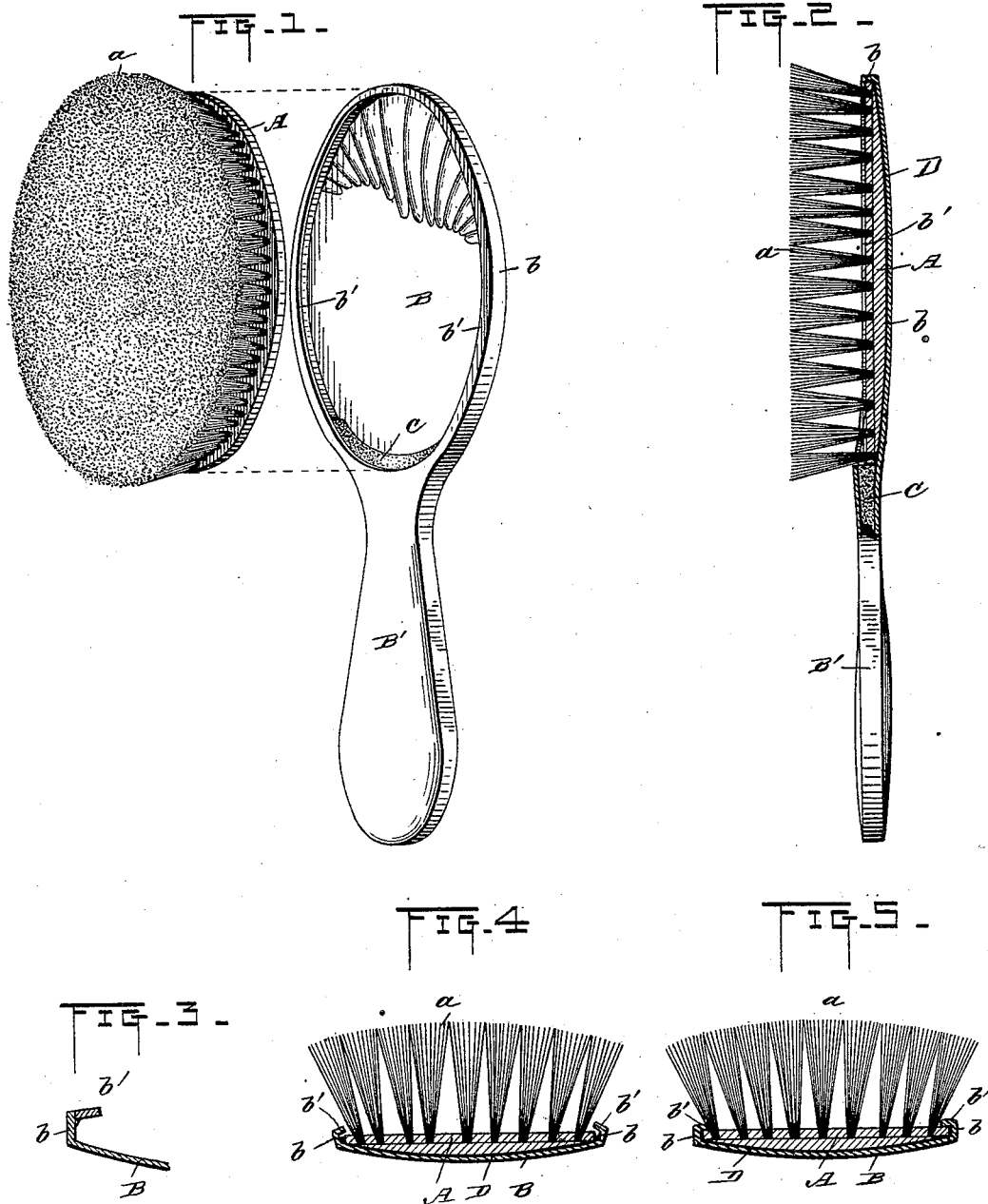


(No Model.)

S. W. BABBITT.
BRUSH.

No. 419,597.

Patented Jan. 14, 1890.



Witnesses -

E. D. Smith
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Inventor.

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UNITED STATES PATENT OFFICE.

SETH WM. BABBITT, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE
WILCOX SILVER PLATE COMPANY, OF SAME PLACE.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 419,597, dated January 14, 1890.

