

No. 828,540.

PATENTED AUG. 14, 1906.

J. DE VERE.  
BRUSH.

APPLICATION FILED MAY 28, 1906.

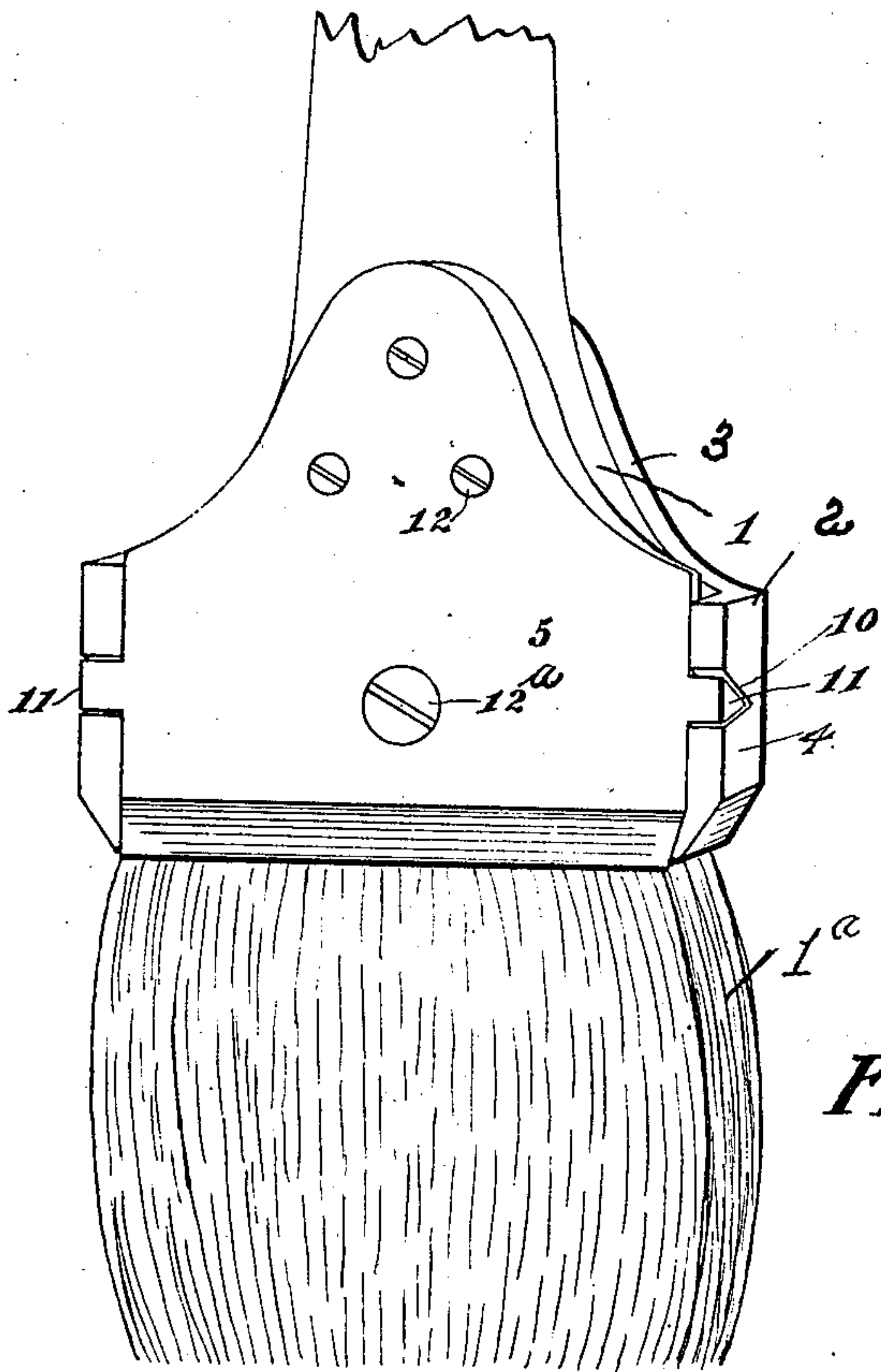


Fig. 1.

