R. BISBEE.

BRUSH.

No. 193,137. Patented July 17, 1877.

Fig. 1

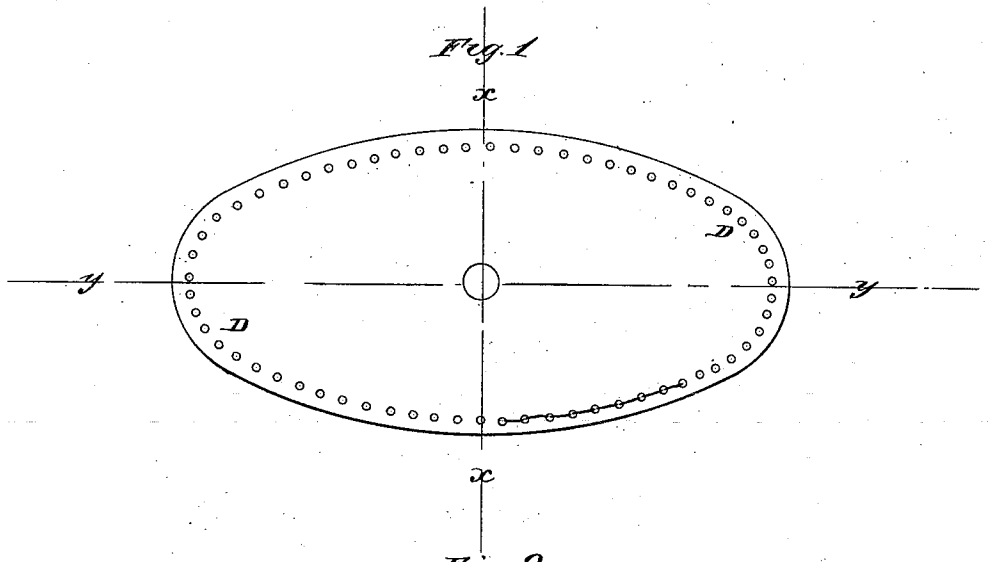


Fig. 2

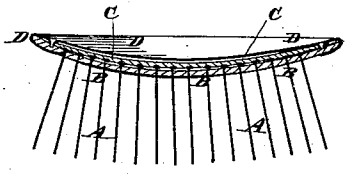
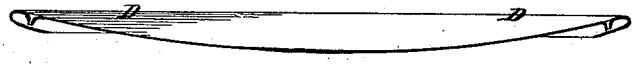


Fig. 3



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RANDALL BISBEE, OF NEW YORK, N. Y.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **193,137**, dated July 17, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, RANDALL BISBEE, of the city, county, and State of New York, have invented a new and useful Improvement in Metallic Brushes, of which the following is a specification:

Figure 1 is a rear view of the block of one of my improved brushes. Fig. 2 is a cross-section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a longitudinal section of the metallic back, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to improve the construction of metallic brushes, so as to enable them to be made lighter and neater, and adapt them to receive any desired kind of a back.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A are the wires, which take the place of the ordinary bristles, which are placed through a rubber plate, B, with their heads resting against the inner side of the said plate.

C is a leather plate, placed over the heads of the wires or pins A, and between them and the back D.

The back D is a metal plate, through which, around its edge, is formed a row of holes, which are punched from the outer or rear side in such a way that the burrs of said holes may be passed into or through the rubber plate B, so as when the edge of the said back D is turned down upon the rubber plate B, they may hold the said rubber plate securely.

If additional security is desired, the metal plate D and the rubber plate A may be secured by sewing them with wire or thread through the holes of the said plate D.

After the back D has been secured in place the brush is placed in a die, with its turned-over edge firmly supported and held, and a die or former is forced down upon the back of the plate D, giving it an arched form, as shown in the drawing. This arching or springing of the plate D gives a tension to the rubber plate D, which tension is regulated by the greater or less arch given to the plate D.

The back and handle are then applied in the usual way.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of wires A and rubber plate B with leather plate C and a metallic plate, D, arched in form and burred around the edge, as and for the purpose specified.

RANDALL BISBEE.

Witnesses:

JAMES T. GRAHAM,

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