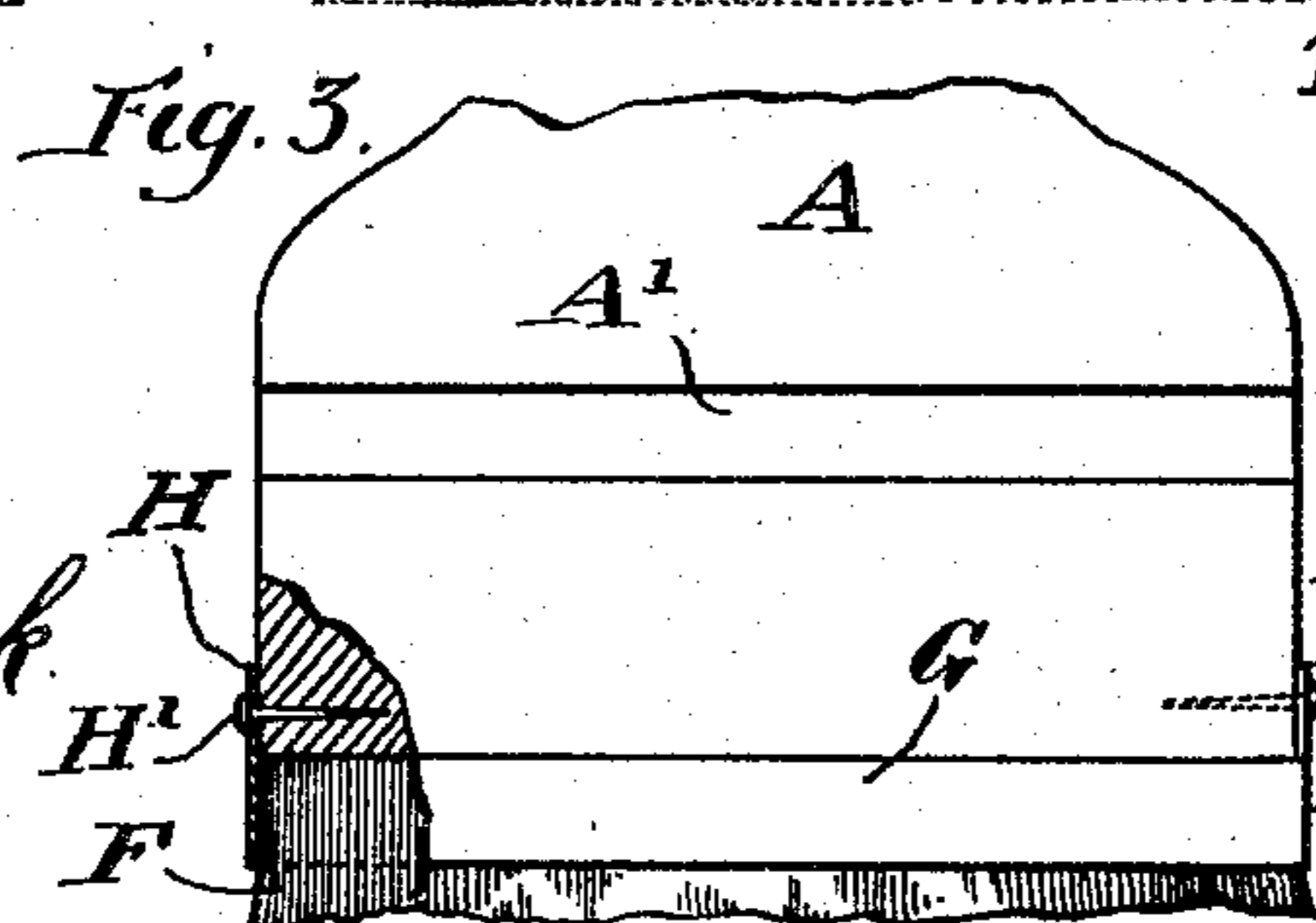
