W. L. LAMPKIN.

SCRUBBING NOZZLE.

APPLICATION FILED MAR. 8, 1919.

1,334,911.

Patented Mar. 23, 1920.

2 SHEETS—SHEET 1.

Fig 1

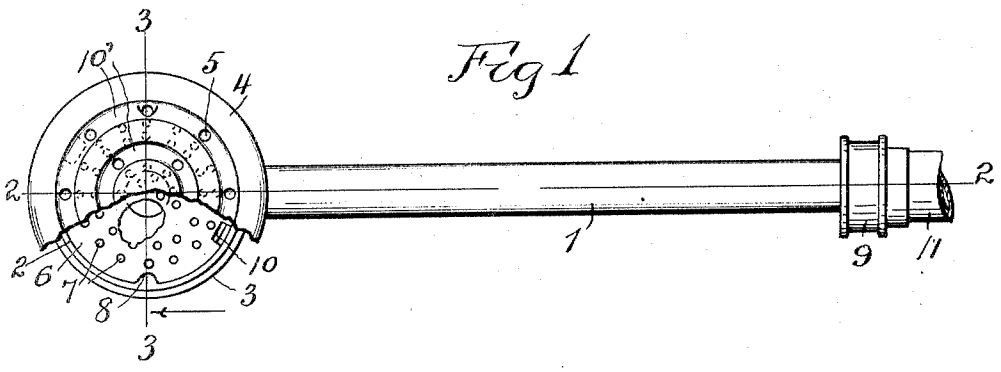


Fig 2

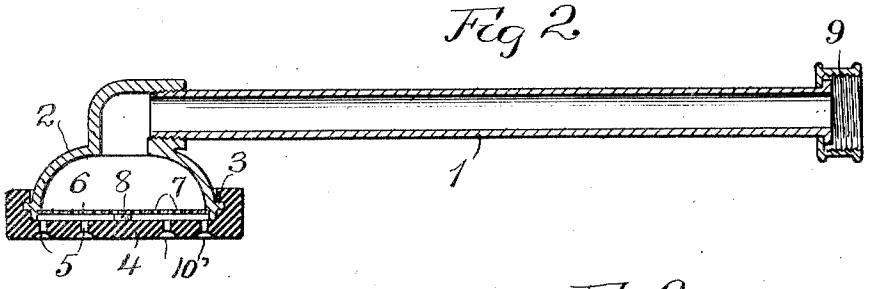


Fig 3

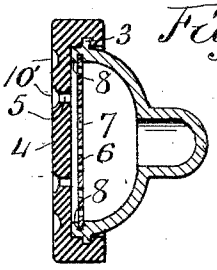


Fig 4

Witness:
R. E. Hamilton

Inventor,
Walter L. Lampkin
By Warren D. House,
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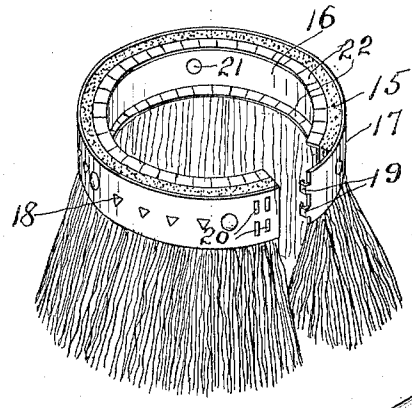
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2 SHEETS—SHEET 2.

