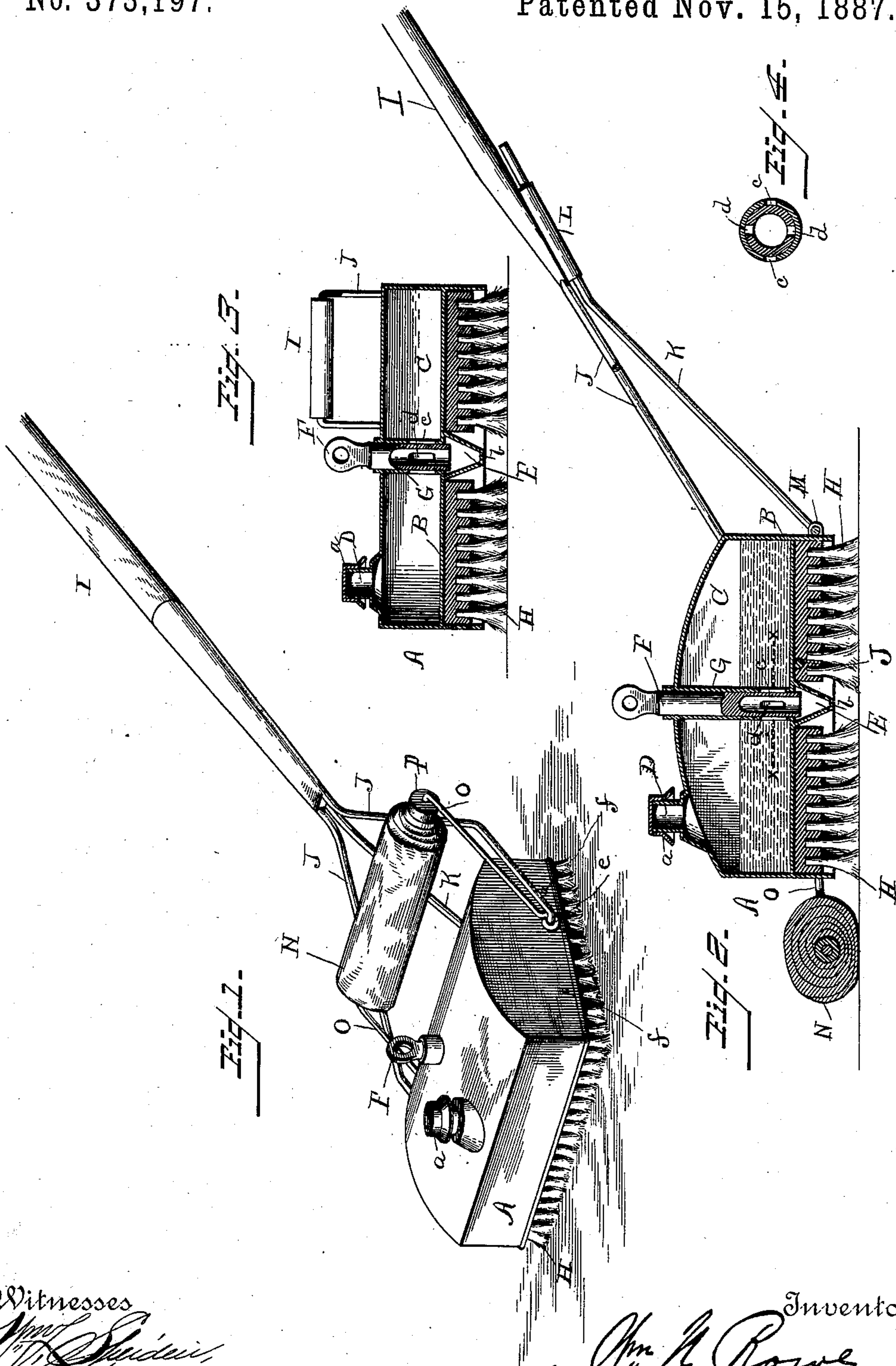


(No Model.)

