

(No Model.)

M. APP.

BRUSH.

No. 346,421.

Patented July 27, 1886.

Fig. 1.

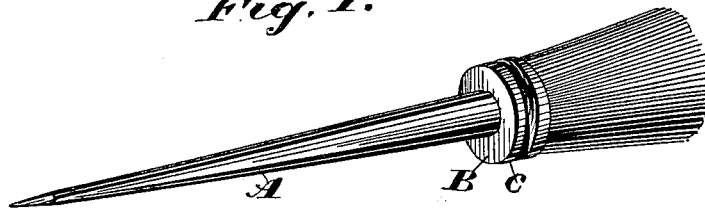


Fig. 2.

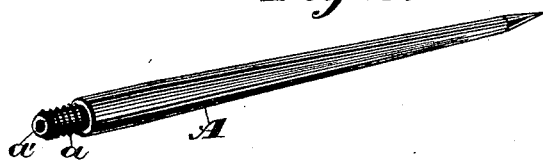


Fig. 3.

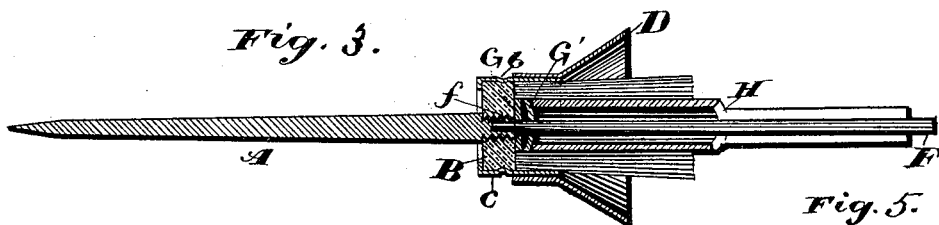


Fig. 5.

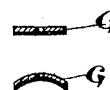
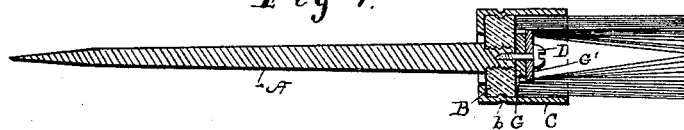


Fig 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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BRUSH.

SPECIFICATION forming part of Letters Patent No. 346,421, dated July 27, 1886.

Application filed February 26, 1884. Serial No. 123,081. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL APP, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful

5 Improvements in Brushes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to improvements in brushes; and it consists in certain features of construction, and in the combination of parts hereinafter described, and pointed out in the claim.

15 In the accompanying drawings, Figure 1 is a view in perspective of my improved brush. Fig. 2 is a view in perspective of the handle. Figs. 3 and 4 are longitudinal sections illustrating the manner of constructing the brushes. 20 Fig. 5 shows views in section of the disks that secure the brush fiber.

A represents the handle of the brush, and has a shoulder and threaded end, *a*, for engaging the head B, and a hole, *a'*, for receiving a 25 wood-screw, as hereinafter shown. The head B is threaded to receive the handle, and may be provided with one or more grooves, *b*, on the periphery thereof. The band C, preferably of brass or copper, is mounted on the head 30 B, and is "spun" into the groove or grooves *b*, and may also be spun over either or both edges of the head. The band C is about flush with the head on the side toward the handle, but extends some distance beyond the opposite 35 side of the head to receive the bristles. The parts thus far assembled are placed with the handle in a vertical position, with the head on top.

40 D is a broad band, more or less flaring or funnel-shaped from the central portion upward, and is slipped on over the band C, as shown in Fig. 3. The part embracing the band C is also a trifle flaring, so that it may easily be placed in position, and when pressed 45 down will firmly embrace the band C and support it.

By means of the band D the bristles are easily placed in position, as shown in Fig. 3.

Next the rod F is placed in position in the center of the bristles, with the small end in the 50 hole *a'*, and the shoulder of the rod resting on the end of the handle, as shown at C, Fig. 3. This rod serves as a guide in placing first the ring or washer G, and next the concavo-convex ring G', that is placed with the con- 55 caved side down or next to the ring G. The ring G is of sufficient size to crowd the bristles out to their place against the band C. The ring G' is of about the same diameter as the ring G, and after it is in position, as shown in 60 Fig. 3, the hollow plunger H is inserted in the brush and brought to bear on the ring G' with such pressure as to flatten the ring down onto the ring G, by means of which the periphery of the ring G' is expanded, binding the bristles 65 so firmly between the edges of the ring G' and the band C that they are rigidly held for all practical purposes. The rod F is removed, and while the pressure is still on the ring G' the screw I is inserted and screwed home, 70 holding the disks and handle together, after which the plunger and band D are removed. It will be seen that no shrinking of the wood-work can loosen the bristles, as they are held, as aforesaid, between metal parts. Brushes 75 are liable to be held in stock for many months; in the meantime those of the ordinary construction sometimes become worthless by reason of the shrinkage of the wood-work, or by the stretching of the twine or wire with which 80 the bristles are secured.

What I claim is—

In a brush, the combination, with a handle, a head, and a band encircling and secured to the head, of a flat ring secured to the head, and 85 a saucer-shaped ring or disk slightly larger, when flattened, than the flat disk, for locking the bristles in position, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 14th 90 day of February, 1884.

MICHAEL APP.

Witnesses:

CHAS. H. DORER,
ALBERT E. LYNCH.