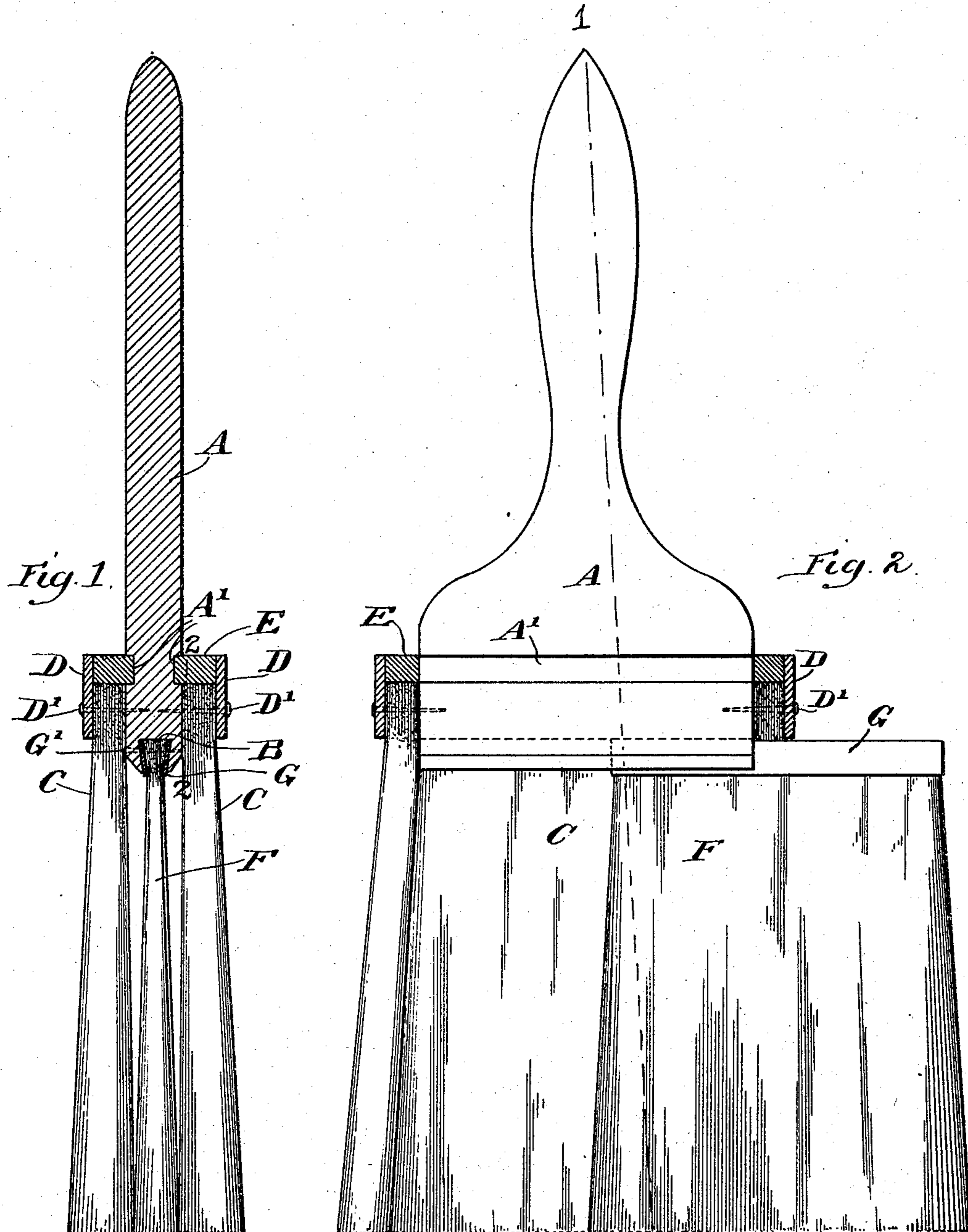