W. N. ROWE.
FOUNTAIN SCRUBBING BRUSH.

No. 373,197.

Patented Nov. 15, 1887.



Witnesses
Wm. H. Spence
Alfred I. Sage

Inventor
Wm. N. Rowe
By his Attorney
W. G. Henderson

UNITED STATES PATENT OFFICE.

WILLIAM N. ROWE, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
TO THE NOVELTY MANUFACTURING COMPANY, OF SAME PLACE.

FOUNTAIN SCRUBBING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 373,197, dated November 15, 1887.

Application filed August 4, 1886. Serial No. 210,015. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. ROWE, (assignor to THE NOVELTY MANUFACTURING COMPANY, of Washington, District of Columbia,) a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Fountain Scrubbing-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 scrubbing-brushes, and has for its object to provide a brush in which the water will be contained in a reservoir, and from thence fed in desired and regulated quantities to an auxiliary chamber, from whence it may pass through perforations to the bristles or to the object to be scrubbed.

It has further for its object to provide such a brush with a mop, which can be used either while the water is passing from the auxiliary chamber or after it has been cut off therefrom, so as to mop up the water after the brushes have performed their work, which mop can be thrown back out of operation upon a support provided therefor, so as to be brought into use only when required.

Other objects are generally to simplify and cheapen the construction of such brushes and to increase their efficiency.

To the accomplishment of such objects the invention consists in the construction and also in the combination of parts, hereinafter particularly described, and sought to be specified by the claims, reference being had to the accompanying drawings, forming part hereof, and in which—

Figure 1 is a perspective of a brush constructed according to my invention, and adapted to be manipulated, in manners similar to carpet-sweepers, by means of a long handle connected thereto. Fig. 2 is a cross-section through Fig. 1, showing the interior construction of the brush and the mop thrown down into position for use. Fig. 3 is a longitudinal vertical section through a small hand-brush constructed according to my invention and adapted for use in all places where such small brushes can be most conveniently used. Fig. 4 is a cross-section through the tubular valve on the line xx of Fig. 2.

In the drawings, the letter A designates the body or shell of the brush, of any preferred form, but preferably, in the case of large brushes for scrubbing floors, of the shape illustrated in Fig. 1, and in the smaller brushes of the shape of ordinary scrubbing-brushes in common use, recognized by a converging forward end and square rear end.

In the upper portion of the body or shell there is formed by a horizontal dividing-partition, B, a chamber, C, to be designated as the "reservoir," and supplied with water through a nozzle, D, closed by a cap, a . In a lower plane than this reservoir, at any desired point, but preferably at or near the center of the dividing-partition, there is located an auxiliary chamber, E, of any suitable form, but preferably with downwardly-converging side walls, so as to direct the water to perforations b , formed in its bottom and extending, preferably, along the whole length of the reservoir.

Communication between the reservoir and auxiliary chamber is controlled by a suitable valve. The construction preferred is a tubular valve, F, fitting in its casing G, which extends up into the reservoir from the dividing-partition and is preferably extended through to the top of the shell, so that no water can pass from the reservoir into it except what passes through the ports c , formed therein, of which there may be any desired number, only two, however, being shown. The valve F has ports d , corresponding to those in its casing, so that when the ports register with each other water will pass from the reservoir to the auxiliary chamber in quantity proportionate to the extent that the ports are opened, and when the valve is turned to take the ports from out of register the water will be completely cut off from the auxiliary chamber. The converging walls of the auxiliary chamber will cause all of the water to soon pass from the chamber.

The brush or brushes H are set with their backs against the under side of the partition B, and are secured in place by suitable means—for instance, by screws f , passed through the shell into the backs of the brushes.

