

J. L. WHITING.
BRUSHES.

No. 179,438.

Patented July 4, 1876.

Fig. 1.



Fig. 2.

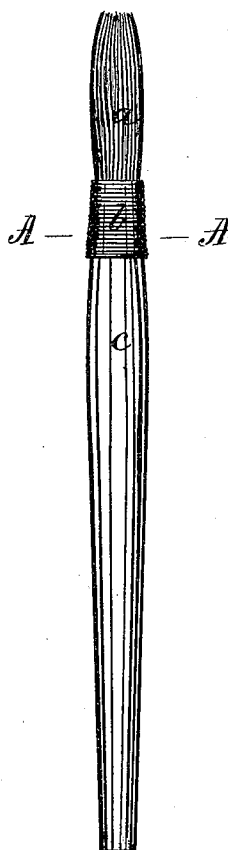


Fig. 3.



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UNITED STATES PATENT OFFICE

JOHN L. WHITING, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **179,438**, dated July 4, 1876; application filed August 24, 1875.

To all whom it may concern:

Be it known that I, JOHN L. WHITING, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Brushes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in brushes the wrapping or ferrule, as well as a part of the handle, of which is pressed out of a circle subsequent to its application to the brush, by which I am able to confine the bristles more firmly in the ferrule, on account of the circular shape of the ferrule, inclosing within it a larger area than the oval shape, into which it and the yielding body of the bristles are pressed subsequent to its application to the brush.

My improved brushes are made with wire ferrules, which would not allow of their being squeezed together in their extreme upper ends only, as by such a process a few coils of wire only would be formed oval, whereas the remaining part of the ferrule would continue to be circular, and consequently the ferrule would be liable to be broken, besides forming a very bad-looking brush.

To obviate this difficulty, and to be able to manufacture a graceful flattened or oval brush, with an oval handle nearest to the ferrule, I subject the whole length of the ferrule, and part of the soft-wood handle, to an external pressure from two opposite sides, by which I am able to manufacture a handsome and durable oval or flattened brush from a circular one, at a small cost as compared with the making of oval handles and oval ferrules previous to the putting together of these parts to the bristles for the formation of a brush.

By this my invention I am able to change any circular brushes that may be kept on hand to oval or flattened ones at a very short notice, by which I am able to keep less manufactured stock on hand than if I was obliged to keep a separate lot of round and of oval brushes.

The advantages of having a flattened or oval handle where it is held by the operator for a flat or oval brush are, first, that such a brush can be held firmer when it is being used; and, secondly, it allows of the bristles being held in a more parallel direction, by which the efficacy and durability of the brush is increased, as compared with oval ferrules and round handles.

In the drawings, Figure 1 represents a side elevation of my improved brush. Fig. 2 represents an end view, and Fig. 3 represents a top view, of the flattened ferrule.

a represents the bristles, and *b* represents the wire ferrule, of a brush. *c* represents the handle. The brush is originally made circular, and after being so made it is subjected to external pressure from two opposite sides, *A A*, Fig. 2, on the whole length of the ferrule, and a part of the handle nearest to the ferrule, by which I am able to produce a brush, as shown in the drawings, having a flattened or oval ferrule on the whole of its length, as well as a flat or oval handle.

What I wish to secure by Letters Patent, and claim, is—

A brush the ferrule or wrapping, as well as a part of the handle, of which has been pressed out of a circle subsequent to its application to the said brush, substantially as and for the purpose set forth and described.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

JOHN L. WHITING.

Witnesses:

ALBAN ANDRÉN,
JOS. TORREY.