(No Model.)

R. B. SHEPHERD.

BRUSH.

No. 601,405. Patented Mar. 29, 1898.

Fig. 1.

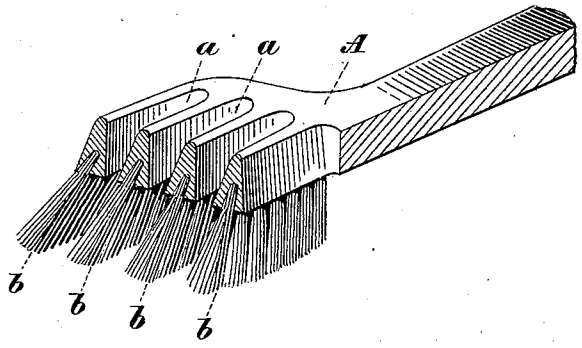
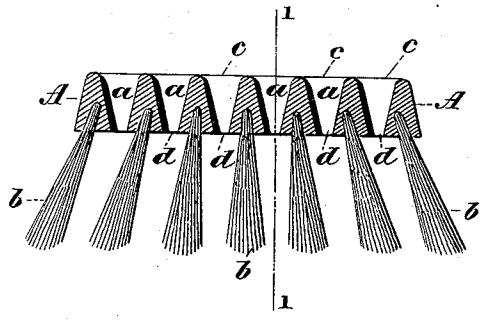


Fig. 2.



WITNESSES:

Gustave Dieterich.

Charles E. Smith

INVENTOR

Robert B. Shepherd

BY Brecen & Cranch

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT B. SHEPHERD, OF NEW YORK, N. Y.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 601,405, dated March 29, 1898.

Application filed July 28, 1897. Serial No. 646,166. (No model.)

To all whom it may concern:

Be it known that I, ROBERT B. SHEPHERD, a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Brushes, of which the following is a full, clear, and exact description.

My invention relates particularly to brushes of that character wherein the back is made reticulated or perforated, the openings or perforations extending through the back of the brush, between the bristles, in a direction at substantially right angles to the plane of the back, so that the brush may be readily cleaned and maintained in a clean condition. Heretofore in brushes of this character it has been customary to make each of the openings in the back in the form of a frustum of a cone, with the base of the frusto-conical openings next to the bristles and the narrowest part of the openings at the rear, or to make the openings of the same extend throughout from the face to the back of the brush-back. Great difficulty has been experienced with brushes made in this manner, inasmuch as the least material is provided where the bristles are mounted and where the most material and strength are required. Furthermore, by constructing a brush-back with openings in the manner hereinbefore described it has been found impracticable to mount the bristles near the edge of the brush, so that they will project outwardly from a longitudinal median line, as is illustrated in the drawings.

The object of my invention is to overcome the difficulties heretofore found in open-back brushes and to produce a strong and efficient open-back brush at little cost.

To this end my invention consists in a brush constructed as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a brush made in accordance with my invention, the section being taken on line 1 1 of Fig. 2. Fig. 2 is a transverse section of the same.

In the drawings, A represents the back of a brush, which is preferably made in one piece by molding or otherwise. The brush-back is reticulated or perforated in a direction at substantially right angles to the plane thereof. The openings *a* extend between the bristles *b*, and the widest portion *c* of each of these openings is at the rear of the brush, the openings tapering to the face or bristle-carrying portion of the brush, where said openings are narrowest, as indicated at *d*. It will be observed that by constructing the brush-back in the manner described, with the widest portions of the openings to the rear of the brush, the most material is provided at the face of the brush in which to mount the bristles. It will also be seen that by my invention I am enabled to mount the bristles so that they will project outwardly from a longitudinal median line of the brush, as clearly represented in Fig. 2.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

A brush having a reticulated back, the openings in which extend between the bristles, said openings being of the greatest diameter at the rear of the brush and decreasing in diameter to the face thereof whereby the most material is provided at the face or bristle-receiving side of the brush-back.

ROBERT B. SHEPHERD.

Witnesses:
CHARLES E. SMITH,
JAMES L. SUYDAM.