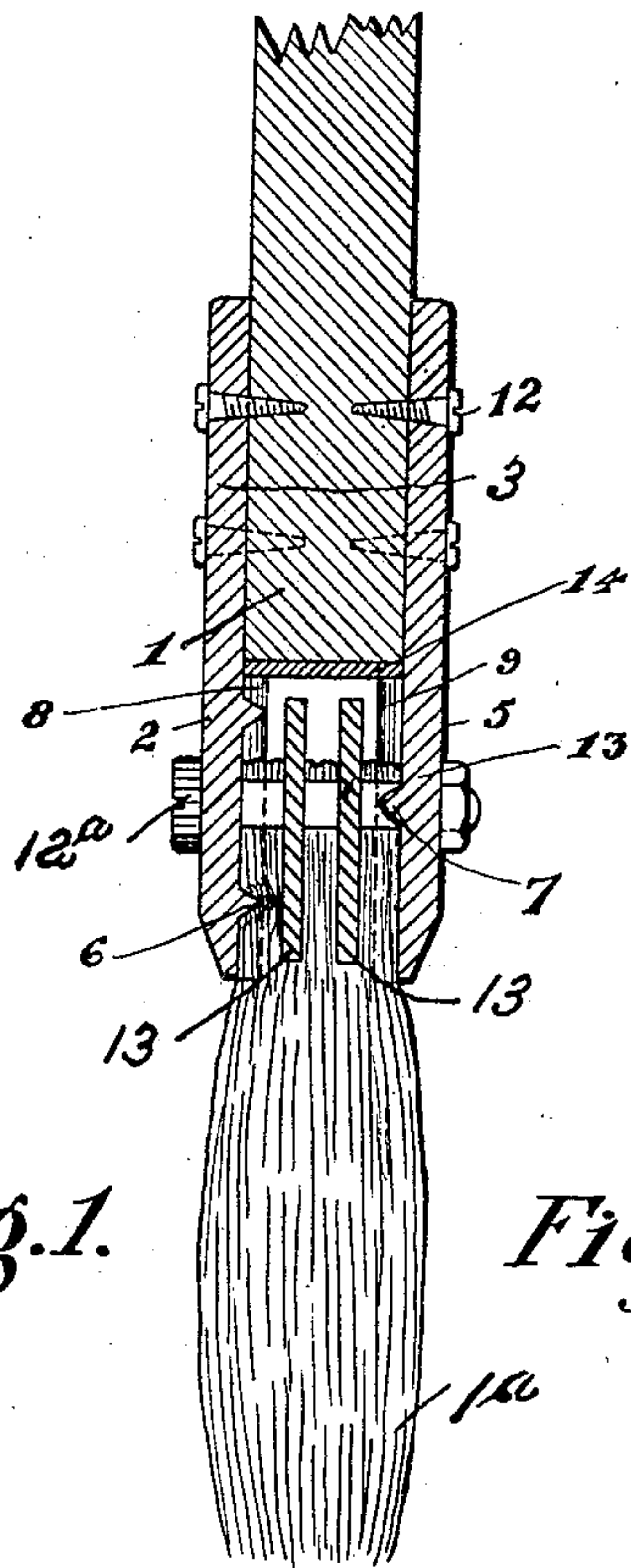


Fig. 2.

