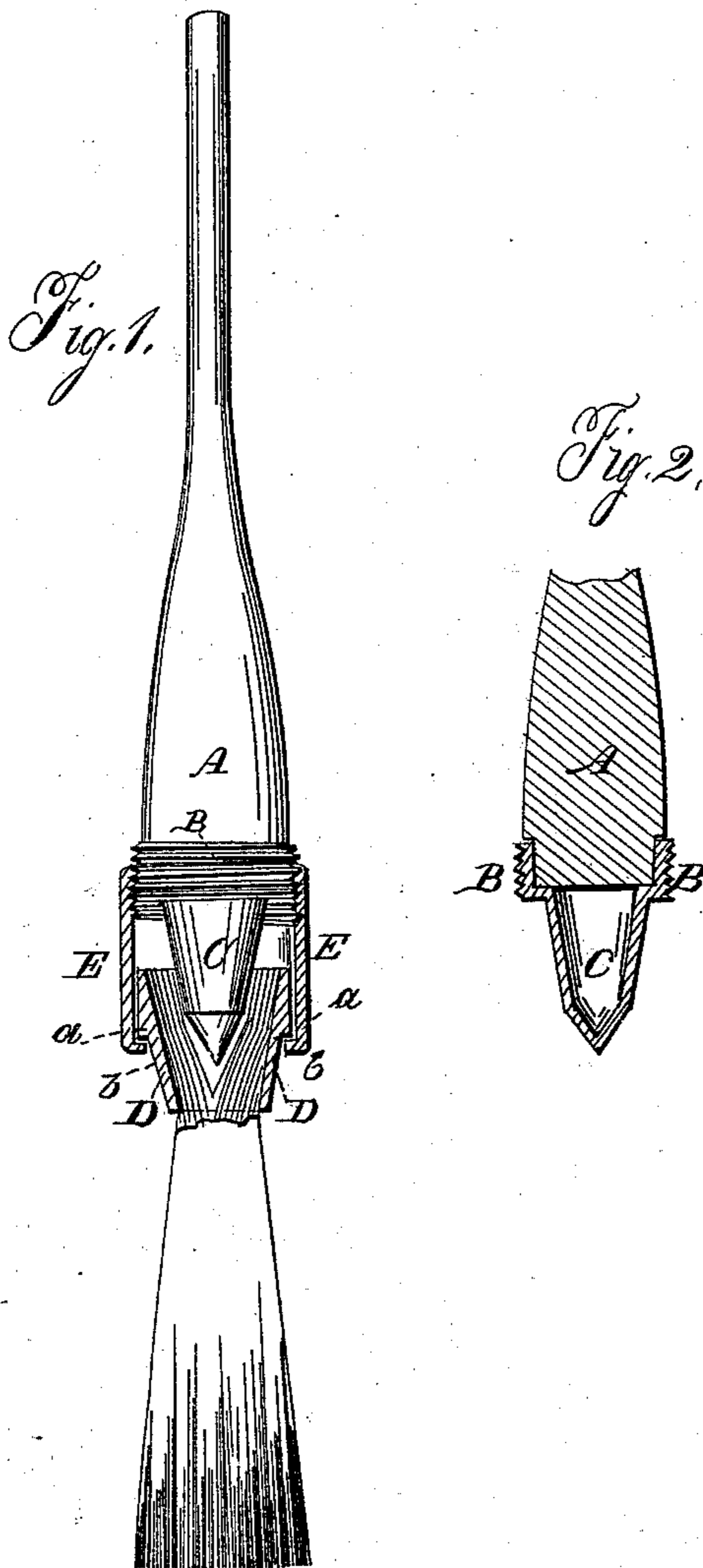


J. M. ESTABROOK.

Paint Brush.

No. 70,182.

Patented Oct. 29, 1867.



Witnesses:  
Theo. Tinsche  
J. M. Estabrook

Inventor:  
J. M. Estabrook,  
Per Munn & Co.  
Attorneys

# United States Patent Office.

JOSEPH M. ESTABROOK, OF MILFORD, MASSACHUSETTS.

*Letters Patent No. 70,182, dated October 29, 1867.*

## IMPROVED PAINT-BRUSH.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH M. ESTABROOK, of Milford, in the county of Worcester, and State of Massachusetts, have invented a new and improved Paint-Brush; 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 make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a central sectional view of my improved brush.

Figure 2 is a section of the handle.

Similar letters of reference indicate corresponding parts.

This invention relates to a new manner of connecting the bristles of paint and paste-brushes with the handle of the same; and its object is to so arrange the devices by which the bristles are held that the bristles are firmly clamped, by a conical ring, against the outside of a wedge, projecting from the handle, without the use of cement or other similar material, and so that the bristles can be secured to the handle by any person not experienced in brush-making.

The devices are also so arranged that the bristles need not come in contact with wooden surfaces, so that they will not be loosened by the shrinking or contracting of the wood.

A represents the handle of a paint or paste-brush. B is a ferrule formed around its lower end, as shown. C is a conical pin projecting from the lower end of the handle. A screw-thread is formed around the outside of the ferrule, as shown. D is a ring, of sheet metal or other suitable material, of somewhat conical shape, provided with a flange, shoulder, or stud, *a*, around its rim. E is a ring, made of sheet metal or other suitable material, provided with a flange, shoulder, or stud, *b*, on the inside.

The upper ends of the bristles are put into the ring D, and the latter is then let into the larger ring E, so that it is suspended from the flange *b* by means of the flange *a*. The ring E is provided with internal screw-thread, and fits the ferrule B, and is then screwed upon the ferrule. The conical pin C is thereby forced into the bristles, and the ends of the bristles are clamped between the pin C and the inside of the ring D, as is clearly shown in fig. 1. The more the ring E is screwed up, the tighter will the bristles be held, and thus a brush can be retained in good order, even if some bristles have been lost.

It is very easy to secure bristles in this holder, and the same may, therefore, be used for bristles of various kinds, it not requiring any skill to unfasten and replace the same.

The cone C can be made part of the handle A, or it can be made of hard rubber or other suitable material, but I would prefer to make it of sheet metal, and stamp it from the same plate from which the ferrule B is stamped, as is clearly indicated in fig. 2. Thereby the bristles are brought in contact only with metallic surfaces, and the brush will therefore not be injured by swelling, when in water.

I claim as new, and desire to secure by Letters Patent—

1. The arrangement of the rings D and E, having flanges or studs or shoulders *a* and *b*, respectively, and being combined with the handle A, having the ferrule B and conical pin C, all made and operating substantially as herein shown and described.

2. Making the ferrule B and pin C of one piece of sheet metal, substantially as herein shown and described.

JOS. M. ESTABROOK.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.