

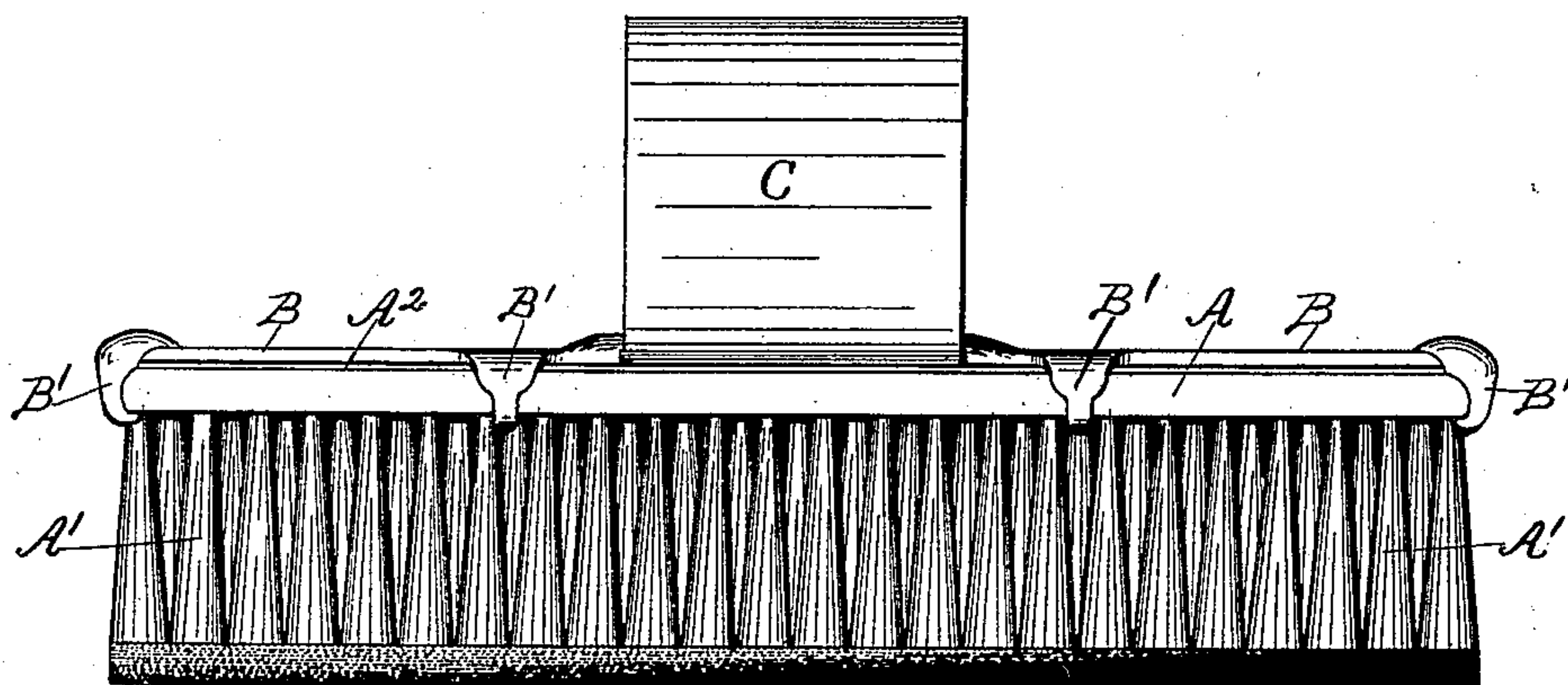
