(No Model.)

G. W. PARK.

FOUNTAIN CLEANSING BRUSH.

No. 524,094. Patented Aug. 7, 1894.

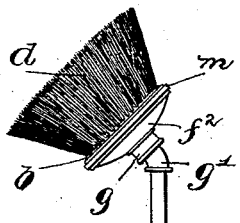


Fig. 1.

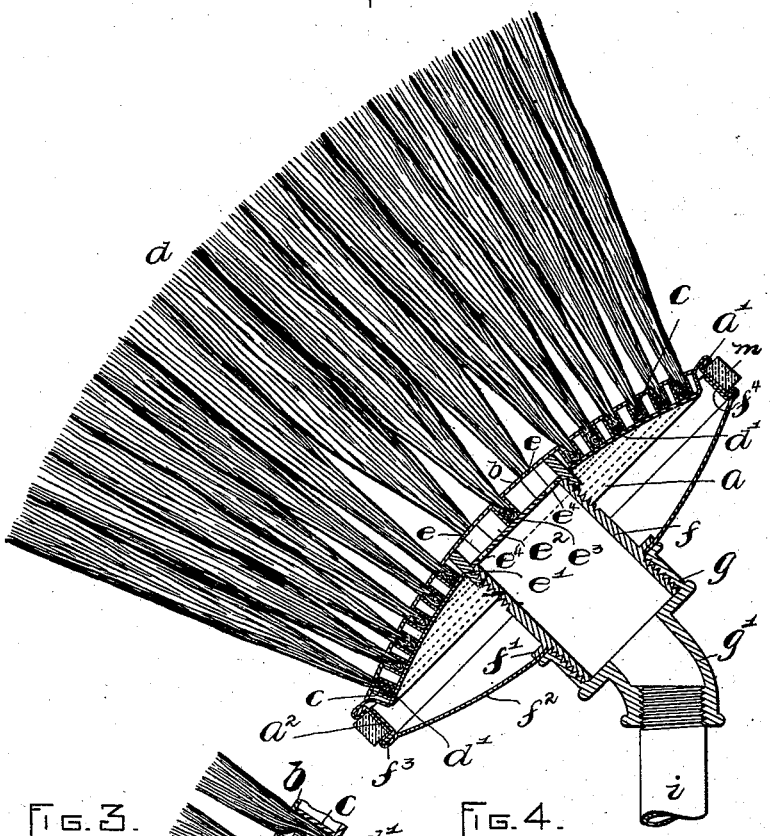


Fig. 2.

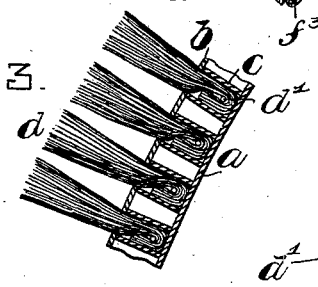


Fig. 3.

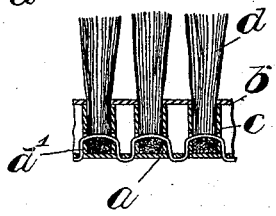
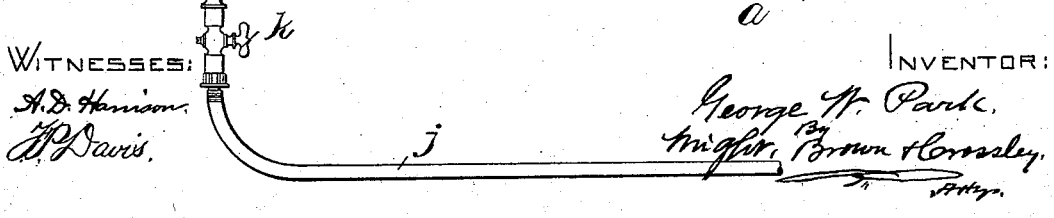


Fig. 4.



Witnesses:
A. D. Harrison.
J. P. Davis.

Inventor:
George W. Park.
by his Attys. Brown & Crossley.

UNITED STATES PATENT OFFICE.

GEORGE W. PARK, OF QUINCY, MASSACHUSETTS.

FOUNTAIN CLEANSING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 524,094, dated August 7, 1894.

Application filed March 12, 1894. Serial No. 503,290. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PARK, of Quincy, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Fountain Cleansing-Brushes, of which the following is a specification.

