J. L. Whiting,

Paint Brush.

No. 107,742. Patented Sept. 27, 1870.

Fig. 1.

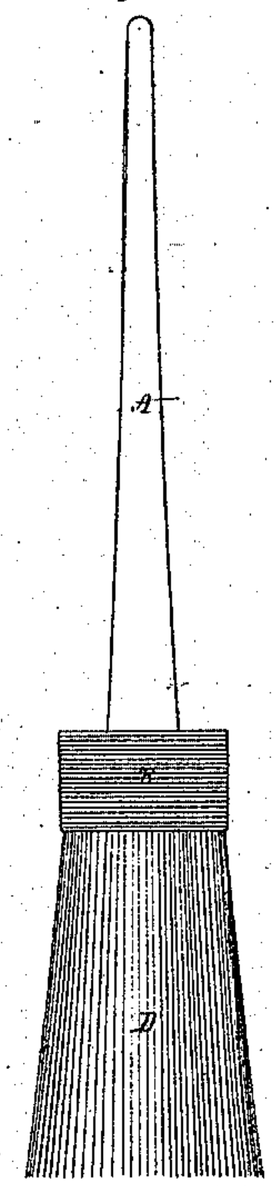


Fig. 5.

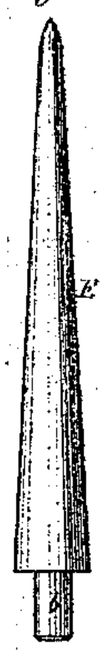


Fig. 3.

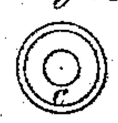
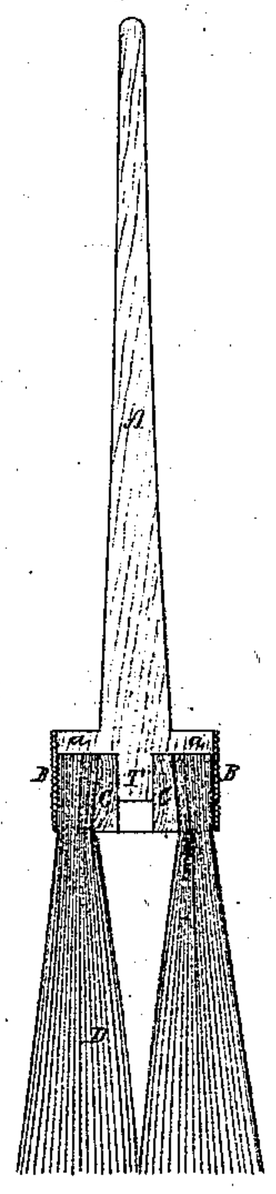


Fig. 4.

Fig. 2.



Witnesses.

S. N. Piper

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UNITED STATES PATENT OFFICE.

JOHN L. WHITING, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **107,742**, dated September 27, 1870.

To all whom it may concern:

Be it known that I, JOHN L. WHITING, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Brushes; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side view, and Fig. 2 a longitudinal section, of one of my improved brushes. Fig. 4 is an end view, and Fig. 3 a side view, of the conical expander. Fig. 5 is a side view of the "introducer," or device used in inserting the expander in a mass of bristles when placed within a ferrule.

The handle A of the said brush is furnished with a head, *a*, to receive a ferrule, B. From this head a round, or cylindrical, or prismatic tenon, T, is extended in manner as represented, it being designed to receive a conical expander, C, which is a frustum of a cone bored axially to receive and fit upon the tenon.

In the process of making the brush, the mass D of bristles should first be inserted in the ferrule B a suitable distance, after which the conical expander should be placed on the tenon *b* of a tapering or conical introducer, E, formed as shown in Fig. 5, the tenon *b* being inserted into the expander at its smaller end. The expander having been arranged on the introducer, as described, the latter is to be inserted smaller end foremost into the mass of bristles at the end thereof which is farthest from the ferrule and be forced into and through the mass, so as to expand the mass into the ferrule, and leave the expander in its proper position within the mass and ferrule. Next, the handle A should be inserted and fixed in the ferrule, and in or to the expander, the head *a* entering the ferrule, and the tenon T going into the expander. For this purpose cement may be used to conjoin the parts, or they may be fastened together by one or more screws or other proper devices. The expander may screw directly upon the tenon; or, in other words, the latter may screw directly into the expander.

I am aware that in making a brush it has been customary to have a tapering expander extend from the handle with the base of the expander toward and fixed to the handle or its head, the same being as represented in the United States Patent No. 39,439, dated August 4, 1863, and reissued on December 15, 1868, such patent having been granted to me. In the brush shown in such patent the expander is driven into the mass of bristles at its upper end, whereas in my present brush the expander enters the mass at its lower end, or that farthest from the ferrule, and is driven up toward and into the ferrule, and subsequently is fastened to the handle by being fixed upon a tenon or projection therefrom, as described, the whole operating to very strongly fasten the bristles within the ferrule and to the handle, and the latter to the ferrule, the expander serving as a wedge or dovetail to aid in holding the bristles to the ferrule.

In another application for a patent recently made by me and allowed, the expander is represented as inserted and fixed in the handle. Consequently I do not here intend to claim such, having claimed it in such application.

What I herein claim as my present invention is—

The connection or tenon T with the expander C, as shown, in combination with the handle A, cap or head *a*, ferrule B, and bristles D, all as constructed and represented.

JOHN L. WHITING.

Witnesses:
R. H. EDDY,
S. N. PIPER.