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A. SEALUND.
FOUNTAIN BRUSH.
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UNITED STATES PATENT OFFICE.

AXEL SEALUND, OF SAN JOSE, CALIFORNIA.

FOUNTAIN BRUSH.

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To all whom it may concern:

Be it known that I, AXEL SEALUND, a subject of the King of Sweden, residing at San Jose, in the county of Santa Clara and State of California, have invented certain new and useful Improvements in Fountain Brushes; and I do 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 an improved fountain brush and one object of the invention is to provide a fountain brush having an improved head construction in which the casing is provided with a neck extension for engaging a tubular handle and in which a spring actuated valve is mounted in the inner end portion of the neck with its stem extending into the casing for engagement by the cleaner head so that when the cleaner head is moved inwardly against the action of a spring, the valve may be opened and water permitted to pass into the casing through the neck and through outlet openings formed in the cleaner head of the brush.

Another object of the invention is to provide a fountain brush in which the cleaner head will be pivotally mounted in the casing adjacent the forward side of the casing, the rear portion of the cleaner head carrying pins which pass through slots in the casing so that the cleaner head may have limited swinging movement. By this construction, the cleaner head will be so mounted in the brush that the cleaner head will have its rear portion swung upwardly into the casing and the valve will be opened without any special effort on the part of the operator.

Another object of the invention is to provide a fountain brush which will be so constructed that the cleaner head can be easily removed and a new one put in place or a cleaner head having bristles of a different type substituted for the one already in use.

Another object of the invention is to provide a fountain brush which will have a comparatively simple construction and can be readily taken apart and reassembled when desired.

This invention is illustrated in the accompanying drawings, wherein:

Figure 1 is a view showing the improved fountain brush partially in front elevation and partially in longitudinal section.

Figure 2 is a transverse sectional view through the brush taken along the line 2—2 of Fig. 1.

Figure 3 is a perspective view of one end portion of the brush.

This improved fountain brush is provided with a casing 1 having front and rear walls 2 and 3 and end walls 4. A hollow neck 5 extends from the upper wall of this casing and is adapted for connection with a tubular handle 6 which serves not only as a handle but will also serve as a pipe through which water or any other fluid may pass. This fluid is to pass through the handle and neck 5 into the casing and it is desired to control the passage of the fluid through the neck so that the fluid will only pass through the neck when desired. In order to control the passage of the fluid through the neck 5, there has been provided a valve having a body portion 7 which is screwed up into the threaded inner end portion of the neck and extends into the interior of the casing. This body 7 is provided with a valve seat 8 at its upper end upon which will rest a valve head 9. The stem 10 of this valve extends downwardly through the body portion 7 of the valve and adjacent its lower free end is provided with an opening through which will pass an abutment pin 11 engaged by a spring 12, the spring 12 having its upper end engaging a partition 13 in the body portion of the valve. From an inspection of Figs. 1 and 2, it will be readily seen that the spring will normally hold the valve closed but that when pressure is applied to the lower end of the valve stem, the valve will be moved upwardly to an open position against the action of the spring and the fluid may readily pass through the neck 5. Openings 14 are formed in the partition 13 and side portions of the valve body so that when the valve is opened, the fluid may pass through these openings and into the casing 1.

The cleaner head 15 is mounted in the open lower end of the casing 1 and is provided with a plurality of openings 16 so that the fluid after passing into the casing may pass through these openings 16 and saturate the bristles 17 and also wet the floor or other surface which is being cleaned or painted. In the present illustration, the cleaner head has been shown provided with bristles such as are commonly provided in connection with floor brushes, but it is to be understood that any type of bristles could be

