

G. D. PUSHEE.

BRUSH.

APPLICATION FILED JULY 9, 1909.

960,582.

Patented June 7, 1910.

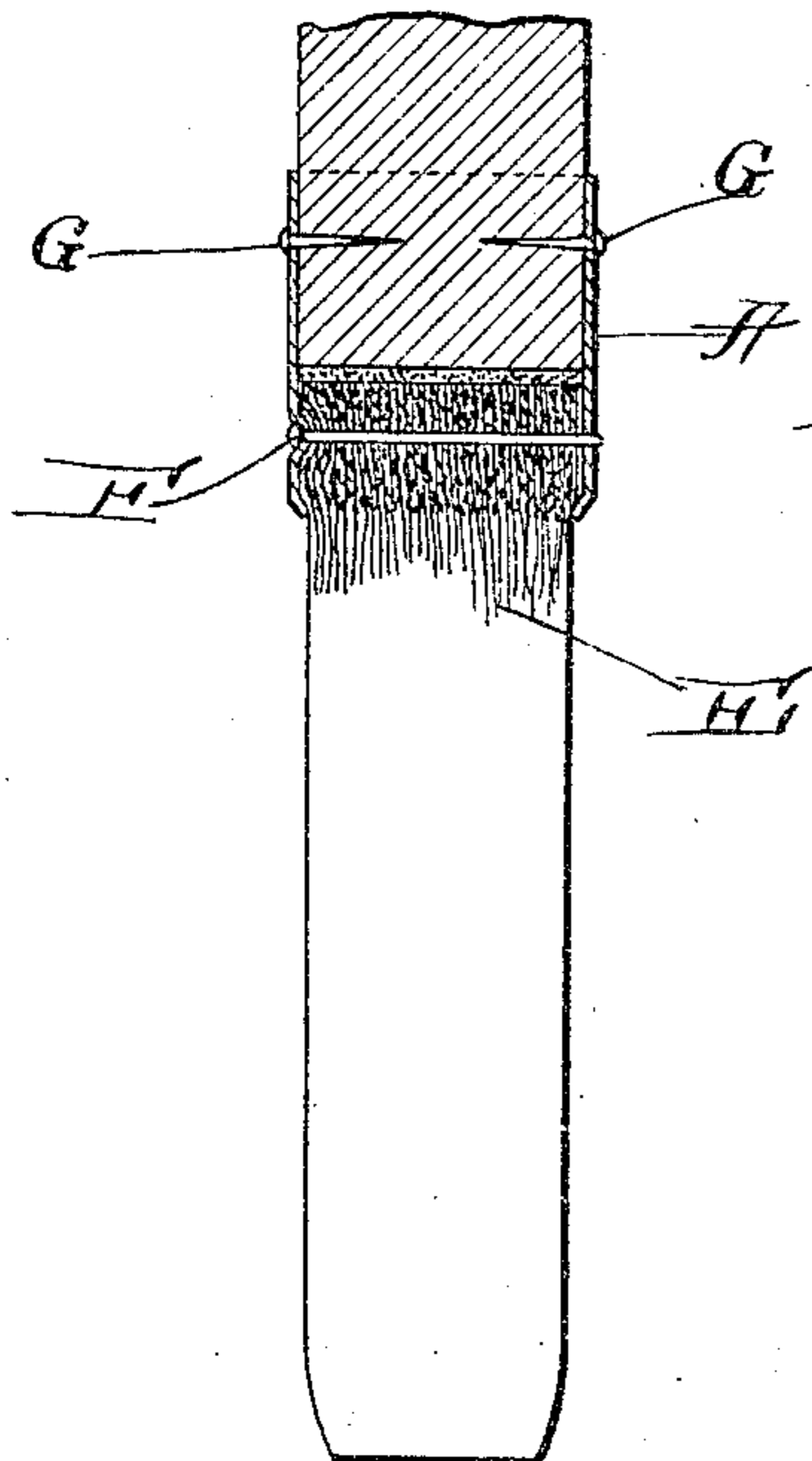


Fig. 2.