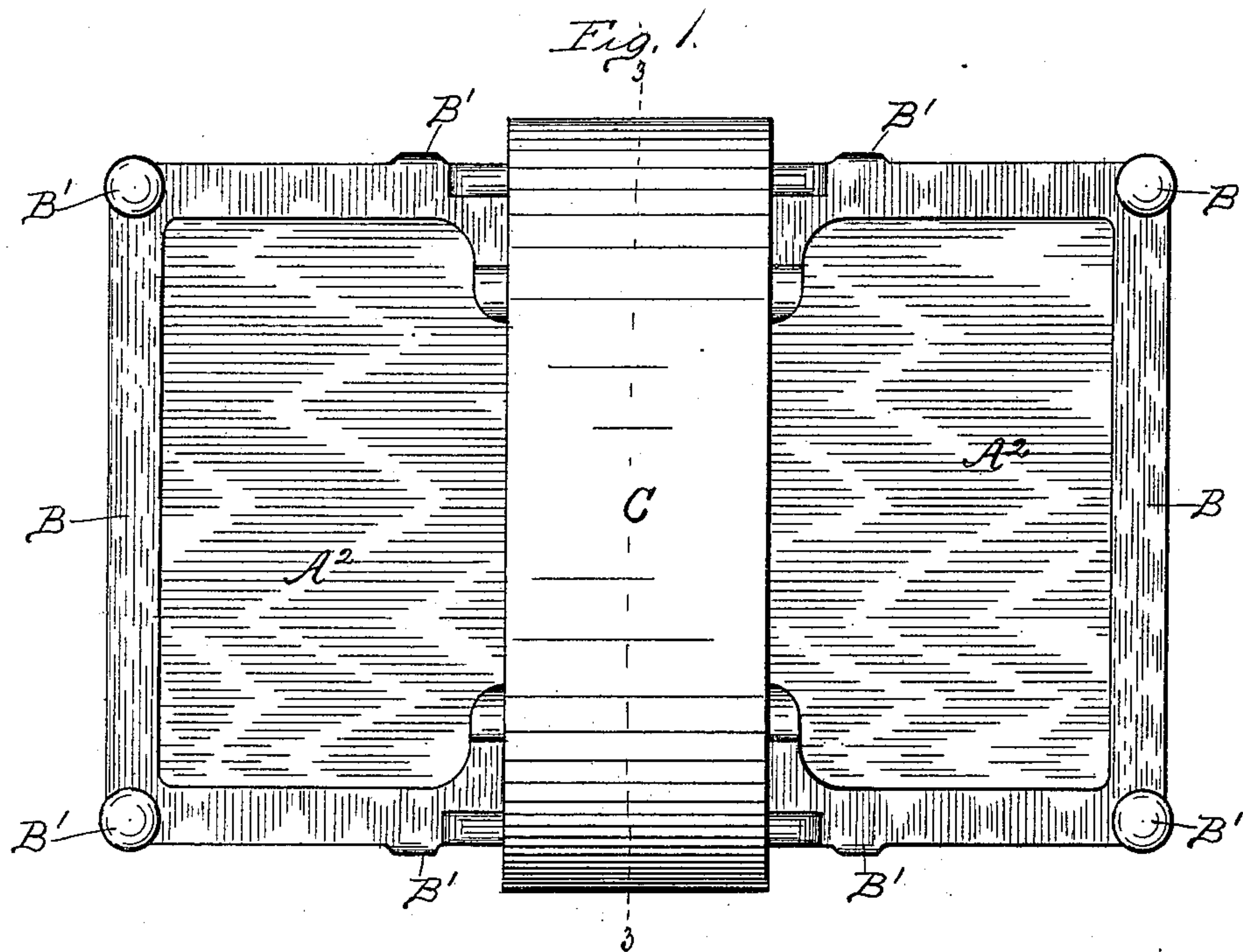
(No Model.)