No. 782,580.

PATENTED FEB. 14, 1905.

W. REESE.
BRUSH.

APPLICATION FILED DEC. 23, 1903.



Witnesse:

H. B. Hallock.
L. H. Monson

Inventor.

William Reese

Wm. P. Williams
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM REESE, OF PHILADELPHIA, PENNSYLVANIA.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 782,580, dated February 14, 1905.

Application filed December 23, 1903. Serial No. 186,271.

To all whom it may concern:

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

My invention relates to a new and useful improvement in brushes, and has for its object to construct a brush of that class known to the trade as "solid-center" brushes, in which the central bristles are held securely in place and may be easily inserted in the center of the brush.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical cross-section through my improved brush, the section taken on the line 1 1 of Fig. 2; Fig. 2, a vertical section taken at right angles to Fig. 1, showing the central portion about to be inserted in the brush, the section taken on line 2 2 of Fig. 1; Fig. 3, a side elevation of the handle portion and a portion of the central bristles, showing a modified form of attaching the central bristles to the handle.

It is a well-known fact that solid-center brushes possess advantages over other brushes having hollow centers, and I am also aware that certain manufacturers make a brush with a solid center, and one in particular of which I am aware. The ends of the central bristles are cemented in a straight slot formed in the inner end of the handle.

My invention consists in first binding the butts of the central bristles and then inserting the butt-ends thus bound within a dovetail groove in the inner end of the handle of the brush, thus securing the bristles in place.

In the drawings, A represents the handle of the brush, the inner end of which is made in

the usual manner with the grooves A' upon each side for the cement. The extreme inner end of the handle has formed therein the dovetail groove B, extending from one edge of the handle to the other.

C represents the bristles placed around the outside of the handle.

D is the strip of leather or other material surrounding the butt-ends of the bristles C and secured to the handle by nails D', which pass through the strip D, also through the bristles C into the handle A. The inner end of the handle A extends sufficiently far into the brush to provide for the groove B being entirely below the strip D.

E is the usual filling of cement for securing the butt-ends of the bristles C in place.

F represents the central bristles, arranged in a flat bunch, the butt-ends of said bristles being surrounded by a binding of metal or other suitable material G and cemented within said binding. As the butt-ends of bristles are always larger than any other portion of the bristles, the binding when bound tight around the bristles will incline at the sides toward the outer end of the bristles and converge toward one another. Thus the binding will be of such a form in cross-section as to slide and fit easily within a dovetail groove B of the handle A, and thus in manufacturing the brush after the bristles C have been secured in place it is only necessary to separate the bristles C upon one edge of the brush and insert the binding G, surrounding the bristles F, within the groove B and slide the same into place. Then, if necessary, said binding can be secured to the handle by nails G' or any other means desired. It will thus be seen that as the butt-ends of the bristles F are larger than any other portion of the bristles in diameter and said butt-ends lying at the bottom of the dovetail groove B the bristles F cannot be pulled out of place without splitting the wood away from each side of the groove B.

In Fig. 3 I have shown a modified form of construction in which the inner end of the handle A is made flat, and the central bristles F after being bound with the binding-strip G are merely

placed against the flat surface on the inner end of the handle A and secured in place by means of ears H extending from the binding-strip G upon each edge of the handle and
5 nails or screws H' passing through said ears into the handle.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from
10 the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

1. In a brush, a handle, bristles, the butt-ends of which are secured around the outside
15 of the handle, a central group of bristles, a binding surrounding the butt-ends of said central group of bristles independent of the handle, and said bristles cemented within the binding, the sides of the binding-strip inclining
20 inward toward one another and toward the end of the bristles, and means for securing

the binding-strip to the inner end of the handle, as specified.

2. In a brush, a handle, the handle provided with a dovetail groove extending from one edge
25 to the other of the same, bristles secured around the outside of the handle, a central group of bristles, a binding-strip surrounding the butt-ends of said central group of bristles, the top edges of the sides of said binding-strip being
30 wider apart than the bottom edges of the strip, said binding-strip adapted to fit and slide within the dovetail groove of the handle, as specified.

In testimony whereof I have hereunto af-
35 fixed my signature in the presence of two subscribing witnesses.

WILLIAM REESE.

Witnesses:

FRANKLIN R. MAXWELL,
HANS WENIGER.