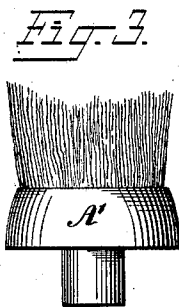
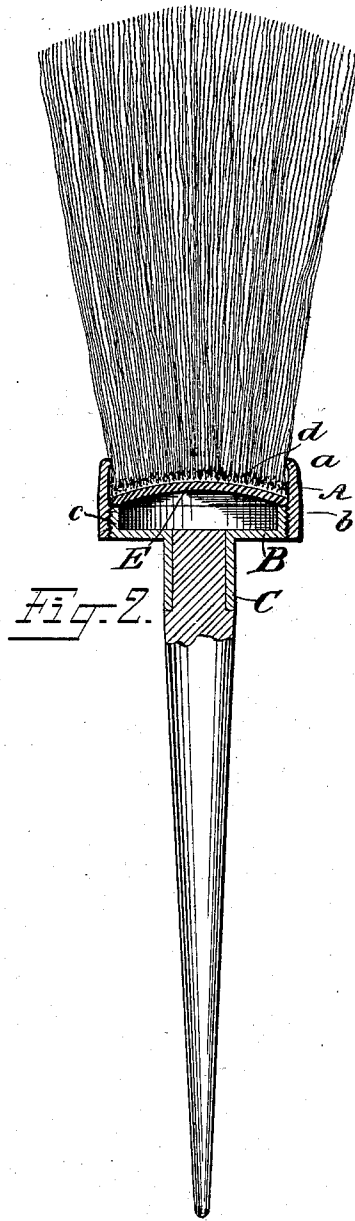
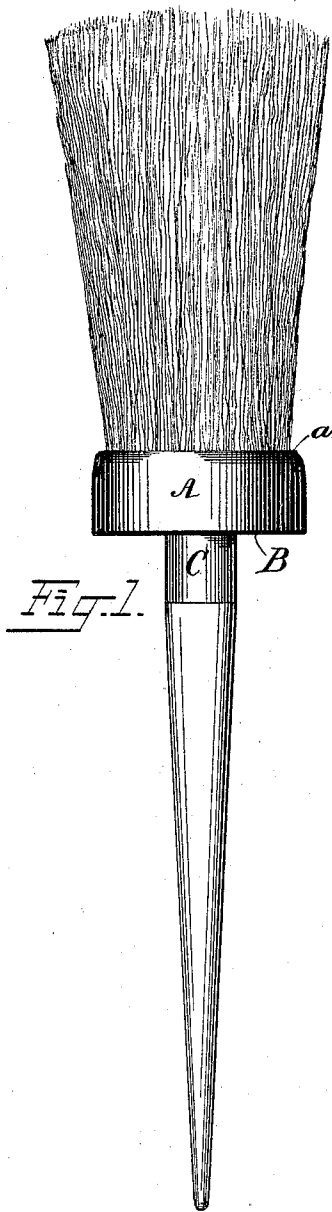


(No Model.)

L. A. LIGHTENHOME.
BRUSH.

No. 605,230.

Patented June 7, 1898.



WITNESSES:

O. C. Winge
J. B. Clautice

INVENTOR

Lavine A. Lightenhome
BY
Thomas D. Weston
ATTORNEY

UNITED STATES PATENT OFFICE.

LAVINE A. LIGHTENHOME, OF OLNEY, PENNSYLVANIA.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 605,230, dated June 7, 1898.

Application filed October 18, 1897. Serial No. 655,566. (No model.)

To all whom it may concern:

Be it known that I, LAVINE A. LIGHTENHOME, a citizen of the United States, residing at Olney, Philadelphia county, in the State of Pennsylvania, have invented a certain new and useful Improvement in Paint and Varnish Brushes, of which the following is a specification.

This invention relates to that class of paint and varnish brushes in which the bristles are secured in a tapered ferrule and the handle bears and is secured in the thimble of a disk cap upon the annular threaded flange of which the ferrule is adapted to screw.

In my improved brush the bristles are held by cement in the presence of a concavo-convex disk operated upon by the threaded flange of the cap, the disk in this instance serving the dual function, first, of uniformly spreading and wedging the cement among the bristle-butts for holding them individually and collectively, and, second, the outer brush portion possessing the desired rounding without the necessity for special trimming. In this arrangement the brush is both solid and mellow.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is an elevation of a paint-brush constructed in accordance with my invention. Fig. 2 is a vertical sectional elevation of so much of the same as is necessary to illustrate more immediately the provision for securing the bristles; and Fig. 3 is an external view of a portion of a brush, illustrating a modification.

Like letters of reference refer to corresponding parts throughout the several figures where they occur.

Referring to Figs. 1 and 2, A designates a metal ferrule which holds the bristles and which terminates in an abrupt inward turn or contraction *a* at the smaller end and is internally screw-threaded at its larger end *b*.

The cap B, which has the rear thimble C for the reception of the handle, is integrally provided with a forwardly-extending flange *c*, externally threaded to permit the ferrule to be screwed thereon.

E indicates a concavo-convex disk of approximately the diameter of the ferrule A and adapted to bear at its edge on the flange *c*.

In constructing the improved brush the requisite quantity of bristles are introduced in a loose condition into the ferrule, so that the butts will be level with the rear edge (the larger end) of said ferrule. The cement *d* is then applied and permitted to slightly set to secure the bristles in a composite mass, which is caused to move inwardly to a slight extent by drawing on the brush portion proper. This latter operation results in securing a space at the rear of the ferrule for the introduction of the disk E, after which the ferrule is screwed onto the flange *c*, causing the latter to force the disk and cemented bristles forwardly within the ferrule, the tapering form of the latter resulting in the compression of the cemented mass and the thorough and uniform distribution of the cement into a number of minute wedges of cement.

While the tapering form of the ferrule secures the desired compression of the cemented bristles, the latter are sufficient in bulk to lodge behind the contraction *a*, which thus constitutes a barrier against the bristles being pulled from the ferrule even when subjected to great strain.

In Fig. 3 I have shown a ferrule A' of a slightly-different shape—*i. e.*, curved as well as tapering to impart to the working end a shape suitable for a varnish-brush.

I claim as my invention—

1. In a brush, the combination with a cap having a handle, of a tapered ferrule having an abrupt contraction *a*, at its smaller end, and adapted for engagement with a portion of said cap, bristles having their cemented butts within said ferrule, and a concavo-convex disk interposed between the cap and mass of cemented butts, substantially as herein specified.

2. In a brush, the combination with a cap having a handle and provided with an externally-threaded flange *c*, of an interiorly-threaded tapered ferrule in engagement with the flange, bristles having their cemented butts within said ferrule, and a concavo-convex disk E, bearing on the flange and exerting a pressure on the mass of cemented bristles, substantially as herein specified.

LAVINE A. LIGHTENHOME.

Witnesses:

W. H. BURGER,
J. J. HOPPER.