

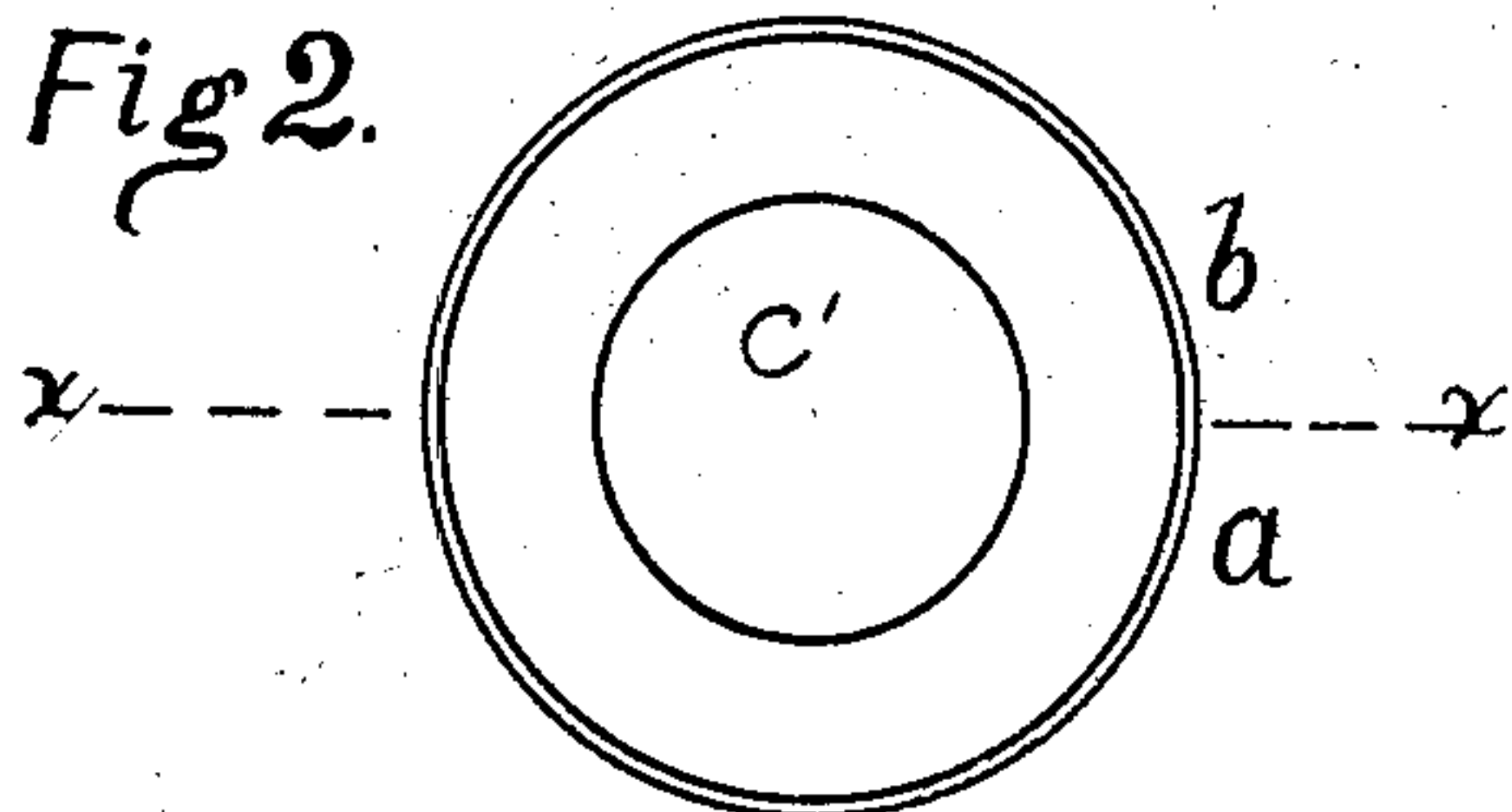
No. 771,085.

PATENTED SEPT. 27, 1904.

