



# United States Patent Office.

ALBERT D. PENTZ, OF NEW YORK, N. Y.

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## IMPROVEMENT IN FOUNTAIN BLACKING-BRUSHES.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ALBERT D. PENTZ, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Fountain Blacking-Brush; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention relates to blacking-brushes and boxes, and consists in certain improvements thereon, which will be first described and then clearly pointed out in the claim.

In the accompanying drawing—

Figure 1 represents a vertical longitudinal section of the brush on the line *x x* of fig. 2;

Figure 2 is a top view, with the supply-brush turned back on its hinge to show the aperture in the top of the fountain and the elastic ring and valve arrangement on the back of the supply-brush.

Similar letters of reference indicate corresponding parts.

A is the polishing-brush.

B is the supply-brush.

C is the fountain or chamber on the back of the polishing-brush.

D is the back, to which the bristles E are attached.

The chamber C is formed by attaching sheet metal of any kind, or any other suitable material, to the back D, so as to form a water-tight chamber or fountain, as seen in fig. 1.

The handle F is attached to the fountain in any suitable manner.

G is an aperture in the top of the chamber, surrounded by the fixed guide-ring H.

This ring forms a part of the hinge T, by which the supply-brush is connected with the chamber.

J is the back of the supply-brush, to which the bristles K are attached.

Through this back are orifices L, more or less in number.

M is a metallic band around the back J, which projects from the back so as to form a chamber, N, on the back of the supply-brush.

O is an elastic ring of rubber or other suitable material, which is made a little wider in its cross-section than the chamber is deep. This elastic ring is placed in the chamber surrounding the orifice G in fountain.

When the supply-brush is clasped to the fountain, as seen at P, fig. 1, the supply-brush or band M will be slightly raised from the fountain; but there will be sufficient pressure on the elastic ring, caused by the clasp-fastening, to keep the liquid in the fountain from escaping.

Over the elastic ring is placed a thin metallic plate, R, with an orifice in its center, and over the plate is placed a flexible disk, S, with an aperture in its center.

The metallic plate R and flexible disk S are confined to the back of the supply-valve by the central screw T.

U is a small disk-valve on the head of the screw T.

The orifices through metallic plate and flexible disk are larger than the screw, and are covered by the valve U.

Liquid blacking being placed in the fountain, and the supply-brush being fastened down by the clasp P, the elasticity of the ring O will keep the valve U in close contact with the flexible disk, and force the disk against the metallic plate R, and thereby close the orifices through both.

In this condition the brush may be carried or handled without leakage; but by pressing the supply-brush down, as in brushing or distributing blacking on a boot or shoe, the elastic ring will be sufficiently compressed to loosen the valve from the flexible disk, and allow the liquid to flow through the central orifices and through the head of the brush or holes L, thus supplying the blacking to the boot in quantities proportioned to the pressure applied.

The common paste-blackening may be placed in the fountain with a little water. The necessary agitation in brushing will dissolve the paste and give the required blackening in a liquid state.

By this arrangement a vast amount of time, trouble, and annoyance are saved, and its advantages must be apparent to all.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. A polishing-brush, A, and supply-brush B L, combined with chambers C N arranged between them, as and for the purpose described.

2. The elastic ring O and valve U with the plate R and flexible disk S, whereby the liquid can be discharged from the fountain C by means of pressure, substantially as shown and described, and for the purposes set forth.

3. The ring H, band M, and catch P, combined as described, with the brush B and box C, to connect them, and to form an auxiliary and intermediate chamber, N, for the purpose specified.

4. The valve-screw T, disk S, plate R, and elastic ring O, combined as described, with the apertured box C G, and brush B L, for the purpose of graduating the flow of blacking, as set forth.

Witnesses:

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