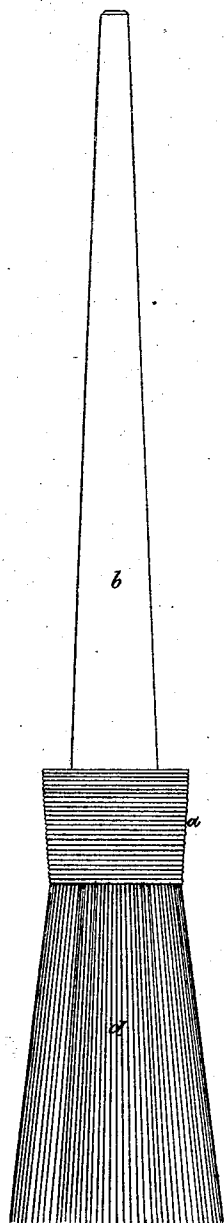


John L. Whiting's Improvement in Brushes.

116382

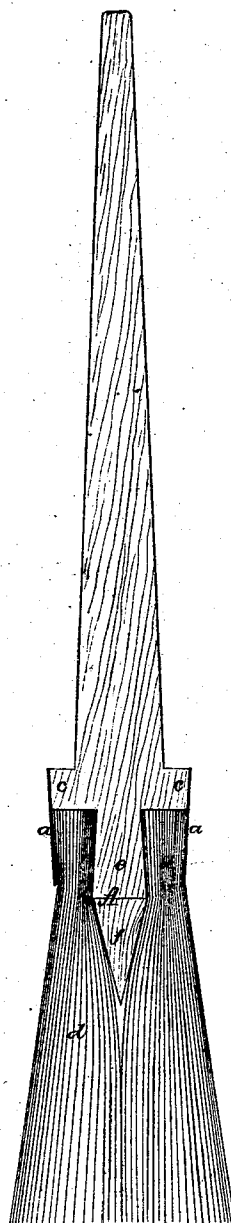
PATENTED JUN 27 1871

Fig. 1.



Witnesses.
S. N. P. per
L. N. Molen

Fig. 2.



John L. Whiting
by his attorney
N. May

UNITED STATES PATENT OFFICE.

JOHN LAKE WHITING, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. 116,382, dated June 27, 1871.

To all whom it may concern:

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

Figure 1 is a side view, and Fig. 2 a longitudinal section of one of my improved brushes.

The said brush is analogous to that which constitutes the subject of Letters Patent No. 39,439, dated August 4, 1863, and reissued December 15, 1868, and granted to myself, my present improvement having special reference to that part of the brush which in such patent is termed the wedge-point or cone.

In my present mode of making a brush I construct such wedge-handle projection in two separate parts, one of which is fixed firmly to and projects from the handle or its head, and the other is separate, and is a cone, pyramid, or wedge, as the case may require.

The brush exhibited in the drawing is what is usually termed a "round brush"—that is to say, it has a tubular ferrule, *a*, in the form of a conic frustum, and, moreover, its handle *b* is provided with a cylindrical or slightly-tapering head, *c*, to enter such ferrule and stop or close its upper end, and constitutes an abutment to rest against the top of the mass *d* of stock or bristles. The projection for expanding the mass of bristles in the ferrule is shown at *A* as consisting of a conic frustum, *e*, united at its lesser base to the head *c*, and also of a cone, *f*, separable from such frustum, and having a base disposed against and corresponding in size with or about with the outer base of the frustum *e*. The part *e* may be cylindrical or prismatic, but I prefer to have it as a frustum, arranged with its lesser base in conjunction with the head *c*, because in such case it will admit, after being forced into a mass of bristles within a ferrule, *a*, contraction of the mass toward the axis of the frustum, as well as an expansion of it in an opposite direction. The portion of the mass of bristles which will be in the ferrule will, with the conic frustum, become dovetailed, as it were, in the ferrule all around the frustum, the cement used in the mass serving to keep it expanded, and with the ferrule and frustum operating to prevent the bristles from being drawn out of place.

In making the brush the cone is used only in the light of an introducer, to effect entrance of the frustum into the mass of bristles, such being accomplished by applying or arranging the cone-base foremost against the base or free end of the frustum or part *e*, and next forcing the whole point foremost into the mass of bristles previously inserted in the ferrule. The whole is to be advanced into the mass until the head *c* may have sufficiently entered the ferrule, it being understood that cement has been previously applied to the parts to be expanded and connected. Finally, the cone is to be drawn out through the mass of bristles.

I herein make no claim to a brush made as represented in my said patent; nor do I herein claim one constructed as shown in the United States patent 107,742, dated September 27, 1870, and granted to me, the handle of the latter brush being made or provided with a head having a tenon to receive a conical expander or frustum.

I have also to remark that I herein make no claim to a brush constructed as represented in either of the United States patents Nos. 106,492, 108,420, granted to me, as in the case of the brush as exhibited in the first of these last-mentioned patents the expander or bristles-expanding projection is separable relatively to the handle, and inserted in the bristles in the direction opposite to that in which the part *e* of my brush is entered therein. In the brush as shown in the patent 108,420 the expander forms part of the handle and is separate from the wooden cap of the ferrule; whereas in my present brush the expander or projection *e*, the cap *c*, and the handle are in one piece, and inserted in the bristles, and at the upper end thereof, by means of the separable introducer or point *f*.

What, therefore, I claim is—

The improved brush, constructed and having its parts arranged substantially as hereinbefore described and as shown in the drawing, the portions *e* and *c* being either permanently connected to or in one piece with the handle, and introduced into the ferrule and the butt of the mass of bristles by the aid of a separate cone or pivot, *f*, all as explained.

JOHN LAKE WHITING.

Witnesses:

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