A. LIGHTFOOT.

BRUSH.

APPLICATION FILED FEB. 6, 1914.

1,131,068. Patented Mar. 9, 1915.

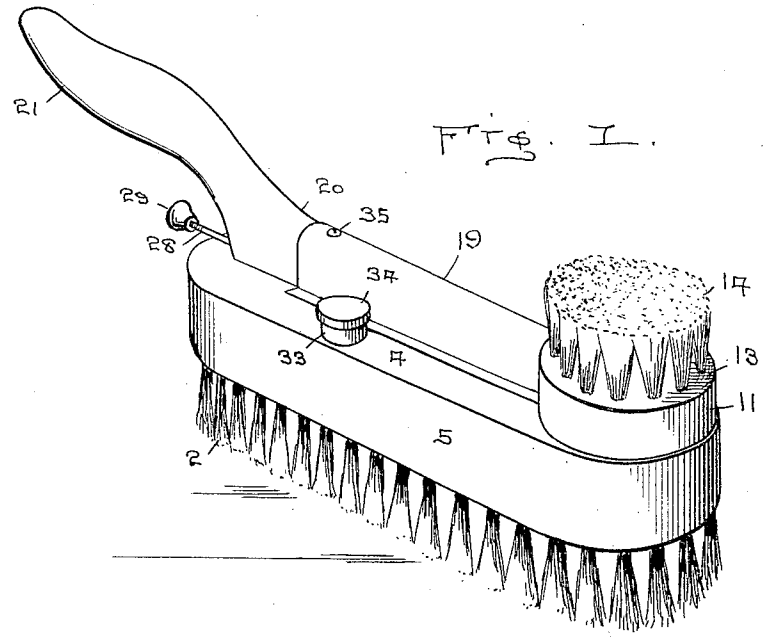


Fig. 1.

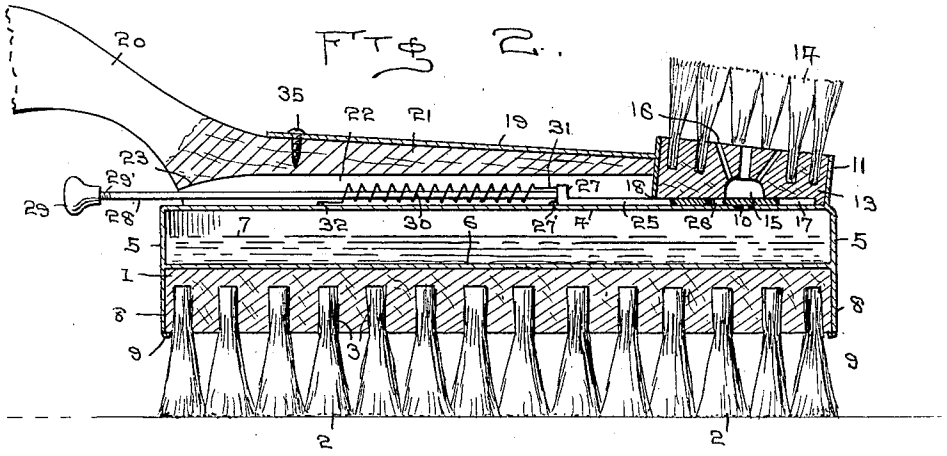


Fig. 2.

Witnesses

J. H. Reid.

Inventor

A. Lightfoot

By W. J. FitzGerald & Co

Attorneys

UNITED STATES PATENT OFFICE.

ALFRED LIGHTFOOT, OF WILLIAMSPORT, PENNSYLVANIA.

BRUSH.

1,131,068. Specification of Letters Patent. Patented Mar. 9, 1915.

Application filed February 6, 1914. Serial No. 817,038.

To all whom it may concern:

Be it known that I, ALFRED LIGHTFOOT, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in 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.

This invention relates to brushes and more particularly to fountain brushes for polishing shoes, stoves, and other articles, and has for one of its objects the provision of a brush provided with a valve constructed in a manner for obviating the necessity of rubber or other packing for the valve, and to further prevent leaking and other objectionable features common to devices of this character.

