J. F. BOWDITCH.

BRUSHES.

No. 182,406.

Patented Sept. 19, 1876.

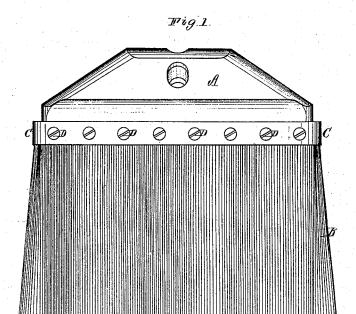
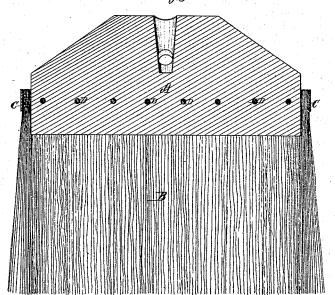


Fig.2.



Fig.3.



John F. Bowditch

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UNITED STATES PATENT OFFICE.

JOHN F. BOWDITCH, OF BRAINTREE, MASSACHUSETTS.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. **182,406**, dated September 19, 1876; application filed June 17, 1876.

To all whom it may concern:

Be it known that I, John F. Bowditch, of Braintree, of the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Whitewash-Brushes; and do hereby declare the same to be fully described in the tollowing specification and represented in the accompanying drawings, of which—

Figure 1 is a side view, Fig. 2 a transverse section, and Fig 3 a longitudinal section, of a brush of my invariant

brush of my improved kind.

In whitewash-brushes, as usually made, it is often very difficult, owing to the usual contraction and expansion of the block, to keep the bristles from coming out or becoming loose.

My improved brush has means of tightening the bristles, or increasing their hold to the stock or block, as occasion may require.

The brush is composed of a wedge-shaped block or stock, a quantity of bristles extending around it, a metallic hoop encompassing them, and a series of clamp-screws going transversely through the said stock, the mass of bristles, and the hoop, and being screwed into the latter or provided with nuts.

In the drawings the block or stock is shown at A, the mass of bristles at B, the encompassing hoop at C, the series of screws at D D, and their nuts at E, all being arranged

as represented.

In making the brush, the mass of bristles and the hoop encompassing them, and duly charged with cement, are to be placed within a metallic clamp or slotted plate, and held firmly by means of a vise, after which the stock is inserted and driven down into the mass the requisite distance. Next, the screws are to be passed through holes made in the stock and the hoop, and the nuts are to be screwed upon the threads of the screws, so as to firmly contract the hoop or band upon the mass of bristles, and draw them closely together and up to the stock. The clamp should be provided with holes, for the ready introduction of the screws into the brush, and the

due application of the nuts to such screws, while the brush may be held in the clamp.

From the above it will be seen that, should any of the bristles in any part of the mass work loose, the screws and nuts will afford ready means of tightening them; or, should they not be sufficiently tight to prevent what is termed "leakage of the brush," they can easily be made tighter.

I am aware that bristles have been held to a stock by a band and series of nails or tacks, and therefore I do not claim such, they affording no ready means of tightening the bristles, and, besides, are very liable to work loose and cause the brush to shed its bristles.

I do not claim a brush in which the bristles are held by separate bars and screw-bolts and nuts, arranged as shown in the United States Patent No. 92,154. Nor do I claim a brush composed of straw splints and a series of narrow strips of wood or metal, provided with bolts and nuts, all being as shown in the United States Patent No. 129,944, as in neither of the said brushes are the bristles circumscribed by a hoop, to support them at the ends as well as at the sides. Nor is there in such brushes any wedge-shaped stock, to be driven into the mass of bristles to spread such within and to the hoop. Nor do I claim a brush head or body constructed of a piece of metal cut and folded, and provided with screws and nuts, all as shown in the United States Patent No. 54,284, such brush having no hoop to encompass, nor wedge-shaped stock to enter, the mass of the bristles, as in my improved brush.

I claim—

As an improved manufacture, the brush, substantially as described, composed of the wedge-shaped stock A, the mass B of bristles, the metallic hoop C, and the series of clamp-screws D and nuts E, all arranged and applied essentially as set forth.

JOHN F. BOWDITCH.

Witnesses:

R. H. EDDY, J. R. SNOW.