The scrubber is provided with a handle, I, of any approved form. In the case of the floor-scrubber the handle is preferably secured to the brush or shell by brace-rods J, which diverge

from the handle toward the sides of the shell, then run parallel therewith, and then transversely thereto, passing through the sides of the shell and running under the horizontal partition B. This brace-rod forms a bail-connection between the handle and shell. For the purpose of strengthening and stiffening the connection between the handle and shell a rod, K, is connected to the handle and to the shell in some suitable way—for instance, to the handle by an eye or loop, L, and to the shell by passing it through an eye or loop, M. The mop N may be of any approved form and connected to the swinging arms O in any suitable way; but the form preferred is that of some soft absorbent material wrapped around a roller, P, journaled on the ends of the arms O, which at their lower ends are hinged to the shell, preferably by an eye, e, formed at the end of each rod and made to encircle the rods J at the point where they pass through the sides of the shell. The mop is thus free to be swung over the front of the shell or brush, as shown in Fig. 2, and to lie upon the floor, so as to mop up the water and dry the floor.

When the mop is not to be used, it is thrown back over the brush or shell and will rest upon the rod J, as shown in Fig. 1.

In the case of the small hand-brush the handle I will be connected to the shell by the brace J, which at its lower end will be suitably connected—for instance, by soldering or otherwise—to the shell.

In operation the reservoir is filled with water and the controlling-valve turned so as to permit the water in the desired quantity to pass from the reservoir to the auxiliary chamber, from whence it will be distributed by the perforations to the object to be scrubbed. The water will thus pass in any quantity required to the desired spot and by the bristles be spread or distributed over the space to be traversed. After the necessary scrubbing has been effected the valve is turned so as to shut off the flow of water, when the mop is thrown forward and the brush manipulated back and forth so that the bristles will continue to brush and clean the floor, while the mop will at the same time absorb the water and thus aid in drying the floor. The mop by reason of the roll turning during the whole operation, is continually presenting a new or changed absorbing-surface to the floor, so that the saturated part is carried up and given an opportunity to have some of its water absorbed toward the center of the roll before it is again brought against the floor, so that when it is the second time brought against the floor the surface has lost some of the water by absorption and is thus in better condition to absorb more water.

By making the auxiliary chamber of reduced size compared to the main reservoir and providing the regulating-valve the flow of water is brought under better control and there is no loss of time resulting from delay in waiting

to empty the auxiliary chamber after the scrubbing is finished.

While the roller-mop is the preferred form, the invention is not restricted thereto, and changes in the details of construction of the other parts and change of position can be made without departing from the scope of my invention as set forth in certain of the following claims.

Having described my invention and set forth its merits, what I claim is—

1. In a scrubbing-brush, the shell provided with the partition B, located above the lower edge of the shell and forming the bottom of reservoir C, the valve-casing G, extending from the partition B to the top of the shell and formed with ports c, the valve F, fitting in said casing and formed with ports to communicate with ports c of its casing, the auxiliary chamber E, located beneath valve F, formed with converging walls extending transversely across the shell and having perforations b in its bottom, and brushes H, set within the shell A with their backs next to partition B, substantially as and for the purposes specified.

2. The combination of the shell formed with a reservoir in its upper part, an auxiliary chamber in communication therewith, a valve for controlling the flow of water from the reservoir to the auxiliary chamber, a brush at the bottom of the shell, and arms hinged to the shell to swing from front to rear thereof and provided with a mop, substantially as described.

3. The combination of the shell formed with the reservoir in its upper part, the auxiliary chamber in communication therewith, the valve for controlling the flow of water from the reservoir to the chamber, a brush at the bottom of the shell, a handle and brace-rods connected to the shell, and arms hinged to the shell to swing from front to rear of the shell and carrying a mop resting upon said rods when thrown back thereon, substantially as described.

4. The combination, with the shell formed with a reservoir and auxiliary chamber with a controlling-valve between them of a brush at the bottom of the shell, a handle, brace-rods J, extending from the handle to the shell and under the latter, and a rod, K, connected to the handle and shell, substantially as described.

5. The combination of the shell formed with a valve-controlled reservoir and chamber, the brushes to spread the water passing from the reservoir and chamber, a revolving mop, and arms hinged to the shell and forming the journals for the mop, substantially as described.

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

WM. N. ROWE.

Witnesses:

WM. G. HENDERSON,
ALFRED T. GAGE.