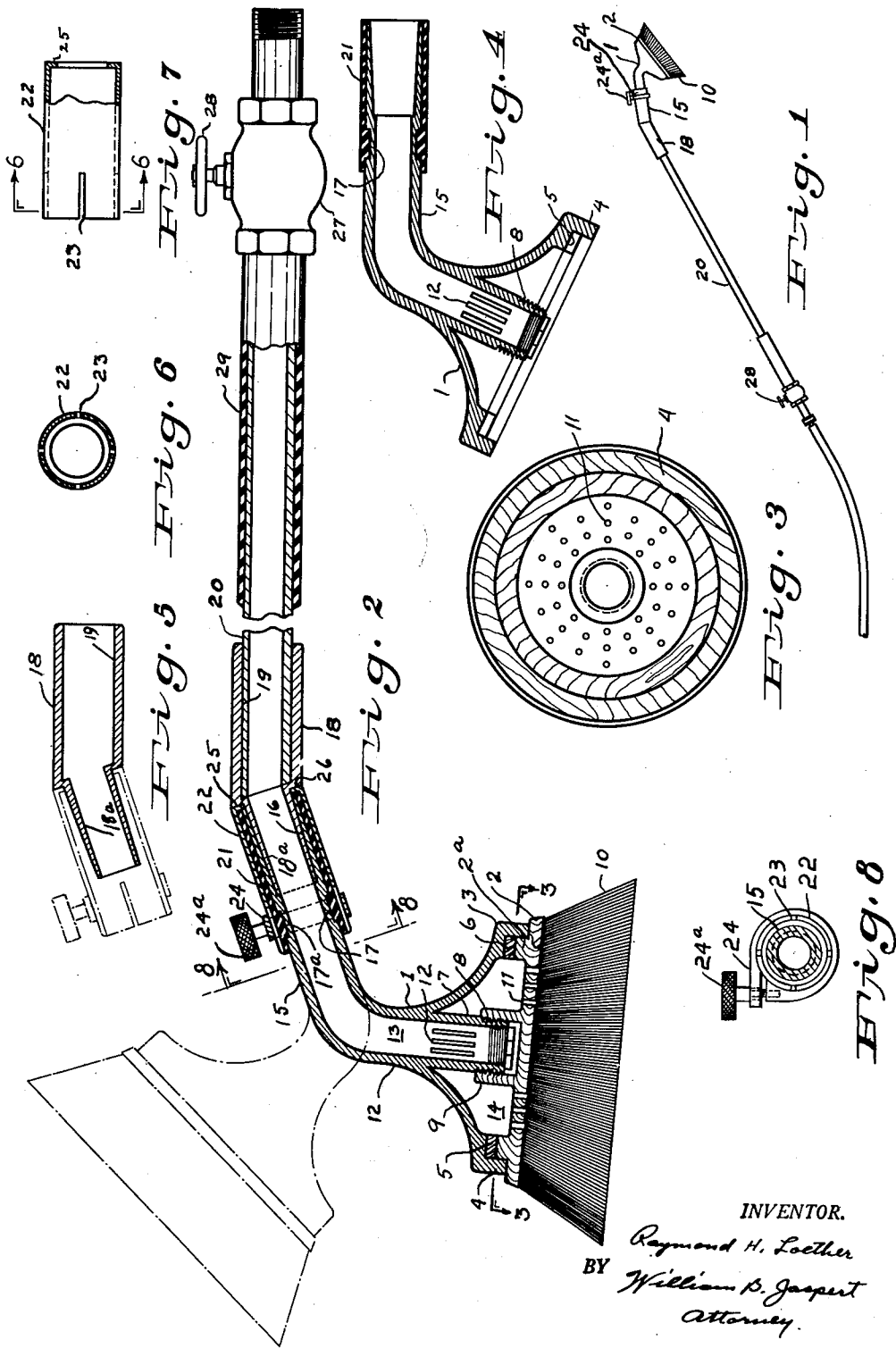


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FOUNTAIN BRUSH

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FOUNTAIN BRUSH

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2 Claims. (Cl. 15—128)

This invention relates to new and useful improvements in fountain brushes, more particularly to a brush having a relatively long, rigid handle by means of which the brush element is manipulated for use in cleaning automobiles, side walls of buildings, and the like.

It is among the objects of the invention to provide a fountain brush having an adapter for holding the brush which is mounted on a handle member to be angularly movable thereon while maintaining a liquid seal at the joint of the adapter and handle.

A further object of the invention is to provide an adapter for a fountain brush which is provided with a threaded connector for engaging the center of the brush and a relatively large sealing area around the periphery of the brush whereby the intermediate space constitutes a fluid chamber for maintaining free and adequate flow of the liquid through perforations in the base of the brush.

These and other objects of the invention will become more apparent from a consideration of the accompanying drawing, constituting a part hereof, in which like reference characters designate like parts, and in which

Fig. 1 is a side elevational view of a fountain brush and handle assembly embodying the principles of this invention;

Fig. 2 a cross sectional view, partially in elevation, of a fountain brush and handle;

Fig. 3 a top plan view of the brush element taken along the line 3—3 Fig. 2;

Fig. 4 a vertical section of the brush adapter;

Fig. 5 a cross sectional view of an adapter sleeve for mounting the brush on the handle portion;

Fig. 6 a cross sectional view of a spring collet or ferrule for mounting the brush adapter to the handle member, taken along the line 6—6, Fig. 7;

Fig. 7 a side elevational view, partially in cross section, of the ferrule member; and

Fig. 8 a cross-sectional view, partially in elevation, taken along the line 8—8, Fig. 2.

