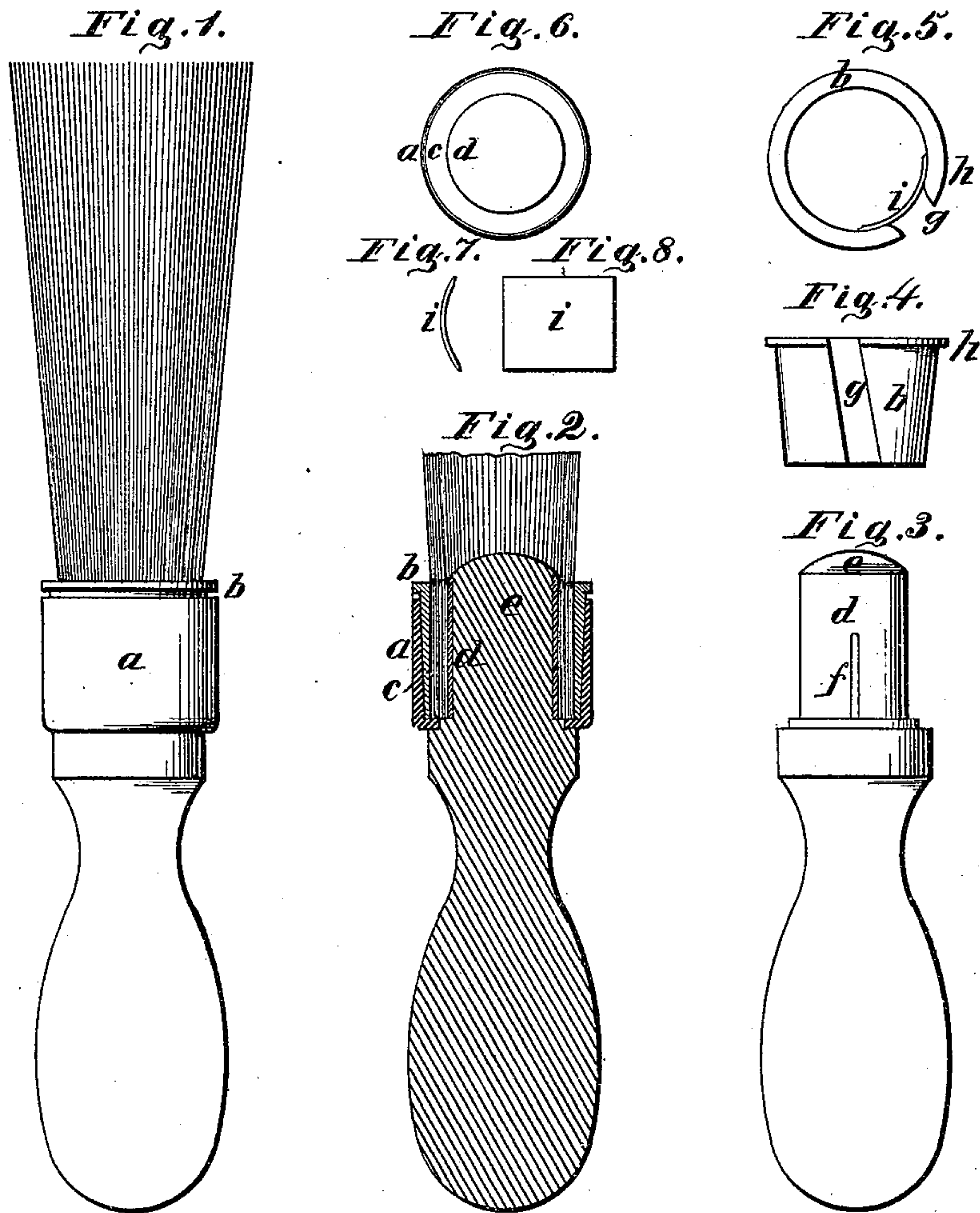


L. ABBOTT.

Brushes.

No. 133,347.

Patented Nov. 26, 1872.



Witnesses:  
Geo E. Furwood,  
John A. Knight.

Inventor.  
Lew Abbott.

# UNITED STATES PATENT OFFICE.

LEVI ABBOTT, OF LEWISTON, MAINE, ASSIGNOR TO HIMSELF, ISAAC C. DAY, AND THOMAS F. DAY, OF SAME PLACE.

## IMPROVEMENT IN BRUSHES.

Specification forming part of Letters Patent No. 133,347, dated November 26, 1872.

*To all whom it may concern:*

Be it known that I. LEVI ABBOTT, of Lewiston, county of Androscoggin and State of Maine, have invented a new and Improved Method of Making Brushes, of which the following is a specification:

My invention relates to the construction of brushes of any desired form or shape by the use of a metallic thimble, ferrule, key, and disk; as shown and described in the annexed drawing.

Figure 1 shows a front view of the brush.

Fig. 2 shows a sectional view of the same, giving the different parts used in its construction—viz., the metallic ring or thimble *a*, the metallic ring or key *b*, the space for bristles or other material at *c*, the metallic ferrule *d*, and stem of the handle *e*.

Fig. 3 shows the handle of the brush with the ferrule *d* attached and slotted, as at *f*. The object of the slot *f* is to allow the ferrule *d* to contract when the key *b*, Fig. 4, is driven home, thereby causing it to impinge on the wood, and firmly securing the ferrule to the handle.

Fig. 4 is the metallic ring or key *b*, and slotted as shown at *g*. This ring or key serves two purposes—viz., as a fastening for the bristles or other material, and also secures the ferrule *d* to the handle. It operates in the fol-

lowing manner: The thimble *a* and key *b* have corresponding tapers, which cause *b* to contract when forced into position, as shown in Fig. 2, the slot *g* allowing room for that purpose, thereby firmly securing the bristles or other material, and at the same time forcing the slotted end of the ferrule *d* into the wood of the handle, and holding the same in a perfectly secure manner.

Fig. 5 is a top view of Fig. 4, showing the flange *h* and application of the metallic disk *i*, Figs. 7 and 8, to cover the slot *g* in the key *b*, Fig. 4, when in use.

Fig. 6 shows the position of the thimble *a* and ferrule *d*, forming the space for the bristles or other material.

Figs. 7 and 8 show the metallic disk *i*, Fig. 5, used to cover the slot *g* in the ring or key *b*, Fig. 4, for the purpose of preventing the bristles or other material from filling the slot *g* to prevent its contracting.

I claim as my invention—

The combination of the thimble *a*, the ferrule *d*, the key *b*, and the metal disk *i* in their application to the manufacture of brushes.

LEVI ABBOTT.

Witnesses:

GEO. E. SHERWOOD,  
JOHN A. KNIGHT.