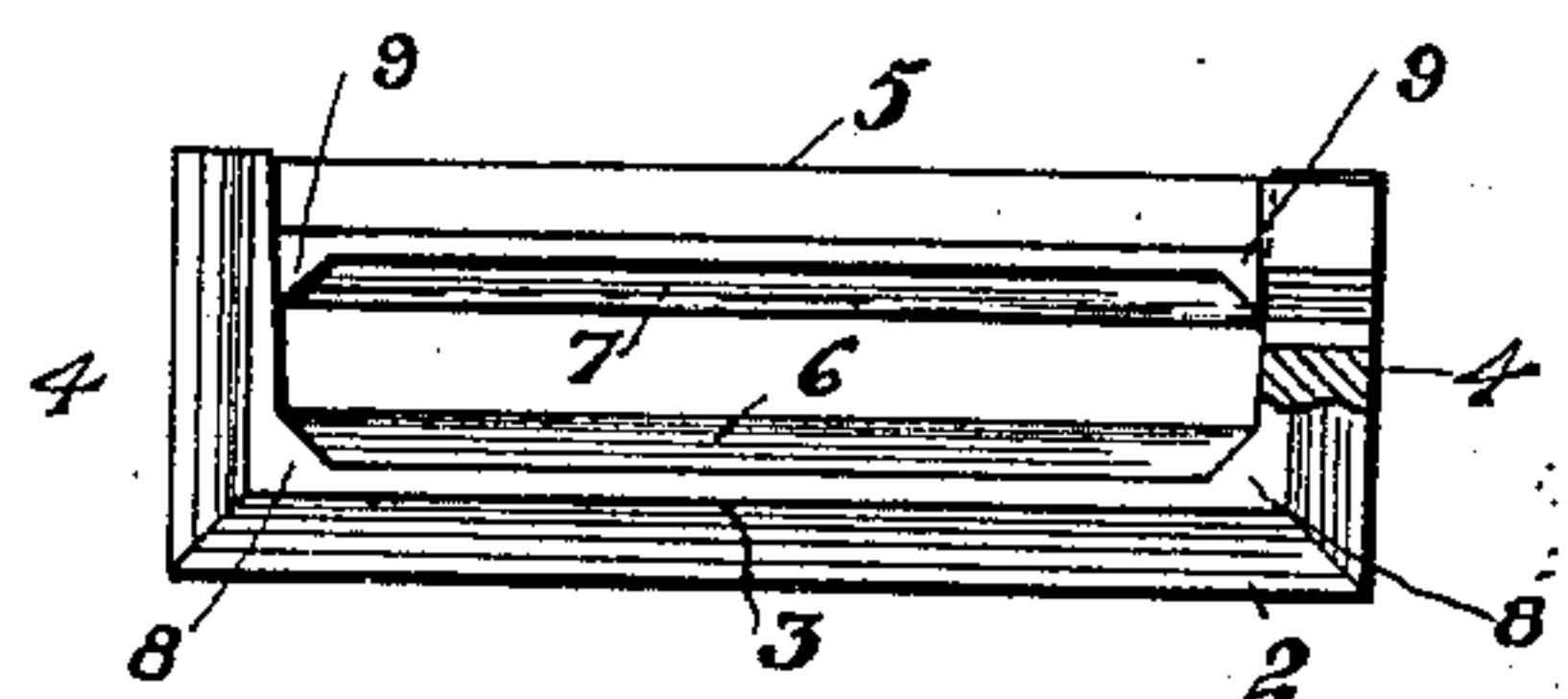


Fig. 3.

WITNESSES.

Brennan West.  
Ludo H. Keller.

INVENTOR.

John De Vere.

By Bates, Gould & Hull, ATTYS.



# UNITED STATES PATENT OFFICE.

JOHN DE VERE, OF BLACKBURN, ENGLAND.

## BRUSH.

No. 828,540.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed May 28, 1906. Serial No. 319,020.

*To all whom it may concern:*

Be it known that I, JOHN DE VERE, residing at Blackburn, in the county of Lancaster, England, have invented a certain new and useful Improvement in Brushes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

My invention relates to brushes, such as are employed by painters, whitewashers, and paper-hangers; and its object is to provide a brush which is particularly simple in construction, highly durable, and very efficient in use, which possesses marked advantages in ease of assembling the parts thereof and in effectiveness in retaining the bristles.

While numerous patents have been issued showing sockets resembling somewhat the one which comprises my invention, so far as I am aware none of these are in extensive use. This is believed to be due to the fact that such constructions have been too expensive of production or inefficient of operation to secure their adoption.