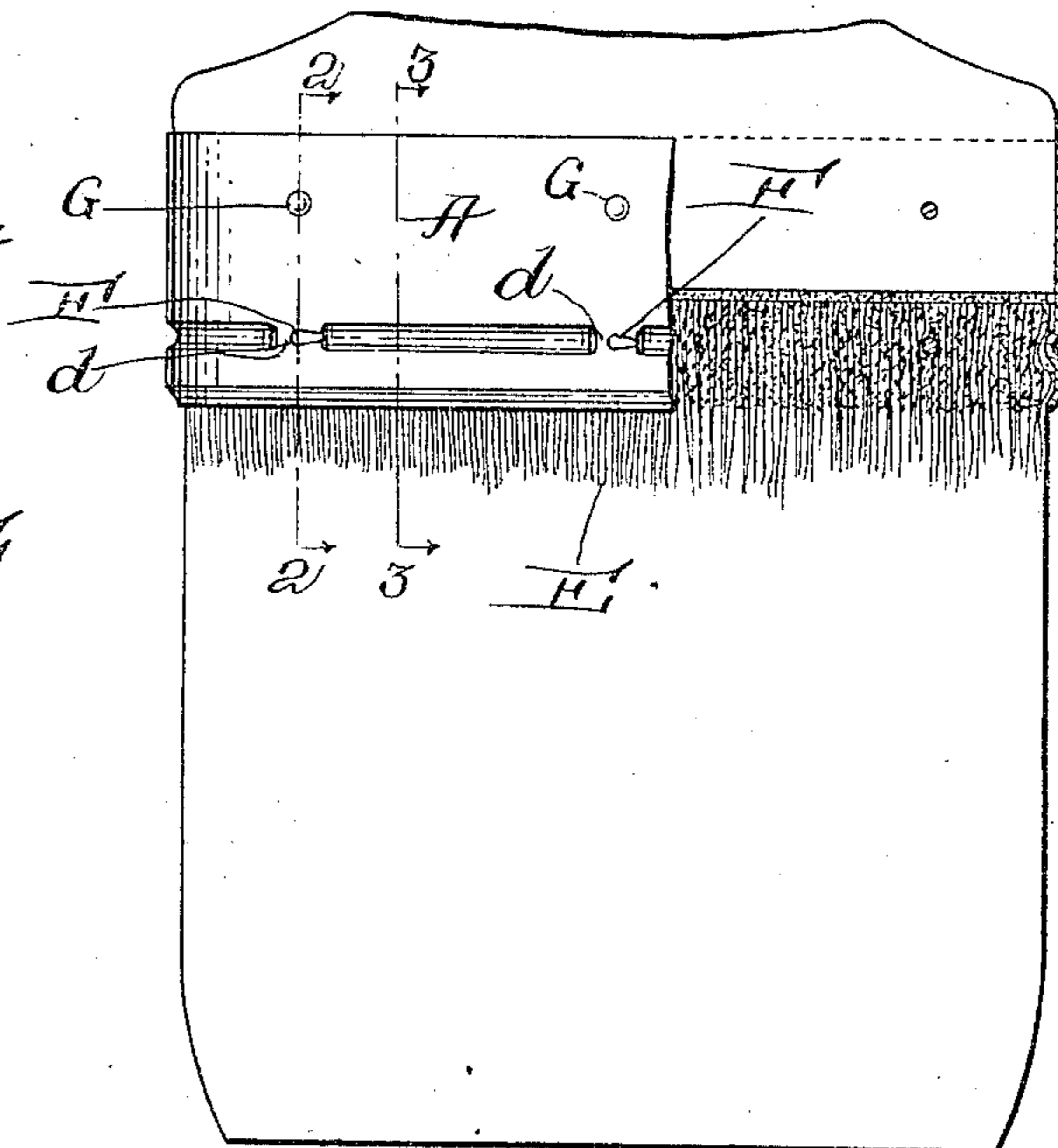


Fig. 1.