This invention relates to fountain brushes such as are used for washing windows, the exterior of railway cars and the like, and has in view a number of improvements calculated to increase the usefulness of such an article, all of which are fully described hereinafter and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of the brush complete. Fig. 2 shows an enlarged sectional view of the head portion of the brush. Figs. 3 and 4 show sectional details illustrating the manner of securing the bristles.

In the drawings—the letters, *a*, and *b*, designate concavo-convex plates of sheet-metal, one being dished, as shown, and formed with a marginal bead or flange, *a'*, and provided with a skirt, a^2, and the other fitting in the dished plate and secured thereto. Pockets, *c*, extend between the plates, *a*, and *b*, these pockets being formed of short tubes and the outer plate, *b*, being perforated over the pockets to admit the tufts of bristles, *d*, thereto, said tufts being doubled over at the inner ends and inserted in the pockets and being secured therein by wires, *d'*, passed through the pockets and the bights formed by doubling the tufts, and through perforations in the inner plate, *a*, between the pockets. It will be seen that the bristles are very securely fastened by this arrangement. The center of the outer plate is provided with a number of perforations, *e*, and the inner plate has a central hole which is fitted with a ring, *e'*, the latter abutting the outer plate and surrounding the central portion thereof, having the perforations, *e*, and cutting off communication between the central recess or chamber, e^2, thus formed and the space between the plates, *a*, and *b*. A diaphragm, e^3, is fitted in the ring, *e'*, to form a support for the pockets in which the central tufts are secured, said partition being provided with perforations, e^4.

The ring, *e'*, is internally screw-threaded and forms a socket into which is screwed a pipe-section or coupling, *f*. This coupling is formed with an annular shoulder, *f'*, and a concavo-convex cover, f^2, fits over the coupling and against the said shoulder, and is formed with a marginal bead or flange, f^3, and provided with an annular skirt, f^4, which fits inside the skirt, a^2. The coupling, *f*, is screw-threaded beyond the shoulder, *f'*, to receive a cap-piece, *g*, having a nipple, *g'*, and screwing against the cover, f^2, so as to clamp the same securely between it and the shoulder, *f'*.

A tubular handle, *i*, screws into the nipple, *g'*, and has provision for connection of hose, *j*, and is provided with a cock, *k*, to regulate the water supply.

In the use of the brush water flows through the handle, *i*, nipple, *g'*, and coupling, *f*, into the chamber, e^2, the perforations, e^4, providing communication therewith,—and thence through the perforations, *e*, into the tufts, *d*.

It is to be noted that the water has no access to the secured ends of the tufts and cannot cause detachment thereof by producing a damaging effect on the fastenings, as corrosion of the wires, *d'*. It is further to be noted that the water is supplied only at the center of the brush which insures against dripping.

The construction shown possesses the advantages of simplicity, strength, durability and a neat exterior appearance.

The marginal beads or flanges, a^2, and f^3, form between them an annular groove, and a solid rubber band, *m*, is sprung into this groove and projects beyond the flanges, a^2, and f^3, forming a buffer to protect parts against which the brush may strike while in use.

Having thus explained the nature of the invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, it is declared that what is claimed is—

1. A fountain cleansing brush comprising in its construction a head having a perforated center and a screw-threaded socket surrounding the same, bristles secured in the head and around the perforated center, a pipe-coupling screwing into the socket and having an annular shoulder, a cover fitted to the head and against the said annular shoulder, and a nip-

ple screwing on the coupling and against the cap.

2. A brush comprising a head made up of plates and pockets extending between the same, tufts of bristles having their ends doubled and inserted in the said pockets, and securing wires extending through the pockets and the bights formed by the doubled bristles, and through the inner plate, substantially as described.

3. A fountain brush comprising in its construction a head composed of an outer and inner plate, and pockets extending between the same, the outer plate having perforations in its central portion, a screw-threaded ring fitting through an opening in the center of the inner plate and abutting the outer plate, a pipe-coupling joining the screw-threaded ring, and tufts of bristles fastened in the pockets of the head.

4. A fountain brush comprising in its construction a head having a perforated center, a screw-threaded socket around the same, pockets, and a marginal flange, bristles secured in the pockets, a pipe-coupling screwing into the socket, a cap fitted to the head and having a marginal flange, a rubber band sprung into the annular groove formed by the marginal flanges of the head and cap, and a hollow handle connected with the pipe-coupling.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 6th day of March, A. D. 1894.

GEORGE W. PARK.

Witnesses:
A. D. HARRISON,
F. P. DAVIS.