The object of my invention is to provide a socket which shall be free from the objections noted, and may be defined generally as consisting of the combinations of elements embodied in the claims hereto annexed.

Referring to the drawings, Figure 1 represents a perspective view of a brush, showing a socket constructed in accordance with my invention applied thereto. Fig. 2 represents a vertical sectional view through the brush and socket shown in Fig. 1, the upper ends of the bristles being broken away to disclose the inclined ribs, which are formed adjacent to the ends of the socket members; and Fig. 3 is a plan view of the socket-plates 2 and 5 when assembled, one of the side arms being broken away.

The invention includes generally a handle, a bunch of ordinary bristles, and a novel construction of brush-head for holding the bristles and engaging the brush-handle.

In the accompanying drawings the brush-handle is designated 1 and the bristles 1<sup>a</sup>. The brush-head is composed of two metallic castings, one of which (designated 2) includes a part (designated by 3) fastened to the handle by means of screws 12 or like fastening means and a second part extending beyond the end of the brush and provided with lateral extensions, (designated 4,) which have inclined inner faces or inner faces which diverge from the inner face of the main part of

the casting. The second casting is designated 5 and comprises a part secured to the handle, which is complementary to the part of the plate 2 which is secured to the handle, and a part extending beyond the end of the handle and fitted between the diverging faces of the extensions 4.

The plates 2 5, with the extensions 4, provide a four-sided inclosure for the reception of the ends of the bristles, which adjusts itself, to a degree, to bunches of bristles of slightly-varying sizes. One of these members, as member 2, is provided with a plurality of ribs extending transversely thereof and transversely of the direction of the bristles. Two such ribs 6 are shown; but more may be employed, if desirable. The other member 5 is provided with a similar longitudinal rib 7, staggered with respect to the rib 6, whereby when the members are clamped together the bristles are firmly held in the socket. The member 2 is provided with a bevel 8 at the intersection of the inner face of each side arm with the inner face of side 3. Similar bevels are provided at the ends of the member 5.

The side arms 4 are provided with V-shaped notches 10, projecting inwardly from the edges thereof to form guides for similarly-shaped projections 11, carried by the plate 5.

The purpose of the bevels 8 and 9 is to compact the bristles inwardly at the outer edges, giving an efficient shape to the edges of the brush and preventing the bristles from working between the members 5 and 2 when said members are clamped together. A further advantage of the bevels 9 is that they extend the side edges of the cover-plate 5 to a sufficient depth to enable the projections 11 to be formed therefrom in casting, said projections constituting, in effect, an extension of the rib 7. Both members 2 and 5 are provided with suitable holes for the accommodation of a bolt 12<sup>a</sup>, whereby said members may be clamped together at a point beyond the end of the handle 1.

The inclination of the inner faces of extensions 4 is clearly shown in Fig. 3 of the accompanying drawings, and as the bevels 9 extend substantially perpendicular the bristles are compacted at the corners of the bunch toward the center as the bolt 12<sup>a</sup> is tightened to draw the plate 5 toward the plate 2, thereby facilitating assembling and preventing the bristles from working between the outer sides of the ribs 9 and the inner surfaces of the arms 4.



The bristles are preferably inserted in layers, said layers being separated by longitudinal strips 13 of wood or similar material, and the ends of the bristles may be covered with a layer of cement 14 applied thereto.

5 Having described my invention, what I claim is—

10 In a brush, the combination with a handle and bristles, of a brush-head comprising a plate secured to one side of the handle and having a portion extending beyond the end of the handle and provided with lateral extensions at the edges thereof, with diverging inner faces, a second plate having a part com-

plemental to the first plate secured to the handle and a part extending beyond the end of the handle and fitted between the diverging faces of said lateral extensions, and a securing-bolt extending between the portions of the two plates which are located beyond the end of the handle, substantially as described. 15 20

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOHN DE VERE.

Witnesses:

FREDERICK COOK,  
CYRIL DUERDEN.