With reference to the several figures of the drawing, the structure therein illustrated comprises an adapter 1 for mounting a brush 2 which consists of the head 3 having a flange 4 forming a shoulder 5 on which is mounted a rubber sealing gasket 6. The adapter head is flared and is provided with a central projecting nozzle 7 having a threaded end 8 for interacting with the threads of a boss 9 extending from the brush base 2. The base 2 may be made of wood, hard rubber or other conventional material in which brush

bristles 10 are set, and it is provided with perforations 11, Figs. 2 and 3, for supplying flowing liquid to the bristle end of the brush. The base 2 is provided with an annular tongue 2a, the outer periphery of which engages flange 4. The tongue 2a engages and compresses the sealing gasket 6 to seal off the liquid in the fluid chamber of the brush head. The nozzle 7 of the brush adapter is provided with slots 12 from which the liquid flows from the passage 13 into the fluid chamber 14 to be uniformly distributed at a uniform pressure to uniformly flow through the spaced perforations 11 in the brush base.

The adapter 1 is preferably provided with a gooseneck 15 and is adapted to be angularly adjusted on its support as shown in the dotted lines of Fig. 2 by means of the following construction. The gooseneck is counterbored internally to a tapered fit as shown by the wall 16 and is grooved at 17 on its outer periphery. It is mounted on a sleeve 18 having a counterbore 19 for receiving the end of a hollow handle 20 and having an extension 18a disposed at an angle to the axis of the sleeve for receiving the tapered end of the gooseneck. The sleeve 18 is firmly secured on the handle portion 20 but the gooseneck is rotatable thereon. To effect a sealing of the gooseneck portion with the sleeve 18 a rubber bushing 21 is placed around the outer portion of the gooseneck, the bushing having a radial tongue 17a that is disposed in the groove 17 of the gooseneck. The rubber sleeve 21 is protected by a ferrule or spring sleeve 22 which, as shown in Figs. 6 and 7, is provided with slots 23 to constitute a spring grip when depressed by a clamping ring 24 having a thumb screw 24a, Fig. 8. One end of the ferrule 22, as shown in Fig. 7, has a radial flange 25 which constitutes an abutment against a shoulder 26 of the sleeve 18. The ferrule 22 may be sweated, such as by brazing or soldering, to the shoulder 26 to become an integral part of the sleeve 18. In assembling the gooseneck 15 of the brush adapter the rubber sleeve 21 is slipped over the end of the gooseneck and the gooseneck is then slid into the ferrule sleeve 22. Thumb screw 24 is then turned to compress the slotted portion of the ferrule 22 against the rubber sleeve 21 to firmly grip the adapter in any set position.

The handle 20 of the fountain brush is provided with a valve 27 having a handle 28 to adjust the flow of water to the brush and the handle portion 20 may be provided with a rubber covering 29 as shown in Fig. 2.

The brush member is assembled to the adapter

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1 by screwing the threaded boss 9 on the threaded end 8 of the extension 7 until it seats against the flange 4. The rubber sealing gasket 6 prevents leakage of the fluid from the chamber 14 through the periphery of the brush and adapter.

As is apparent from Figure 1 of the drawing, the brush assembly with a long or short handle, as desired, may be readily manipulated in cleansing automobiles, walls of new or old buildings, and for general utility purposes. The arrangement of the slotted passages from the adapter to the flow chamber to maintain constant pressure on the flow through the perforations 11 permits of fast and thorough cleansing of the surface to which the brush is applied. Instead of water in cleaning stonework on buildings, a diluted acid may be employed and the brush is also adapted for use of live steam which may be applied to surfaces to be cleansed by the bristles of the brush.

Although one embodiment of the invention has been herein illustrated and described, it will be evident to those skilled in the art that various modifications may be made in the details of construction without departing from the principles herein set forth.

I claim:

1. In a fountain brush an adapter having a flared end and a center projection with a threaded end portion for receiving a brush, a brush having a threaded socket interacting with the threaded end of the adapter, the flared end of the adapter having a shoulder for engaging the brush and for sealing a fluid chamber constituted by the base of the brush and the adapter, the brush having a tongue interacting with a flange of the flared end of the adapter and constituting

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a sealing surface, a sealing gasket disposed between said shoulder and tongue, the brush being provided with bristles and having perforations communicating with the fluid chamber of the adapter and said center projection having slots communicating with a fluid supply source.

2. A fountain brush comprising an adapter having a gooseneck disposed at an angle to the face of the adapter, the adapter having a central projection with a threaded end having slots in the wall thereof for the flow of fluid radially therefrom, the adapter having a shoulder constituting a sealing surface for a gasket and having a radial flange adapted to engage the face of a brush, a brush member comprising a wooden base having a threaded portion for interacting with the central projection of the adapter whereby the brush is compressed against the sealing gasket and seats against the radial flange of the adapter, the brush having bristles and having spaced perforations communicating with a fluid chamber in the adapter.

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