

D. WHITE.
Brush.

No. 215,032.

Patented May 6, 1879.

Fig. 1.

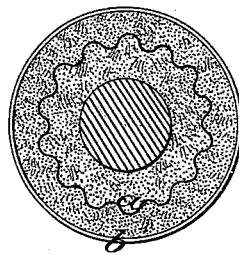
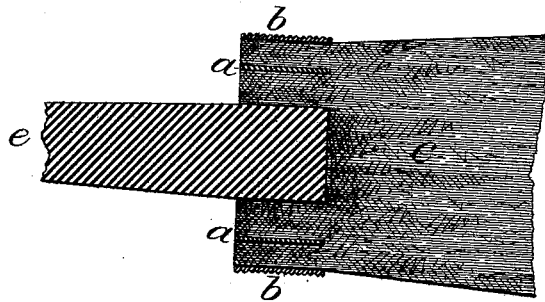


Fig. 2.

Attest:

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DARIUS WHITE, OF PORTLAND, MAINE.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **215,032**, dated May 6, 1879; application filed August 26, 1878.

To all whom it may concern:

Be it known that I, D. WHITE, of Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Brushes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a partial central section. Fig. 2 is a top view of the brush.

The object of my invention is to produce an improvement in brushes whereby the bristles are more firmly held within the outer band or ferrule than by the methods now in common use. This improvement also imparts the desired form or appearance to the bristles when applied to the brush.

The outer ferrule or band is made of an unyielding material, as common. The inner band or ferrule, on the contrary, is so made as to yield or stretch or expand when the handle *e* of the brush is driven to its place. With this view, I make the inner band or ferrule, *a*, with corrugations, wrinkles, or indentations, as shown in the drawings.

The outer or rigid band or ferrule, *b*, encompasses the outside of the body of the bristles *c* at the butt. The inner band or ferrule, *a*, is placed within the bristles at the top end or butt a certain distance from the inside of the outer ferrule, *b*, and at a certain distance also from the butt of the handle. The butt of the bristles fills both the spaces between the inner and outer ferrules and the inner ferrule and

the handle. The handle of the brush being driven in in the ordinary way, and the inner ferrule expanding by reason of its construction, the bristles are wedged and held with firmness and with a uniform force within the entire compass of the outer ferrule. This yielding inner ferrule acts as an inner wedge or filling piece, and, being expansible, binds the bristles and sets them to place as the handle is driven in.

It is manifest that the inner ferrule will yield as the handle is driven in, when the bristles are thin, and so hold them at that point; but where the bristles are thick and solid, so as to resist the pressure of the handle, the expansion will not take place.

The inner band also serves to give the brush an even and regular shape, which is very desirable. Such shape may be given to the inner band as will correspond to a round, square, or triangular brush, or to one whose handle is flat or oval.

The corrugated inner band has the advantage over others of expanding as the brush-handle is driven in without strain on the strength of its material.

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

In a brush, as described, the inner corrugated band, *a*, applied in the manner and for the purposes herein described.

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

D. WHITE.

Witnesses:

WILLIAM HENRY CLIFFORD,
FREEMAN HANSON.