A further object of this invention resides in the provision of a polishing brush whereby the means for operating the valve for supplying the liquid is within easy reach of the handle and remote from the reservoir valve, thereby preventing the soiling of the hands when using the same.

These and other objects will more fully appear and the nature of the invention be more clearly understood by the construction, combination and arrangement of the parts thereof as described in the following specification, defined in the appended claims and illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view of a brush, showing the same as constructed ready for use, and, Fig. 2 is a vertical longitudinal sectional view of the same, showing the interior construction thereof and the manner of assembling the parts therein.

Referring to the drawings, 1 denotes the back of the brush having the usual bristles 2 arranged in a series of recesses 3 at one side of the back of the brush. Arranged upon the brush 1 is a reservoir provided with the top 4 and the side wall 5, the reservoir being further provided with the bottom 6 positioned approximately upon a longitudinal medial line between the top and the lower edges of the wall 5, the reservoir being adapted for holding the polishing liquid 7. The walls 5 of the reservoir are constructed to extend downwardly for providing the retaining flange 8, which flange is adapted to embrace the back 1 of the brush and retaining the same therein by the inwardly crimped edges 9 of the depending wall 8 of the reservoir. Formed in the top 4 of the reservoir and adjacent one end thereof is the aperture 10 which provides a passage for the liquid thereout.

Arranged upon the top 4 of the reservoir, at one end thereof and surrounding in concentric relation the aperture 10, is the circular flange member 11, within which is seated the head 13 of a dauber brush, this brush being provided with the bristles 14 secured therein in any suitable manner and having arranged in the head 13 the recess 15, and extending divergently from the recess 15 are the passages 16, the passages 16 and the recess 15 being provided for conveying the liquid from the reservoir to the bristles 14 of the dauber brush. The head 13 of the dauber brush is further provided with the elongated channel 17, the channel 17 communicating with the opening 18 of the circular flange 11.

Upon the top 4 of the reservoir and abutting the circular flange 11 at one side thereof, is the semicylindrical housing 19, extending rearwardly therefrom and terminating at a point in proximity to the end of the reservoir opposite to the end upon which the dauber brush is mounted, the housing 19 being secured to the top 4 of the reservoir in any suitable manner.

The brush is further provided with the handle 20, formed with the elongated shank 21, having an exterior contour corresponding to the interior contour of the housing 19, the shank 21 being inserted into the housing 19 with its free end abutting against the wall of the circular flange 11 within the housing 19. At the under side of the shank 21 of the handle 20 is the elongated groove 22 extending its full length and having a mean diameter, excepting where the groove approaches the handle 20, the same being restricted at this point, as shown at 23 for retaining the valve stem 28 in its normal position.

Mounted upon the top 4 of the reservoir and adapted to operate through the opening 18 of the flange member 11 and in the channelway 17 of the dauber brush, is the slide valve 25 provided with the aperture 26, designed to register with the aperture 10 in the top 4 of the reservoir and the recess 15 of the brush head 13, and upon the end of

the valve 25, within the groove 22 of the handle 20, is arranged the ear 27 to which is attached the stem 28, which stem extends outwardly through and beyond the restricted portion 23 of the groove 22 of the handle 20 and terminates a short distance beyond the exterior wall 5 of the reservoir at the rear of the brush, and arranged upon the free end of the stem 28 is the knob 29, screw threaded thereon as shown at 29′, within the groove 22 of the handle shank 21 is arranged the retractile spring 30, the spring having one end secured to the ear 27 of the valve 25 and the opposite end thereof fixedly secured to the top 4 of the reservoir at a point between the ear 27 of the valve and the restricted entrance 23 of the groove 22, the spring 30 being designed for normally holding the aperture 26 of the valve 25 rearwardly and out of register with the aperture 10 of the reservoir and the recess 15 of the dauber brush head 11, and the valve 25 against the stop 27′.

The reservoir has provided in the top 4 the nipple 33, through which the polishing liquid is to be poured for filling the reservoir, and the nipple has arranged thereon the cap 34 for closing the same after the filling operation.