2 Sheets—Sheet 1.

L. D. GRANT.  
BRUSH.

No. 464,647.

Patented Dec. 8, 1891.



*Fig. 2.*

Witnesses:  
Frank C. Curtis  
John T. Booth

Inventor:  
Lorenzo D. Grant  
by Geo. A. M. M. M.  
att'y.

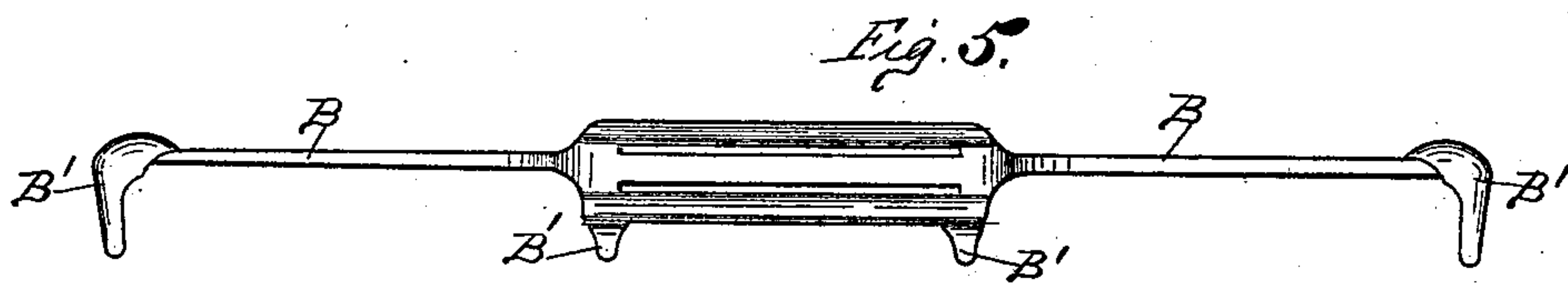
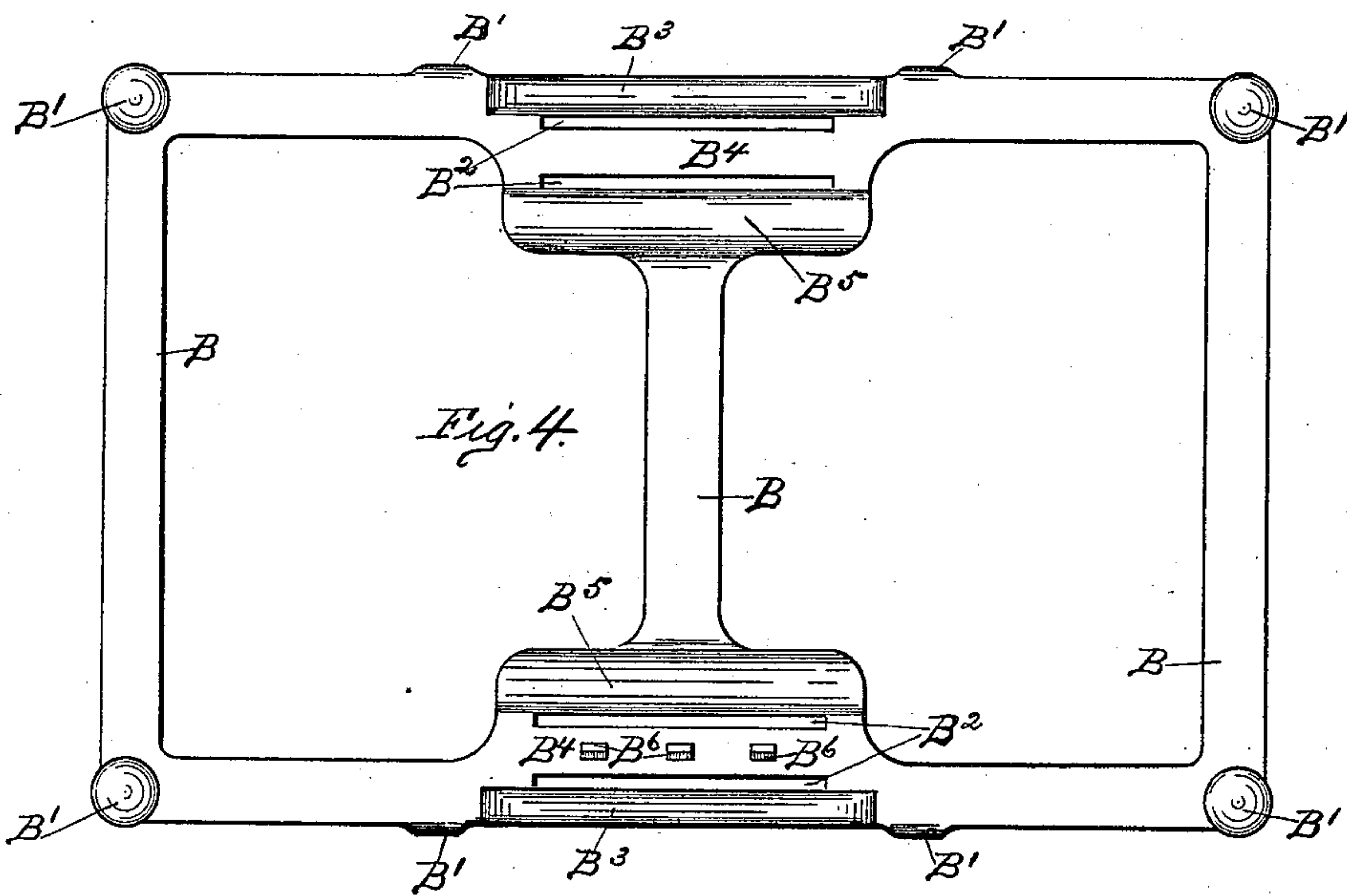
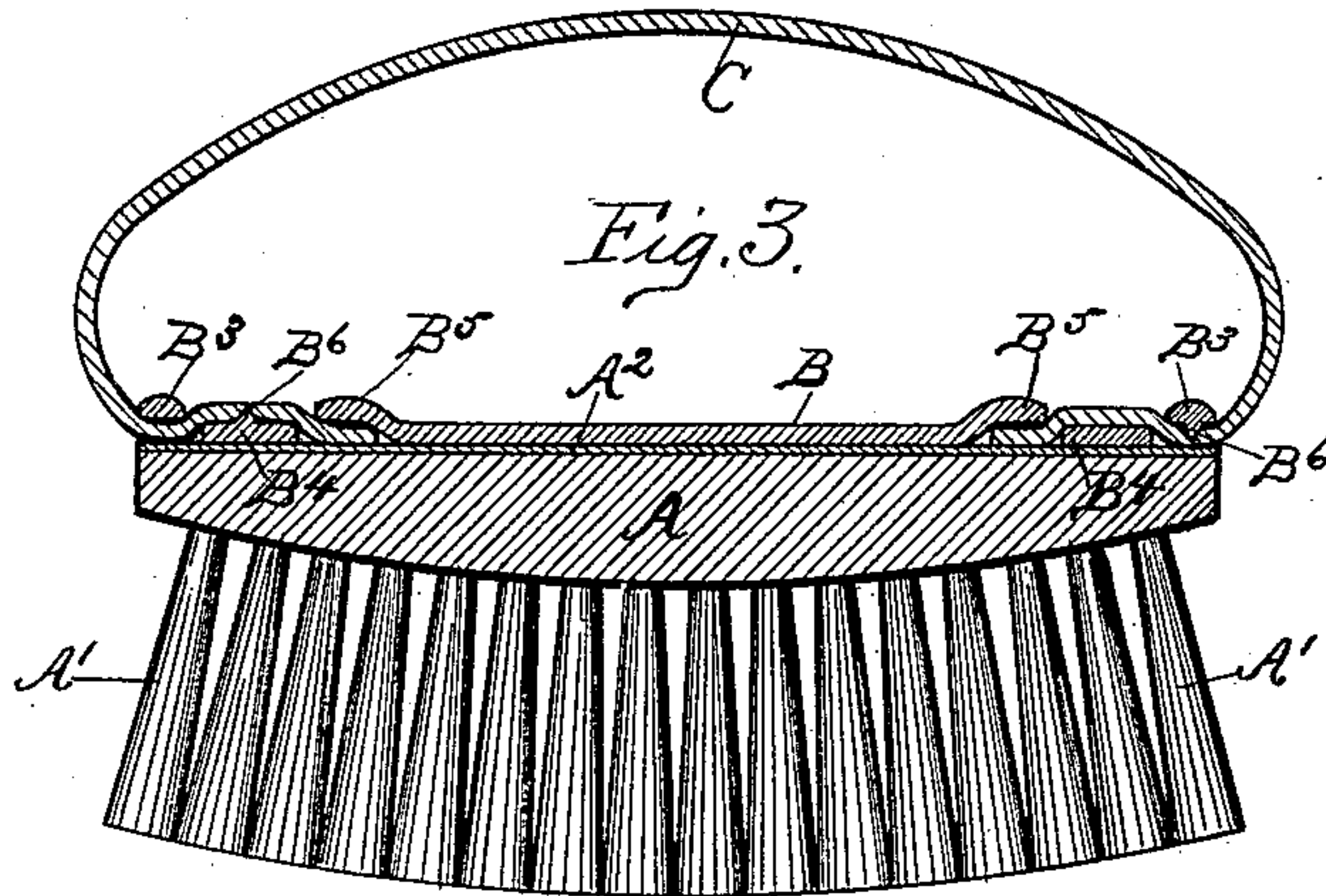
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BRUSH.

