

F. TEMPLEMAN.
FOUNTAIN BRUSH.
APPLICATION FILED NOV. 29, 1915.

1,176,996.

Patented Mar. 28, 1916.

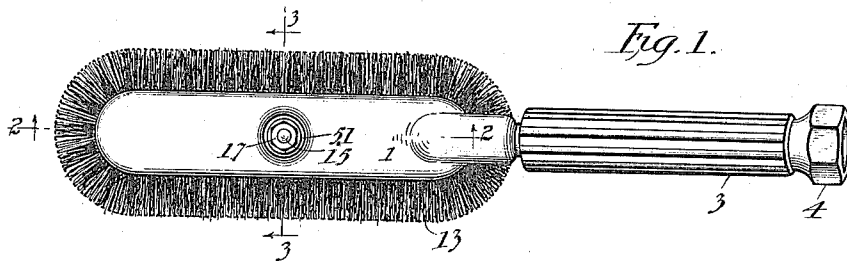


Fig. 1.

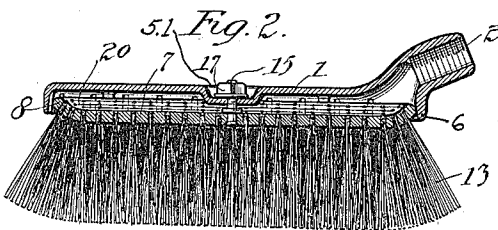


Fig. 2.

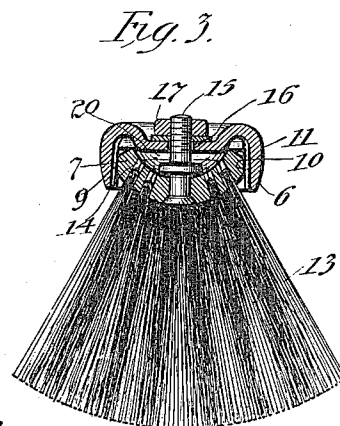


Fig. 3.

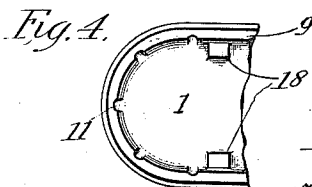


Fig. 4.

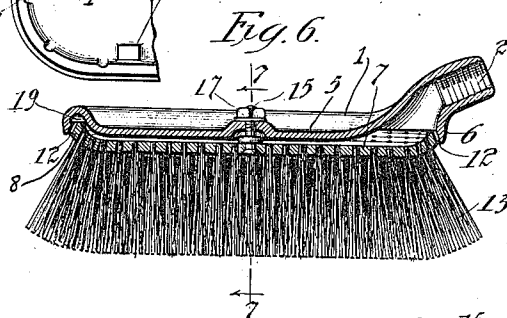


Fig. 6.

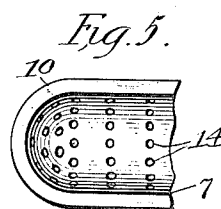


Fig. 5.

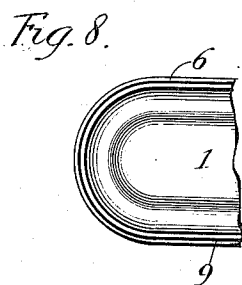


Fig. 8.

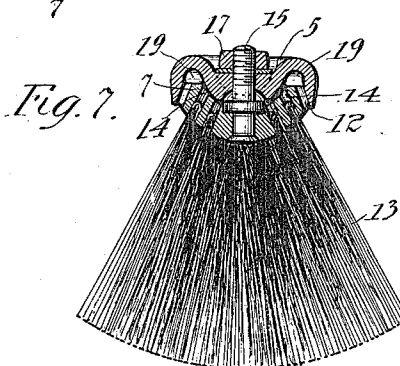


Fig. 7.

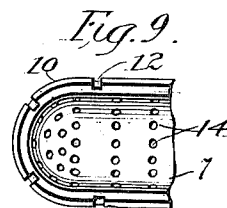


Fig. 9.

