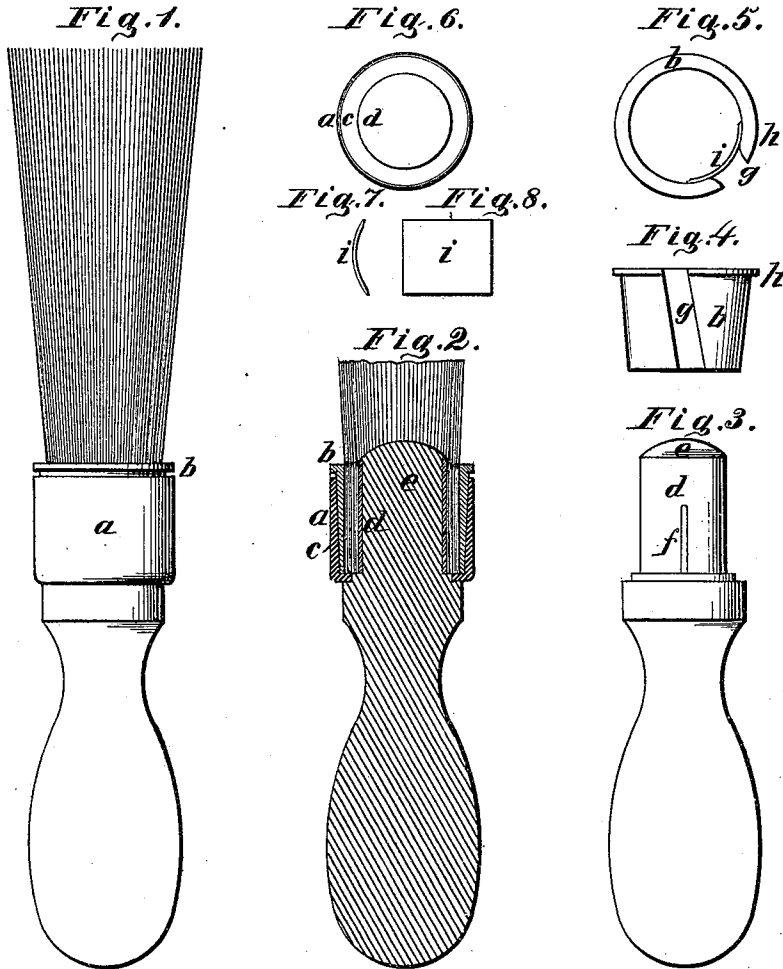


L. ABBOTT.

Brushes.

No. 133,347.

Patented Nov. 26, 1872.



Witnesses:
Geo E. Ironwood.
John A. Knight.

Inventor.
Levi 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.