No. 464,647.

Patented Dec. 8, 1891.



Witnesses:  
Frank C. Curtis  
John T. Booth

Inventor:  
Lorenzo D. Grant  
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# UNITED STATES PATENT OFFICE.

LORENZO D. GRANT, OF LANSINGBURG, NEW YORK.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 464,647, dated December 8, 1891.

Application filed April 28, 1891. Serial No. 390,761. (No model.)

*To all whom it may concern:*

Be it known that I, LORENZO D. GRANT, a citizen of the United States, residing at Lansingburg, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

My invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a top plan view of my improved brush. Fig. 2 is a view of the same in side elevation. Fig. 3 is a vertical cross-section taken on the broken line 3 3 in Fig. 1. Fig. 4 is a top plan view of the skeleton frame detached from the head-block. Fig. 5 is a view in side elevation of the detached frame, showing a modified arrangement of the handle-attaching slots.

My invention is especially adapted to horse-brushes; and it consists in providing a skeleton frame of malleable cast-iron for securing the handle and back to an ordinary head-block, the object being to cheapen and strengthen the construction and at the same time produce an ornamental finish.

A is the head-block, which may be of any known form or material, with the bristles A' secured in apertures therein.

A<sup>2</sup> is the backing, which may be made of a thin sheet of wood, paper, or other suitable material.

B is the skeleton frame, which is made to conform in general outline with the form of the head-block, and is provided with a plurality of depending lugs B', adapted to be bent in upon the lower side of the head-block to hold the same securely upon the block. The frame is also provided on two opposite sides with the slots B<sup>2</sup> and bars B<sup>3</sup>, B<sup>4</sup>, and B<sup>5</sup>.

The handle C is preferably made of leather or other thin flexible material.

To secure the handle and back upon the

head-block it is only necessary to insert the ends of the handle in the slots, passing the ends under the outer bar B<sup>3</sup>, over the middle bar B<sup>4</sup>, and under the inner bar B<sup>5</sup>, place the back upon the back or upper side of the head-block and adjust the skeleton frame upon the back so that the back and the head-block are inclosed by the lugs depending from the frame, and then bend the lower ends of the lugs in upon the lower or face side of the head-block, thereby tightly securing the back to the block and the leather handle within the slots. When desired the sides of the bars engaged by the handle may be roughened or provided with spurs B<sup>6</sup>, adapted to embed themselves in the leather and resist any tendency of the handle to slip from the slots. When desired, the slots and bars may be formed in a depending portion of the frame adapted to extend down the sides of the brush, as shown in Fig. 5, one or more lugs depending from the lower bar to be bent under the head-block and firmly secure the same in place thereon. I am thus able to secure all the parts in their relative position without the use of glue, rivets, or screws and they will not wear loose. The frame also serves to protect the edges of the head-block and prevent the same from splitting or warping out of shape. In rectangular head-blocks I prefer to have corner-lugs, as shown, which cover and protect the corners of the block and back. The corner-lugs also serve as knockers when the corner or side of the brush is struck upon some solid object to shake the dust from the brush, as is frequently done by horsemen.

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

1. The combination, in a brush, of a head-block, a block-covering back, a metallic skeleton frame having handle slots and bars, a flexible handle having its ends inserted in such slots, and a series of lugs depending from such frame and bent in upon the head-block, substantially as described.

2. In a brush, the combination, with a head-block rectangular in shape, of a metallic frame corresponding in shape with the form of the head-block, and retaining-lugs integral with

such frame and bent down over the corners of the block onto its face side, substantially as described.

3. The combination, with a brush-head  
5 block, of a metallic frame having handle-slots in two of its opposite sides, roughened handle-engaging bars integral with the metallic frame and adjacent to one or more of the handle-slots, a flexible handle having its ends in-  
10 serted in such slots and in engagement with

the bars, and a series of lugs depending from such frame and bent in upon the head-block, substantially as described.

In testimony whereof I have hereunto set my hand this 16th day of April, 1891.

LORENZO D. GRANT.

Witnesses:

GEO. A. MOSHER,

FRANK C. CURTIS.