Witnesses:
W. F. Smith
Walter L. Story,

Inventor:
Frank Templeman
Amman & Amman
Attys.

UNITED STATES PATENT OFFICE.

FRANK TEMPLEMAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO TEMPCO MFG. CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

FOUNTAIN-BRUSH.

1,176,996.

Specification of Letters Patent.

Patented Mar. 28, 1916.

Application filed November 29, 1915. Serial No. 63,999.

To all whom it may concern:

Be it known that I, FRANK TEMPLEMAN, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Fountain-Brushes, of which the following is a specification.

This invention relates to fountain brushes, and the example thereof shown in the drawings is designed particularly for use in washing automobiles.

An object of the invention is to provide a fountain brush in which the brush back and brush holder may be cast in such shape as to provide means for circulating a fluid within the brush and fluid outlets for projecting a plurality of fine streams into the body of the bristle tufts.

An illustrative embodiment of this invention is shown in the accompanying drawings, in which:

Figure 1 is a plan view showing the improved fountain brush. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1. Fig. 4 is a fragmentary bottom plan view of the brush holder shown in Figs. 1 to 3 inclusive. Fig. 5 is a fragmentary plan view of the brush back shown in Figs. 2 and 3. Fig. 6 shows in longitudinal section another preferred form of the brush. Fig. 7 shows a transverse section of the brush taken on the line 7—7 of Fig. 6. Fig. 8 is a fragmentary bottom plan view of the brush holder shown in Figs. 6 and 7. Fig. 9 is a fragmentary plan view of the brush back shown in Figs. 6 and 7.

The brush shown in the drawings in general features comprises a brush holder and brush back, each of which may be cast of such shape as to provide a channel for the circulation of fluid between the brush back and brush holder, and a plurality of rim openings for projecting fine sprays or fluid streams into the body of the brush between the rows of bristle tufts. Extremely little machine work is, therefore, required in the production of the brush, since these rim openings may be provided for in casting either the holder or the brush back. A material such as cast aluminum is preferably employed for these parts of the brush. The purpose of providing rim openings between the rows of bristle tufts is to insure a self-

cleaning brush in which the body of bristles are kept saturated in any position of the brush during its operation.

In the drawings, the brush holder 1 is shown provided with a threaded socket 2 for receiving a tubular handle 3 having a threaded hexagonal head, by means of which it may be coupled to an ordinary garden hose. The holder 1, in the preferred form shown in Fig. 6, extends inwardly along its central portion 5 for the purpose of providing an annular passage between said central portion 5 and an annular rim 6. The brush back 7, as shown in Figs. 2 and 6, is of the same formation and is preferably convex in form to provide a rim 8 projecting inwardly into engagement with rim 6 of the brush back. The rims 6 and 8 respectively have interfitting beveled edges 9 and 10 to form a substantially watertight joint between the brush back 7 and holder 1. Either the rim 6 is provided on its inner surface with recesses or notches 11, as shown in Fig. 4, or the brush back is provided with similar notches 12, as shown in Fig. 9, for the purpose of providing a plurality of fluid outlets between the rows of bristle tufts 13 mounted in the brush back 7. The notches 11 or 12 may extend at any desired angle with reference to a central vertical plane of the brush, thus projecting the streams more or less into the body of the bristles, particularly when the brush is in operation and the bristles are bent to one side with respect to the back of the brush. The bristle tufts 13 preferably flare outwardly across the axial line of notches 11 or 12, and are seated in radial holes 14 drilled into the brush back 7.

For the purpose of clamping the brush holder 1 and the back 7 together, the latter is preferably provided with a threaded post 15 extending through aperture 16 in the brush holder and engaged by a nut 17. By this means the brush back and back holder may be drawn together until the brush back rests on the lugs 18 formed in the inner upper surface of the brush holder 1. The rim 6 of the brush holder is slightly resilient so that it may expand under the clamping action of post 15 and nut 17 until the brush back comes to rest on lugs 18.