used such as those used in connection with paint brushes, white-wash brushes and the like, or if desired, soft material could be provided such as is used in connection with cleaners for automobile bodies and the like. The cleaner head 15 is to be pivotally mounted in the casing and in order to do so, there has been provided fastener screws 18 which are passed through openings 19 formed in the ends of the casing near the forward side of the casing. From an inspection of Fig. 1, it will be readily seen that these screws 18 will provide pivot pins thus mounting the cleaner head so that it can have vertical swinging movement in the casing. When the bristles are in engagement with the floor and pressure is applied to the handle to force the casing downwardly and push the brush forwardly as would occur when sweeping a floor, the valve will be moved upwardly to open position and the water or other fluid will flow into the casing and through the openings 16. The floor can then be very readily cleaned and the valve opened and closed during the ordinary operation of handling the brush. It is desired to limit swinging movement of the brush head, and therefore there has been provided screws 20 which are passed through slots 21 in the rear wall 3 of the casing. These screws will serve to prevent the brush head from being forced inwardly beyond a desired amount and will also serve to prevent the brush head from dropping out of the casing when the brush is lifted bodily off of the floor. It is desired to normally retain the brush head in the position shown in Fig. 2 and in order to do so, there has been provided a spring strip 22 which extends longitudinally through the casing near the rear wall 3 and is secured by fastener screws 23 which pass through the central portion of the strip and are screwed up into threaded sockets formed in the block extension 24 which extends inwardly from the rear wall. The end portions of the spring strip engage the end portions of the cleaner head and the cleaner head will thus be yieldably held in the position shown in Fig. 2, and the brush can be used for relatively light sweeping without the valve being opened. There has thus been provided a fountain brush which is so constructed that it will be very efficient in operation and can be used in the ordinary manner that brushes are usually used and the valve opened and closed during the ordinary sweeping process. When it is desired to replace a cleaner head, it is simply necessary to remove the screws 18 and 20 and the cleaner head in use can be taken out of the casing and a new one put in place. When it is desired to remove the valve, the cleaner head will be removed and the valve can then be unscrewed from the hollow neck and repaired or adjusted and then replaced.

I claim:

1. A fountain brush comprising a casing open at its lower end and having a hollow handle engaging neck extending from its upper wall, a valve in said neck having a stem extended into said casing and yieldably held against movement when in a closed position, and a cleaner head fitting into the open lower end of said casing and movable inwardly and outwardly, the cleaner head when moved inwardly engaging the valve stem and moving the valve to an open position.

2. A fountain brush head comprising a casing open at its lower end and having a hollow neck extension provided with an internally threaded lower end portion, a valve seat screwed into the lower end portion of said neck, a valve head having a stem extended through the seat, a spring about the stem yieldably holding the valve closed, and a cleaner head fitting into the open lower end of said casing and movable inwardly and outwardly, the cleaner head when moved inwardly engaging the valve stem and moving the valve to an open position.

3. A fountain brush head comprising a casing open at its lower end and having a hollow handle engaging neck extending from its upper wall, a valve in said neck having a stem extending into said casing and yieldably held against movement with the valve closed, a perforated cleaner head fitting into the open lower end of said casing, fasteners passing through the ends of the casing and into the ends of the cleaner head adjacent the forward side to pivotally mount the cleaner head; and fasteners carried by the cleaner head and passing through vertical slots in the rear side of said casing to limit pivotal movement, the cleaner head when moved inwardly engaging the valve stem and moving the valve to an open position.

4. A fountain brush head comprising a casing open at its lower end and having a hollow neck extension provided with an internally threaded lower end portion, a valve seat screwed into the lower end portion of said neck, a valve head having a stem extending through the seat, a spring about the stem yieldably holding the valve closed, a perforated cleaner head fitting in said casing and closing the open lower end thereof, the cleaner head being pivotally mounted at its forward side and slidably mounted at its rear side, and a spring in said casing engaging the cleaner head to yieldably hold the cleaner head against inward movement, the cleaner head when moved inwardly engaging the valve stem and moving the valve to an open position.

5. A fountain brush head comprising a casing open at its lower end and having an upper wall provided with an inlet, a valve for said inlet normally closed, a perforated

cleaner head fitting into said casing and
closing the open lower end thereof, the
cleaner head being pivotally mounted at its
forward side and slidably mounted at its
5 rear side, and a spring in said casing engag-
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cleaner head when moved inwardly engag-
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open position.

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my hand.

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AXEL SEALUND.