Fig 5



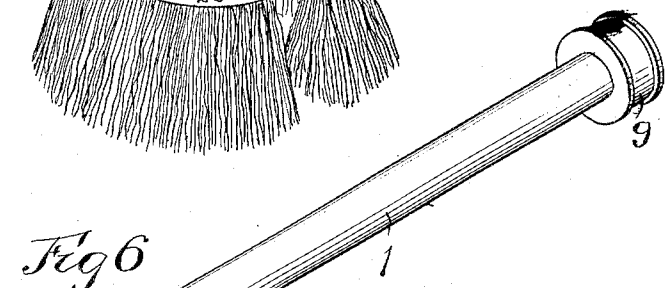


Fig 6

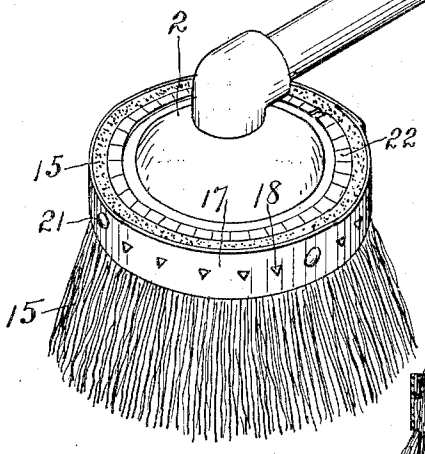
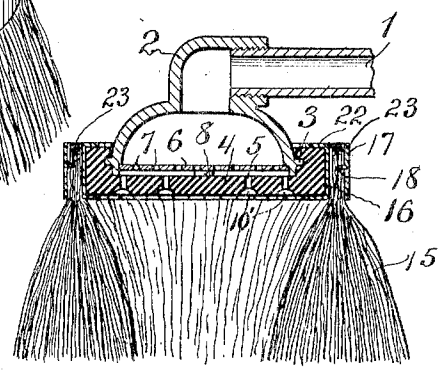


Fig 7



Witness:

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Inventor,

Walter L. Lampkin,

By Warren W. House,

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UNITED STATES PATENT OFFICE.

WALTER L. LAMPKIN, OF KANSAS CITY, MISSOURI.

SCRUBBING-NOZZLE.

1,334,911. Specification of Letters Patent. Patented Mar. 23, 1920.

Application filed March 8, 1919. Serial No. 281,430.

To all whom it may concern:

Be it known that I, WALTER L. LAMPKIN, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a certain new and useful Improvement in Scrubbing-Nozzles, of which the following is a specification.

My invention relates to improvements in scrubbing nozzles.

One of the objects of my invention is to provide a scrubbing nozzle arranged to be attached to a hose and adapted for various cleaning purposes, particularly the cleaning of automobiles.

A further object of my invention is to provide a novel scrubbing nozzle which is simple in construction, cheap to manufacture, not liable to get out of order, which is durable, and which is efficient for the purpose of scraping and washing off dirt without injury to the washed surface.

Still another object of my invention is the provision of a novel shag adapted for use in connection with my improved nozzle.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawing,

Figure 1 is a bottom view, partly broken away, of my improved nozzle shown attached to a hose.

Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1, the hose being omitted.

Fig. 3 is a cross section on the line 3—3 of Fig. 1.

Fig. 4 is a perspective view of my improved nozzle provided with a shag attached thereto.

Fig. 5 is a perspective view of my improved shag or mop.

Fig. 6 is a perspective view of the shag or mop shown in Fig. 5 shown mounted on my improved nozzle.

Fig. 7 is a central vertical sectional view of the nozzle and shag shown in Fig. 6.

Similar reference characters designate similar parts in the different views.

1 designates a tubular handle which has attached to it at one end a hollow nozzle head 2 provided with a circular peripheral flange 3 which is releasably embraced by a flexible cap 4 preferably of soft rubber, provided with perforations 5, which are disposed out of register with perforations 7 of a baffle plate 6 mounted transversely in the head 2 above the cap 4.

9 designates an internally screw-threaded coupling member rotatably mounted on the tubular handle 1, and which is adapted to engage in the usual manner the discharge end of a hose 11.

For holding the baffle plate 6 releasably in the head 2, the baffle plate is provided with one or more peripheral notches 10, adapted to respectively receive one or more inwardly extending lugs 8 on the inner wall of the head 2.

In mounting the baffle plate 6 in the head 2, the baffle plate is slipped into its seat with the notches 10 registering with the lugs 8, and then revolved, so as to bring the baffle plate under the lugs with the notches 10 out of register therewith, as shown in Fig. 1.

