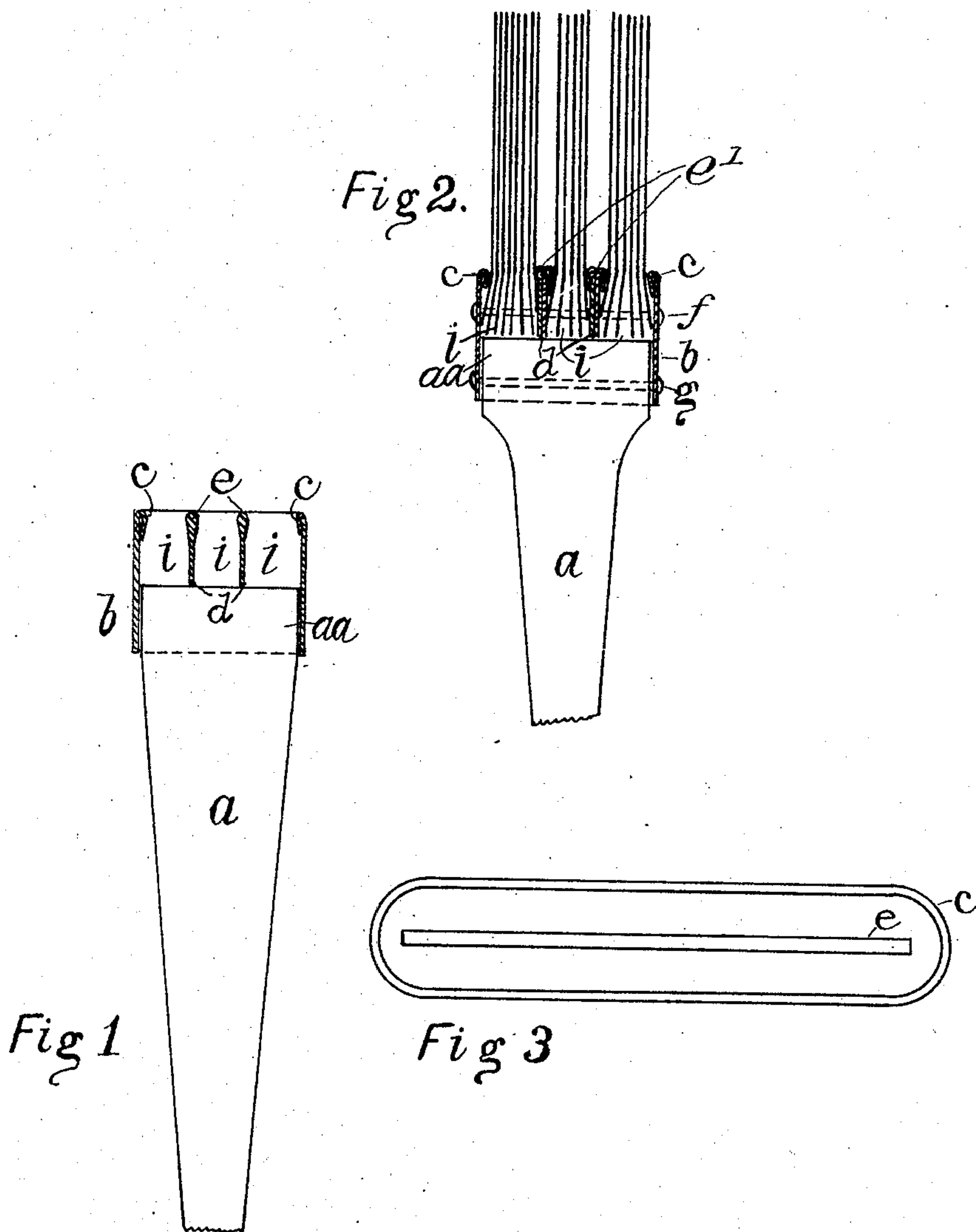


No. 840,227.

PATENTED JAN. 1, 1907.

E. MELCHIOR.
BRUSH.

APPLICATION FILED FEB. 6, 1903.



Witnesses.
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UNITED STATES PATENT OFFICE.

ERNST MELCHIOR, OF CHICAGO, ILLINOIS.

BRUSH.

No. 840,227.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed February 6, 1903. Serial No. 142,150.

To all whom it may concern:

Be it known that I, ERNST MELCHIOR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brushes, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—
Figure 1 shows one form of construction of my said newly-constructed paint-brush in transverse vertical section and without bristles. Fig. 2 is a transverse vertical section of a modified form with bristles in place. Fig. 3 shows a top view of the turned-over edge of the band of a wide brush having but one central partition, the edge being shorter than the length of the chamber or area within the band.

Like reference-letters denote like parts in all figures.

The object of my invention is to improve the construction of brushes used for varnishing, painting, calcimining, and like work. It is a well-known fact that the bristles of such brushes in the present state of the art are liable to come out and that much expense is incurred in the manufacture of such brushes to secure the bristles to the handle.

The aim of my invention is to overcome the said difficulties and to cheapen the labor and cost of construction of brushes. I attain said desirable end in substantially the following way, namely:

The handle of the brush is indicated by reference-letter *a*. At the end of the handle is a wide metal band or ferrule *b*, into which the handle is inserted, the handle passing about half-way through said band.

The part of the handle which is within the band is indicated by the letters *a*. The remaining half of said band receives the bristles, and in order that the bristles may be

more securely held I turn inwardly or in any suitable manner thicken that edge of the band which is farthest from the handle, as shown at *c*. By said means the open area within said band is constricted, whereby the bristles are held more firmly.

Within that part of the ferrule which receives the bristles are provided partitions *d*, the outer edges of which are also enlarged, as shown at *e* in Fig. 1 and at *e'* in Fig. 2. The enlarged outer edges of partitions *d* cooperate with the enlarged edges of the ferrule to constrict the opening therein and to thereby aid in holding the bristles. Where the brush-head is thin, a single partition *d* may fill the center longitudinally, as shown in Fig. 3. Suitable pins *f* pass through the shell and septums or partitions *d* to hold said parts together and to the head, and pins *g* fasten the band *b* to the head of the brush-handle. A constricted area for bristles is thus formed by means of the enlargements *c*, *e*, and *e'*, and at the same time a greater space is left in the ferrule below said enlargements, which is necessary, because it is a well-known fact that the butt-end of a bristle is the largest in diameter, and thereby is diminished or entirely overcome the loss of bristles from the brush-head.

What I claim is—

The combination with a brush-handle provided with a head having its opposite ends of like dimensions and outline, of a band around and extending beyond said head having its outer edge intumed and partitions within said band having enlarged edges of the same height as said band and bristles retained within the strictured area formed by said edges.

ERNST MELCHIOR.

Witnesses:

MORRIS H. EDELSON,
CHESTER L. PERRIN.