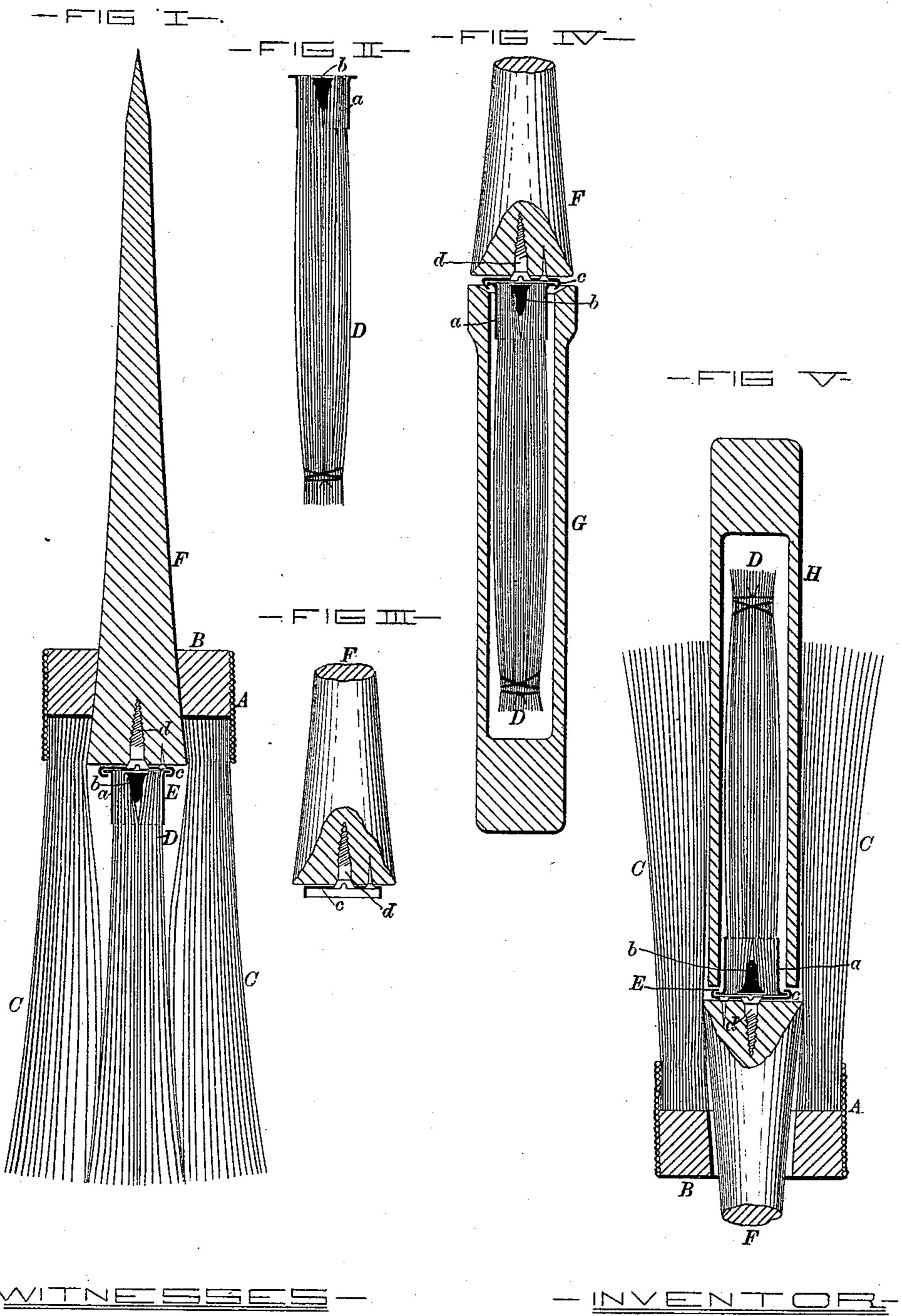
## J. R. RENNOUS.

BRUSH.

No. 250,577.

Patented Dec. 6, 1881.



Dank Fisher

& J. Woolf

John R. Rennous, by GMY H. J. Howard actup.

## United States Patent Office.

JOHN R. RENNOUS, OF BALTIMORE, MARYLAND.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 250,577, dated December 6, 1881.

Application filed October 28, 1881. (No model.)

To all whom it may concern:

Be it known that I, John R. Rennous, of the city of Baltimore, and State of Maryland, have invented certain Improvements in Brushes, of

5 which the following is a specification.

The object of this invention is to produce whatis known to the trade as a "solid" or "fullcenter" paint-brush; and it consists, primarily, in attaching to the handle, which is driven 10 through the mass of bristles and the head-block surrounded by the ferrule, a supplemental brush which practically fills the central space in the mass of bristles formed by the said handle.

It further consists in the manner of constructing the central bush, and in the means whereby it is fastened to the handle aforesaid.

In the further description of my said invention which follows reference is made to the 20 accompanying drawings, forming a part hereof, and in which—

Figure I is a sectional view of the improved brush. Figs. II, III, IV, and V are details of the brush, hereinafter fully described.

Similar letters of reference indicate similar parts in all the views.

A is a ferrule, and B the head-block, with which the butts of the bristles come in contact.

C C are the exterior bristles, which, in connection with the ferrule and block before alluded to and the handle, form the brush proper. D are the bristles of the central or supplemental brush secured to a holder, E, which, in 35 turn, is attached to the handle F. The holder E consists of a flanged thimble, a, into which the bristles D are inserted, and it is fastened to the said bristles by means of a tapering plug, b, which is driven between and among 40 them from their butt-ends and a plate, c, the edge of which is crimped over the flange of the thimble. Fig. I represents a completed brush. Fig. II shows the central bristles, D, inserted in the thimble, and secured therein by means 45 of the tapering plug b. Fig. III shows the plate c fastened to the butt of the handle by means of a screw, d, and a small tack or nail to prevent its turning, and in a condition to receive the thimble and its contents. A tool, 50 G, (shown in Fig. III,) is adapted to crimp the edge of the plate over the flange when struck with a hammer.

It will be understood that in order to admit of the ready application of the tool F to the bristles D the ends of the bristles are first 55 wrapped with twine, as shown in Figs. II, IV, and V. Fig. V shows the brush in the last stage of manufacture—viz., that wherein the two completed parts of the brush are united. In this last operation a tool, H, corresponding 60 with the one, G, except that it is devoid of the inclined edge, is used to force the brush-handle, with its accompanying supplemental brush, to its proper position with reference to the brush proper, and at the same time complete the 65 crimping of the edge of the plate c over the flange of the thimble. If desired, the crimp may be completed by means of the tool G before the handle is placed in position in the brush proper.

By making the thimble a smaller than the butt-end of the handle an annular space is formed in the bristles. This space, which can be omitted by increasing the size of the thimble, is considered by some a decided advantage 75 to the brush, but by others unnecessary. I do not therefore limit myself to either construc-

tion.

I claim as my invention—

1. In combination with the handle of a paint- 80 brush made separate from the head-block and adapted to be driven through the bristles and the head-block to secure the former within the ferrule, a supplemental brush which consists of a mass of bristles having a solid or full cen- 85 ter, fastened within a ferrule by means of a plug driven into the said bristles from the buttend thereof, substantially as and for the purpose specified.

2. As means for securing the bristles D of 90 the supplemental brush to the handle F, the flanged thimble a and plate c, the edge of the latter being crimped over the flange of the former, and the screw or nail d, all arranged

substantially as specified.

JOHN R. RENNOUS.

Witnesses:

ROBERT DICKSEN, THOMAS KEARNEY.