Application filed May 14, 1889. Serial No. 310,716. (No model.)

To all whom it may concern:

Be it known that I, SETH WILLIAM BABBITT, of Meriden, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Brushes; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in brushes having metallic backs, and has special reference to the kind known as "hair-brushes," although applicable to other forms.

In the manufacture of metal-back brushes a number of difficulties are encountered in the way of making a close fit between the metal and the wood or other material forming the brush-block, in which the bristles are set, and in obtaining a perfect finish of the edge of metal surrounding the bristles. I overcome these difficulties and objections by means of the construction in which my invention consists, as hereinafter described, and pointed out in the claims.

In the drawings which accompany and form a part of my specification, Figure 1 is a perspective view of the brush back and handle and the brush-block removed therefrom. Fig. 2 is a longitudinal section. Fig. 3 is an enlarged sectional view of the edge of the brush-block receptacle and flange. Fig. 4 is a cross-section of the brush block and back before compression of the latter, and Fig. 5 is a similar view after compression.

A represents the brush-block, of wood or other suitable material, having bristles *a*.

B represents the metallic back with handle *B'*.

The receptacle in the back for the brush-block is formed by turning up the edges *b* and soldering to said edges a band or flange *b'*, which may be ornamental or plain. By this means a smoother-finished edge is presented than if the edges were turned upward and inward, as it is impossible by the latter method to avoid crimping or corrugating the edge.

At the end of the receptacle near the han-

dle a filling *C* is placed flush with the inner edge of flange *b'* and extending back into the hollow handle. This filling, which may be of plaster-of-paris or other suitable material, is for the double purpose of strengthening the handle and for providing an abutment for the brush-block and cement, as hereinafter referred to. In length the brush-block is slightly greater than the distance from the filling to the edge of the flange *b'* at the other end of the back, while in width it is the same or slightly less than the distance between the opposing edges of the flange *b'*, as shown in Fig. 4.

For the purpose of description I will refer to the portion of the block and back farthest from the handle, as the toe.

The construction being as described and as shown in Fig. 1, I unite the parts as follows: A measured quantity of cement, as dry granulated shellac, is placed in the receptacle, as shown at *D*, and melted by means of a blow-pipe. I then insert the toe of the brush-block under the flange *b'* at the toe of the metal back and press the block firmly into the receptacle. Then I compress the sides of the receptacle until the flange overlaps the side edges of the block, as shown in Fig. 5, and, finally, I press the block firmly downward and forward to carry its toe to the farthest limit under the toe of the metal back and to force some of the cement up between the edges of the block and the filling *C* and the sides of the receptacle.

It will be seen that another advantage of the flange *b'*, soldered to the upturned edges *b*, besides leaving an unwrinkled margin around the brush, furnishes a margin which appears to the eye to be a thick edge and one which is capable of receiving considerable ornamentation.

When it is desired to remove an old brush-block to insert a new one, I heat the metal back to soften the shellac, open the sides of the receptacle, and remove the block by first lifting the end thereof nearest the filling.

It is obvious that the filling *C* may be applied at either end of the metal back, provided there is a recess at the other end to receive the appropriate end of the brush-block.

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

1. In a brush, a back having a receptacle 5 for the brush-block, the sides of said receptacle being provided with an inwardly-projecting flange, and a filling at one end of the receptacle under the flange and flush with its edge, substantially as described.
- 10 2. In combination with a brush-back having a hollow handle and a brush-block receptacle, a filling in said handle and extending to a line flush with the edge of said receptacle, substantially as described.
- 15 3. In combination with a brush-block, a back having a receptacle for said block, said receptacle having an inwardly - projecting flange, the distance across the receptacle in-

side the flange being greater than the width 20 of the block and the distance from end to end being less than the length of the block, whereby the block may be fitted by inserting one end thereof under the flange, then pressing the block down and compressing the sides of the receptacle, substantially as described. 25

4. In a brush, the combination of block A, back B, having a receptacle for the block, flange *b'*, filling C, extending into the handle B', and cement D, substantially as described.

In testimony whereof I affix my signature in 30 presence of two subscribing witnesses.

S. WM. BABBITT.

Witnesses:

W. P. D. RICE,

WM. E. STIMSON.