The under surface of the cap 4 is preferably, roughened to enable it to more readily scrape dirt from the surface which is being cleaned. Such roughening may be effected by providing one or more annular grooves 10′ in the under side of the cap 4, the said grooves communicating with the perforations 5.

In Fig. 4, I have shown attached to the head 2 a mop comprising flexible material 12, such as canvas, provided with a puckering string 13 which is adapted to be drawn tightly and tied around the upper side of the head 2. To the periphery of the canvas 12 is attached an annular shag 14, which extends below the cap 4.

In the operation of my invention, water from the hose 11 passes through the tubular handle 1, the head 2, the perforations 7 in the baffle plate 6, and the perforations 5 in the cap 4. The nozzle may be used for the purpose of preliminarily scraping dirt from the surface to be cleaned without employing the mop shown in Fig. 4. The roughened under surface of the cap 4 is scraped back and forth over the surface to be cleaned, and the water passing through the cap carries away the dirt. To clean off dust and light dirt, the mop shown in Fig. 4 may be advantageously used by being attached to the head 2 as shown in Fig. 4.

In Figs. 5, 6 and 7, I have illustrated a preferred form of mop consisting of a shag 15, which is held clamped between two transversely divided rings 16 and 17, the latter ring or band being provided with inwardly extending tongues 18, preferably sharp and integral with the band or ring 17, and which

enter the shag 15 to more securely hold the strands of the latter in place.

One end of the ring or band 19 is provided with one or more hooks 19, which are adapted to respectively enter either set of perforations 20 provided in the band 17 adjacent to its opposite end. Rivets 21 extend through the rings or bands 16 and 17 and the shag 15 for holding these parts together.

The ring or band 16 is adapted to embrace the periphery of the cap 4 and to be locked in position thereon by causing the hooks 19 to enter one of the sets of perforations 20.

To hold the mop from vertical movement on the cap 4, any suitable means may be provided. In the drawing, Fig. 5, I have shown the upper and lower edges of the ring or band 16 provided with two annular rows of inwardly extending tongues or projections 22, said two rows of projections respectively engaging the upper and lower sides of the cap 4.

The operation of the form of my invention shown in Fig. 6 is the same as has been described with reference to the form shown in Fig. 4.

The baffle plate 6 effects a double function. It prevents the water pressure from forcing the cap 4 off from the head 2, and it reduces the water pressure as it emerges from the cap, owing to the perforations 7 being out of alinement with the perforations 5, and thus prevents the water from splattering over the operator of the nozzle.

23 designates a wire around which the strands of the shag 15 may be folded to prevent the strands from pulling out.

I do not limit my invention to the structure shown and described, as modifications, within the scope of the appended claims, may be made without departing from the spirit of my invention.

What I claim is:—

1. A scrubbing nozzle comprising a hollow head having an enlarged open end provided at its inner side with an inwardly extending lug, a perforate baffle plate circumferentially revoluble in said head and provided with a peripheral notch for receiving therethrough said lug to permit the insertion and removal of the baffle plate, the lug extending inwardly at the outer side of said baffle plate for holding the latter in operative position when the baffle plate has been turned to a position in which the lug is out of register with said notch, a perforate flexible cap removably fitted on and covering said open end, and a tubular handle discharging into said head and having means for attachment to a hose.

2. A scrubbing nozzle having a hollow head provided with an open end, a perforate cap covering said open end, and a mop comprising two transversely divided ring members, one encircling the other, the inner ring member having at its upper and lower edges inwardly extending projections adapted to respectively engage the upper and lower sides of said cap, the outer ring member having means for releasably locking together its ends, and a shag held between said ring members and encircling said cap.

3. In a scrubbing nozzle, a perforate soft rubber cap provided on its discharge side with grooves communicating with the perforations, and means for discharging water through said perforations.

4. In a scrubbing nozzle, a perforate cap having on its discharge side grooves communicating with the perforations, and means for discharging water through said perforations.

5. In a scrubbing nozzle, a perforate flexible cap provided on its discharge side with an annular groove communicating with some of said perforations, and means for discharging water through said perforations.

In testimony whereof I have signed my name to this specification.

WALTER L. LAMPKIN.