The handle 20 is secured within the housing 19 in any suitable manner, as by means of a screw, as shown at 35, or other suitable securing means.

To operate the brush shown in my invention, it is only necessary to turn the same up side down and in this position the operating knob 29 is in convenient reach of the thumb of the user as the hand grasps the handle 20. By pushing the knob 29 inwardly with the thumb, the stem 28 is likewise moved inwardly against the action of the retractile spring 30; this movement of the stem 28 slides the valve 25 in the channelway 17, thus bringing the aperture 10 of the reservoir, the aperture 26 of the valve 25 and the recess 15 into registration with each other and the polishing liquid within the reservoir is now free to flow into the recess 15 and through the passageway 16, supplying the bristles 14 of the dauber brush with the polishing fluid. When a sufficient quantity has been supplied, the thumb is removed from the knob 29 and, through the action of the retractile spring 30, the valve 25 is thus returned to its normal position, the apertures 10 and 26 and the recess 15 are again out of registration, and the brush is then manipulated in a manner for using the polishing bristles 2 of the brush upon the object to be polished.

While I have here shown and described the preferred embodiment of my invention, I hereby reserve the right to make such alterations and variations therein as I may deem expedient from time to time and which will not depart from the spirit of this invention or conflict with the scope of the claims.

Having thus described my invention, what I claim as new and desire to secure by Letters-Patent is:

1. A brush of the class described, comprising a reservoir, a compartment upon the upper side and adjacent the forward end thereof, a dauber brush seated in said compartment, said reservoir and said dauber brush having registering ports, a channel formed in the head of said dauber brush between said posts, and a valve slidably mounted in said channel for establishing communication between said ports.

2. A brush of the class described, comprising a reservoir, a compartment upon the upper side and adjacent the forward end thereof, a dauber brush seated in said compartment, said reservoir and said dauber brush having registering ports, a channel formed in the head of said dauber brush between said ports, a valve slidably mounted in said channel and having a port for establishing communication between said ports, an ear formed at one end of said valve, and a stem secured to the ear of said valve and projecting beyond the rear end of said reservoir for actuating said valve.

3. A brush of the class described, comprising a reservoir, a compartment upon the upper side and adjacent the forward end thereof, a dauber brush seated in said compartment, said reservoir and said dauber brush having registering ports, a channel formed in the head of said dauber brush between said ports, a valve slidably mounted in said channel and having a port for establishing communication between said ports, an ear formed at one end of said valve, a stem secured to the ear of said valve and projecting beyond the rear end of said reservoir for actuating said valve, and a retracting spring having one end secured to the ear of said valve and its opposite end secured to the top of said reservoir for holding said valve rearwardly for normally closing the ports of said reservoir and said dauber brush.

4. A brush of the class described, comprising a reservoir, a compartment upon its upper side and adjacent the forward end thereof, a dauber brush seated in said compartment, said reservoir and said dauber brush having registering ports, a housing secured upon said reservoir and extending from the dauber brush compartment to the rearward end of said reservoir, said dauber brush compartment having an opening therein communicating with said housing, a channel formed in the head of said dauber brush between said ports and extending into said opening, a valve slidably mounted in said channel and having a port for establish-

ing communication between the ports of said reservoir and said dauber brush, the rearward portion of said valve projecting through the opening of said dauber brush compartment and into said housing, an ear formed upon the projecting end of said valve, a handle for said brush, a shank formed upon said handle and secured in said housing, said shank having an elongated groove formed in its under side, a stem operating within said groove of said shank and having one of its ends secured to the ear of said valve and its opposite end projecting rearwardly beyond said reservoir and beneath said handle, a knob upon the projecting end of said stem and adapted to be pushed inwardly for actuating said stem and said valve, and a retractile spring within the groove of said shank having one of its ends secured to the ear of said valve and its opposite end secured to the top of said reservoir at a point rearwardly of said ear of said valve for holding said valve rearwardly for normally closing the parts of said reservoir and said dauber brush.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED LIGHTFOOT.

Witnesses:

HARRY H. HELLER,

J. F. KATZMAIER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."