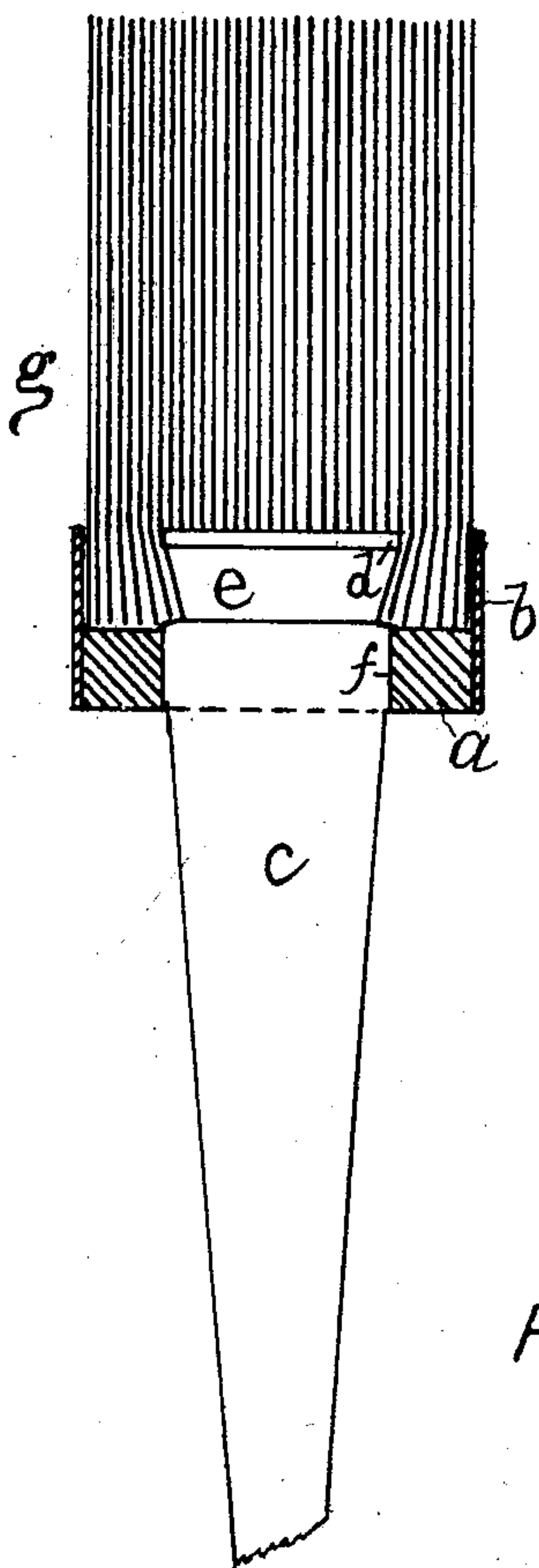
E. MELCHIOR.  
BRUSH.

APPLICATION FILED FEB. 6, 1903.

