(No Model.)

A. C. WRIGHT.

BRUSH.

No. 493,050. Patented Mar. 7, 1893.

Fig 3.

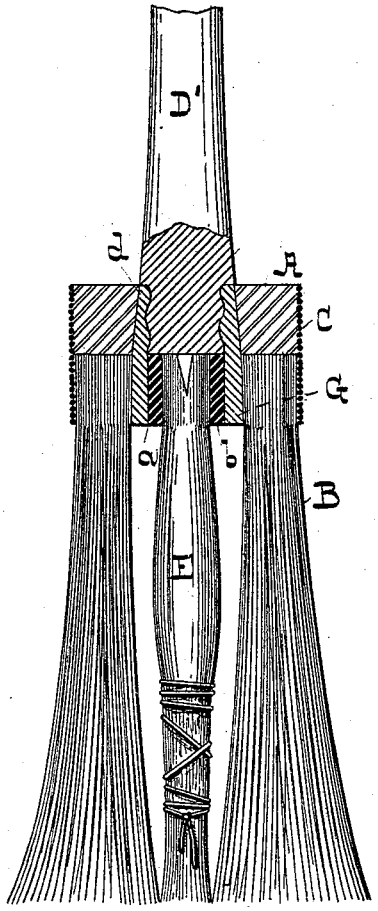


Fig 1.

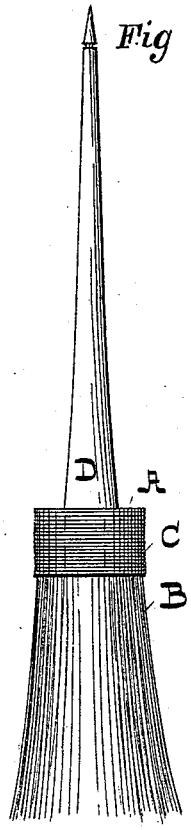
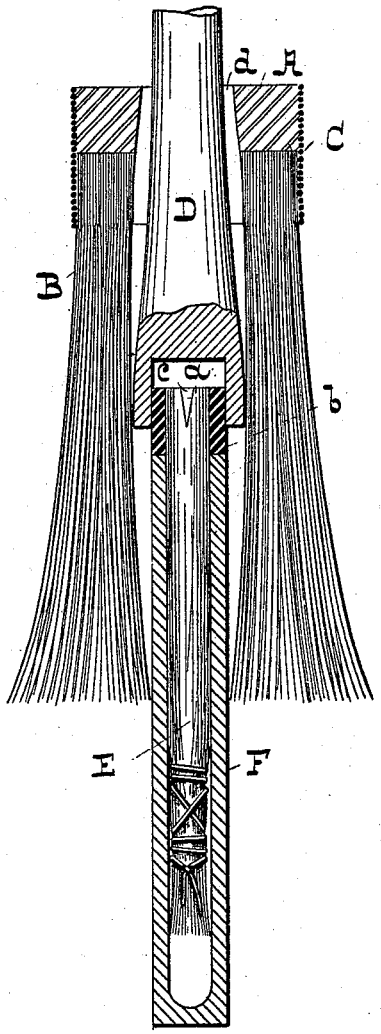


Fig 2.



-WITNESSES-

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UNITED STATES PATENT OFFICE.

ALEXANDER C. WRIGHT, OF BALTIMORE, MARYLAND.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 493,050, dated March 7, 1893.

Application filed June 1, 1892. Serial No. 435,136. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER C. WRIGHT, of the city of Baltimore and State of Maryland, have invented certain Improvements in Brushes, of which the following is a specification.

The object of this invention is to produce what is known to the trade as a "solid" or "full center" paint brush, as will hereinafter fully appear.

In the description of the said invention which follows, reference is made to the accompanying drawings forming a part hereof and in which,—

Figure 1 is an exterior view of the improved brush. Fig. 2 is an enlarged central section of the brush illustrating the method of driving the handle to its place within the head block, and also the manner of attaching the central tuft of the brush to the handle. Fig. 3 is a section similar to Fig. 2, except that a modified construction of the handle is shown.

Referring to Figs. 1 and 2 of the drawings, A is the head block to which the body bristles B are attached in the usual manner.

C is the ferrule applied to the outside of the head block and the body bristles.

D is the handle tapered as usual, the lower or larger end of which is provided with a cylindrical cavity *a* into which the center tuft E is inserted and fastened. Before however the tuft E is inserted in the cylindrical cavity of the handle, the bristles which form the tuft are inclosed in a cylindrical thimble *b* of some soft metal such as lead, and secured by means of a tapering plug *c*. The handle has the usual tapering contour, and the head block a tapering central hole *d* into which the tapering part of the handle is adapted to fit tightly. After the body brush is completed, the thimble with its contained bristles is entered in the cylindrical cavity *a* and the whole inserted in the central hole *d* of the head block from the under side. Before however this is done the bristles of the central tuft are temporarily tied as shown, and over them is placed a tool F the upper end of which comes in contact with the face of the thimble *b*. The tool is then driven which has the effect of forcing the thimble in the central cavity of the handle and "upsetting" or expanding it therein, whereby a tight fit is effected. In this driving operation the handle is also forced to its place within the head block. The tool F is then withdrawn and the bristles of the tuft untied.

A brush constructed as described has however one defect, viz: that the handle may shrink in the head block, and become loose so that it will fall out, and if such displacement of the handle takes place, the bristles of the body also fall out. This defect is entirely obviated in Fig. 3 in which the cavity *a* is formed by placing on the handle an iron ferrule G which projects over the end of the handle D'. In order that the ferrule G may not become loose on the handle, the upper part thereof is threaded and screwed onto the wood. The thread employed to effect this attachment is coarse as shown in the drawings. It will be seen that in both cases the handle has a cylindrical cavity into which the thimble of the center tuft is forced and expanded or "upset" as described, and the only difference between the two constructions, is that in the preferred one, the soft metal thimble is expanded against a metallic wall and the surface of the handle in contact with the head block is a metallic one.

I claim as my invention—

1. In a paint brush of the description set forth, the handle provided with a cylindrical cavity and the center tuft with a soft metal thimble which is inserted in the said cavity and expanded or "upset" therein, substantially as specified.

2. In a paint brush of the description set forth, the handle provided with a metal ferrule which projects beyond the end of the wood thereby forming a cylindrical cavity, and the center tuft with a soft metal thimble which is inserted and expanded in the said cavity, substantially as specified.

3. In a paint brush of the description set forth, the wood handle having an internally threaded ferrule screwed thereon which projects beyond the end of the wood, whereby a cylindrical cavity is produced, and the center tuft with a soft metal thimble which is driven into the said cavity and expanded therein, substantially as specified.

ALEXANDER C. WRIGHT.

Witnesses:
WM. T. HOWARD,
DANL. FISHER.