In the form shown in Fig. 6, the flange 6 may expand until the central inwardly extending or depressed portion 5 of the brush

holder contacts with the brush back 7, thus providing an annular passage 19 for the circulation of a fluid. In the forms shown in Figs. 1 and 2, the brush back 1 and the holder 7 are so shaped as to provide a fluid chamber 20 between the brush back and the brush holder.

In the forms shown in Figs. 1 and 2 the central depressed portion 5.1 is made merely large enough to receive nut 17.

In the operation of the brush, fluid under pressure passes into the annular passage 19 or the chamber 20 through the tubular handle 3, and is projected into the body of bristles, preferably between transverse rows thereof through the rim openings 11 or 12.

When the body of bristles are bent from side to side during lateral motion of the brush on a surface being cleaned, the jets leaving the rim openings serve to keep the brush thoroughly saturated and also to project onto the surface being cleaned in advance of the brush, thus insuring that the brush does not come in contact with a dry surface, and in this manner preventing the scratching of such surface. For instance, when the brush is employed for cleaning automobile bodies, it is desirable that the mud thereon be softened in advance of the brush. The peculiar elongated form of brush shown in the drawings is well adapted for the class of work mentioned, since with it the spokes of wheels may be easily cleaned and such parts as the hubs of the wheels, etc., may be reached by the brush.

The constructions shown may be altered or parts thereof omitted without departing from the scope of the claims.

I claim:

1. A device of the class described, comprising a brush back and bristles secured therein, a brush holder shaped to receive said brush back and to provide a space for the circulation of fluid between said brush back and holder; said brush back and holder being provided with interfitting peripheral edges suitably shaped to form a water-tight joint and to provide a plurality of outlets for directing a fluid stream into the body of bristles supported by the said brush back.

2. In a device of the class described, a brush back and a body of bristles supported thereon, a brush holder formed to interfit with said brush back and to provide a plurality of rim openings between the outer edge of the brush back and said holder.

3. In a device of the class described, a brush back and a body of bristles supported thereon, a brush holder formed to interfit with said brush back and to provide a plurality of rim openings between the outer

edge of the brush back and said holder, said brush back being provided with a central inwardly extending part for the purpose of partially closing a space between said brush back and brush holder, and thereby causing the fluid to circulate between said depressed portion and the rim of the brush.

4. In a fountain brush, a brush back and bristles supported thereon, said brush back being provided with a beveled and recessed rim, a holder for said brush provided with a surrounding beveled rim for engaging the rim of the brush back, and means for securing the brush back to the holder.

5. A fountain brush, comprising a brush back and bristle tufts mounted thereon in transverse rows, said brush back being provided with recesses in its rim between said rows of bristle tufts, a holder for said brush back suitably shaped to receive the brush back and engage the same around its outer edge, and to provide a space for the circulation of the fluid between said brush holder and said brush back.

6. A fountain brush, comprising a brush back and a holder therefor, bristle tufts mounted on said brush back, said brush back and holder being suitably shaped to provide the space between the same for the circulation of the fluid and a plurality of rim openings.

7. A fountain brush, comprising a brush back and holder therefor, said brush back having mounted thereon a plurality of rows of bristle tufts, said brush back and holder being suitably shaped to provide a space between the same for the circulation of a fluid and a plurality of rim openings arranged to project fluid streams into the brush body between the rows of bristle tufts.

8. A fountain brush, comprising a brush back and brush holder suitably shaped to provide an annular space between the same for the circulation of a fluid, said brush back being provided with a plurality of rows of bristle tufts and rim openings between the outer edge of the said brush back and the holder.

9. A fountain brush, comprising a brush back, bristles mounted thereon, a holder for said brush back, said holder having a resilient annular flange for engaging the outer edge of said brush back, and centrally located means for clamping the brush back and brush holder together, said brush back and the flange on said brush holder being suitably shaped to provide a plurality of rim openings.

Signed at Chicago this 26th day of November, 1915.

FRANK TEMPLEMAN.