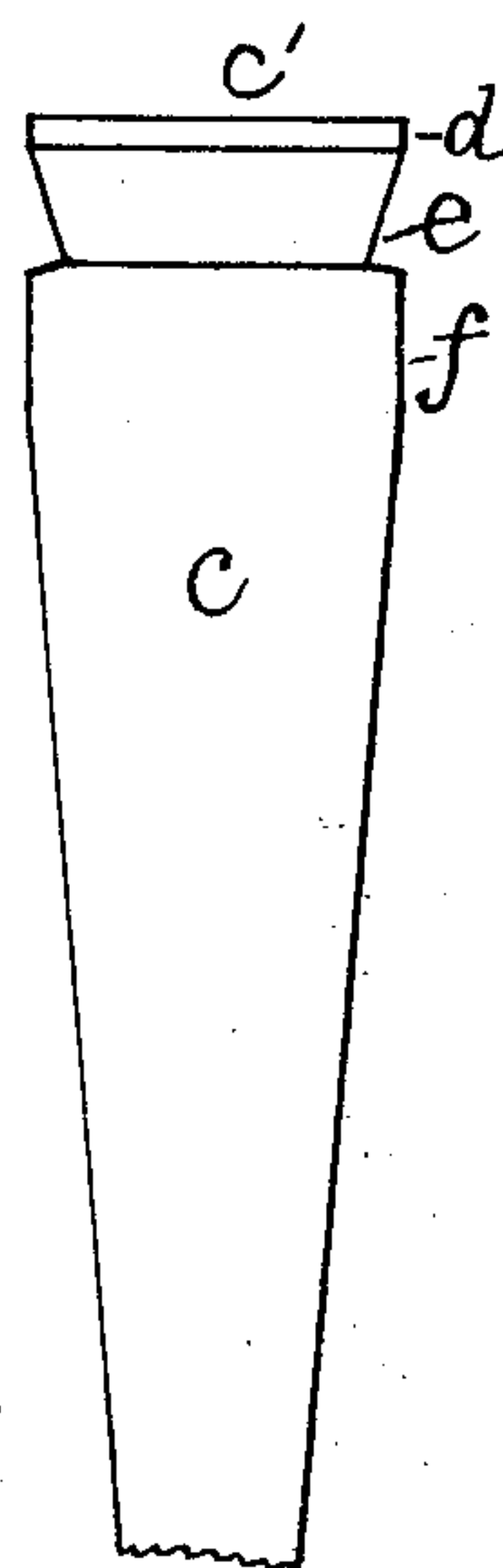
NO MODEL.



*Fig 1.*



*Fig 3.*



Witnesses.  
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## UNITED STATES PATENT OFFICE.

ERNST MELCHIOR, OF CHICAGO, ILLINOIS.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 771,085, dated September 27, 1904.

Application filed February 6, 1903. Serial No. 142,151. (No model.)

*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  
5 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—

10 Figure 1 shows my said newly-devised brush in elevation, partly in central longitudinal section. Fig. 2 shows the said device in plan view as seen from its outer end and without bristles. Fig. 3 shows the handle of  
15 my said new brush in elevation.

Like reference-letters denote like parts throughout.

The object of my invention is to improve the construction of paint-brushes and like devices whereby the bristles in them are held  
20 more securely to the handle than is attained by the present known methods. To secure said desirable end, I construct my said brush in substantially the following manner, namely:  
25 I hold the bristles in a chamber having a diminished end area, and within and relative to said constricted end area the bristle-holding chamber is enlarged.

My construction is substantially as follows,  
30 namely: I provide a wooden ring or base *a* of round, oval, or other convenient form with a central opening through which is passed a tapering handle *c*, having cylindrical parts *d* and *f*, and between said parts a recessed part  
35 *e*, starting from *d* and gradually increasing in

depth to the cylindrical part *f*, whereby is formed an annular recess or notch *e*, as shown in Figs. 1 and 3. To the base *a* is fitted a band  
40 *b*, which extends beyond the base *a* a half-inch, more or less, and which is also about the height of said base. The annular area between the cylinder end *d* and band *b* is filled with bristles to the proper quantity, through  
45 which is then driven the tapering handle *c* until the end *c'* is flush with that of the band *b*. The cylindrical part *d* compresses the bristles most strongly, while below it the enlarged ends of the bristles expand into the enlarged chamber formed by said notch *e* in  
50 said handle. The cylindrical part *f* fits into the opening of the ring or base *a*, and thereby the brush-head is held rigidly by the parts *d* and *f* against lateral motion. Should any  
55 bristle become released from the cement, it would not be able to slip out of its hold, because it is largest at its base or root end, which would tend to hold it tighter as it moved outward.

What I claim is—

The combination with an annular and band-  
60 ed base of an insertible and tapering handle with a cylindrical end provided with an annular tapering groove deepening from the outer end toward the base, said cylindrical end being within the outer edge of said band when  
65 driven, as shown, substantially as specified.

ERNST MELCHIOR.

Witnesses:

MORRIS H. EDELSON,  
CHESTER L. PERRIN.