

J. S. WHITE.

Brushes.

No. 135,053.

Patented Jan. 21, 1873.

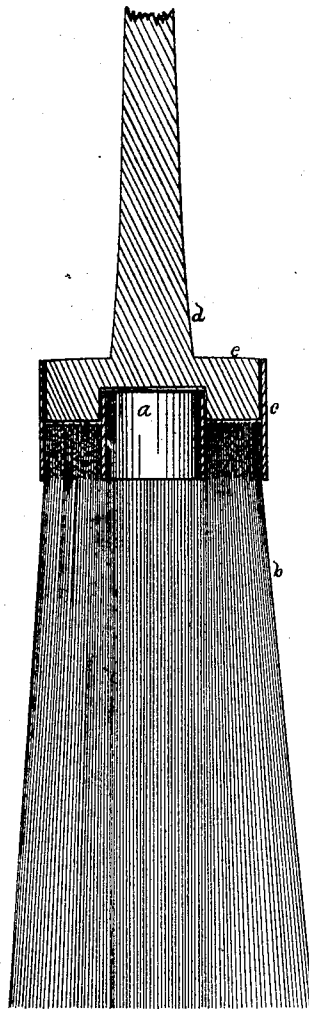


Fig. 1.

Witnesses:

John E. Coffin
Nathan Wood

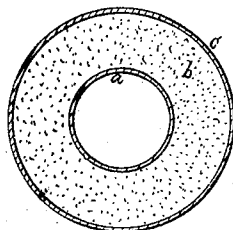


Fig. 2.

Inventor:

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UNITED STATES PATENT OFFICE.

JOHN S. WHITE, OF PORTLAND, MAINE.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. 135,053, dated January 21, 1873.

To all whom it may concern:

Be it known that I, JOHN S. WHITE, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Brushes; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which is hereby made a part of this specification, in which—

Figure 1 is a vertical longitudinal section of a brush having my improvement. Fig. 2 is a top view of the same with the handle removed.

Same letters show like parts.

The object of my invention is to so improve that class of brushes which are made of bristles or other filaments attached to a handle that they will not become loose upon the handle, as must be the case where the bristles are bound directly upon the wooden handle, as wood, however thoroughly seasoned, will, in process of time, shrink away from them; and also to prevent the brush from wearing swallow-tailed or leaking.

Brushes such as are used by painters, either of the round or oval varieties, have heretofore been made with a wooden handle, tapering from the end where the bristles are attached upward toward the grasp; and as the bristles or filaments are bound directly upon the wood the result of the shrinkage, which must occur, even in the best-seasoned woods, is to loosen the attachment of the brush or bristles to the handle; and as the handles are so tapered the outer ends of the bristles or filaments diverge from each other outward, and thus leave the middle of the brush hollow, which gives rise to the very common fault in these brushes in wearing "swallow-tailed," as it is technically called.

My improvement, which obviates these difficulties, consists in using the tube *a*, Fig. 1, (which may be closed at the upper end to form a thimble, if desired,) around which the bristles or filaments of the brush are arranged,

this tube or thimble being made of any suitable metal to obviate the shrinkage heretofore mentioned. This tube or thimble projects a short distance above the butts of the bristles, while the outer binding-ferrule *c*, Fig. 1, is placed tightly around the whole brush, and projects, as shown, higher even than the tube *a*, Fig. 1. This arrangement of the tube *a*, Fig. 1, the bristles *b*, and outer ring or ferrule *c* forms a socket for the wooden handle *d*, the butt of which is made of the form shown at *e* to fit the recess so made, in which it is firmly held by nails or brads driven through the outer ring or ferrule *c* into the handle *e*.

I thus obviate the difficulties heretofore named, and also provide a very useful receptacle for the paint or other material in which the brush is used, as the interior of the tube or thimble *a* becomes a reservoir, which, when the brush is dipped, becomes filled with the paint or other fluid, and as the material taken up by the filaments of the brush is expended this reserve quantity held in the reservoir goes down to supply them.

A brush made as I describe, with my improvement, is very firm in its ferrule, and will wear in the best possible form; and has also the additional advantage of requiring to be dipped far less frequently than a brush made in the ordinary manner.

In case any other form of brush than round is made the tube or thimble may be made of a form to correspond to the form of the brush, as oval, &c.

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

The combination, in either a round or oval brush, of the handle *d*, ferrule *c*, bristles *b*, and tube *a*, as shown in the accompanying drawing, in the manner and for the purposes as hereinbefore set forth.

JOHN S. WHITE.

Witnesses:

D. W. SCRIBNER,
F. E. JORDAN.