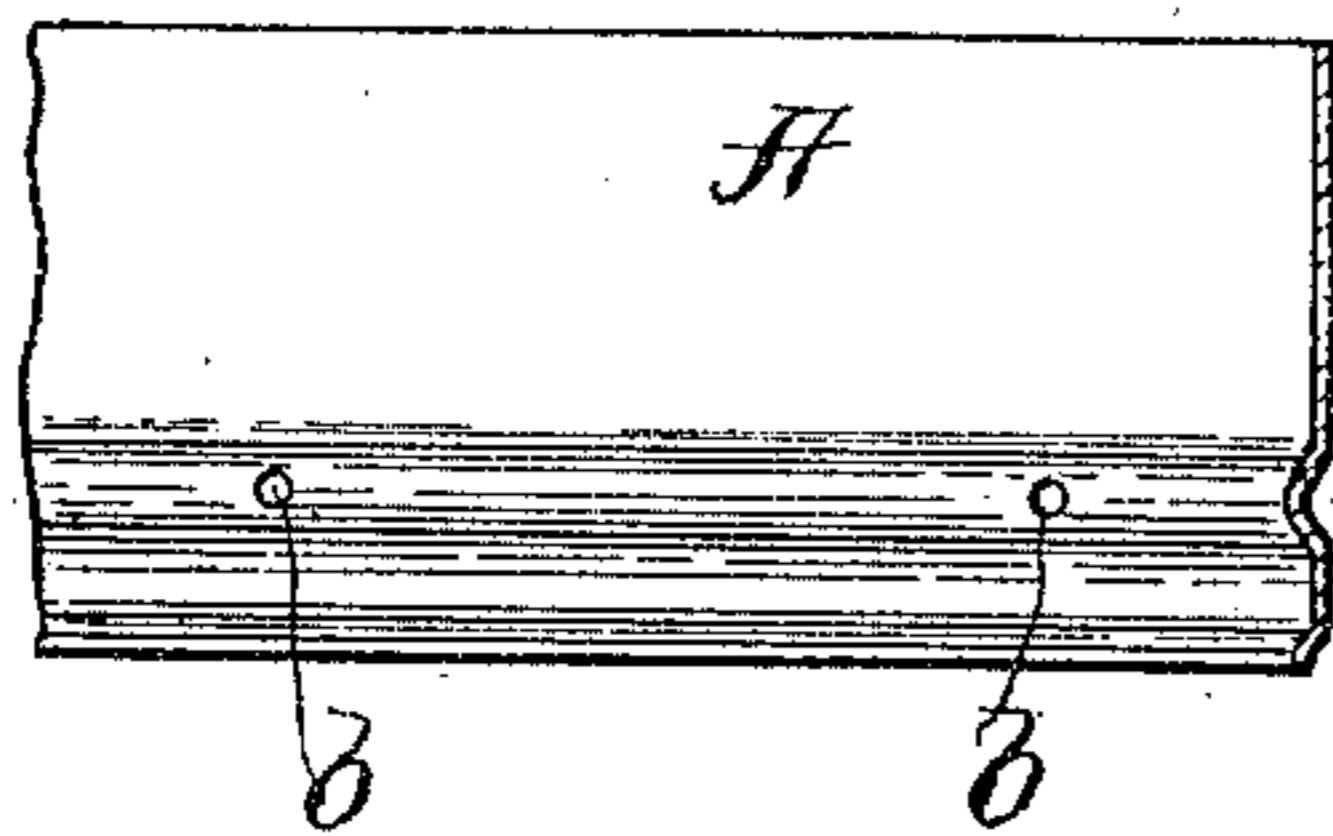


Fig. 4.

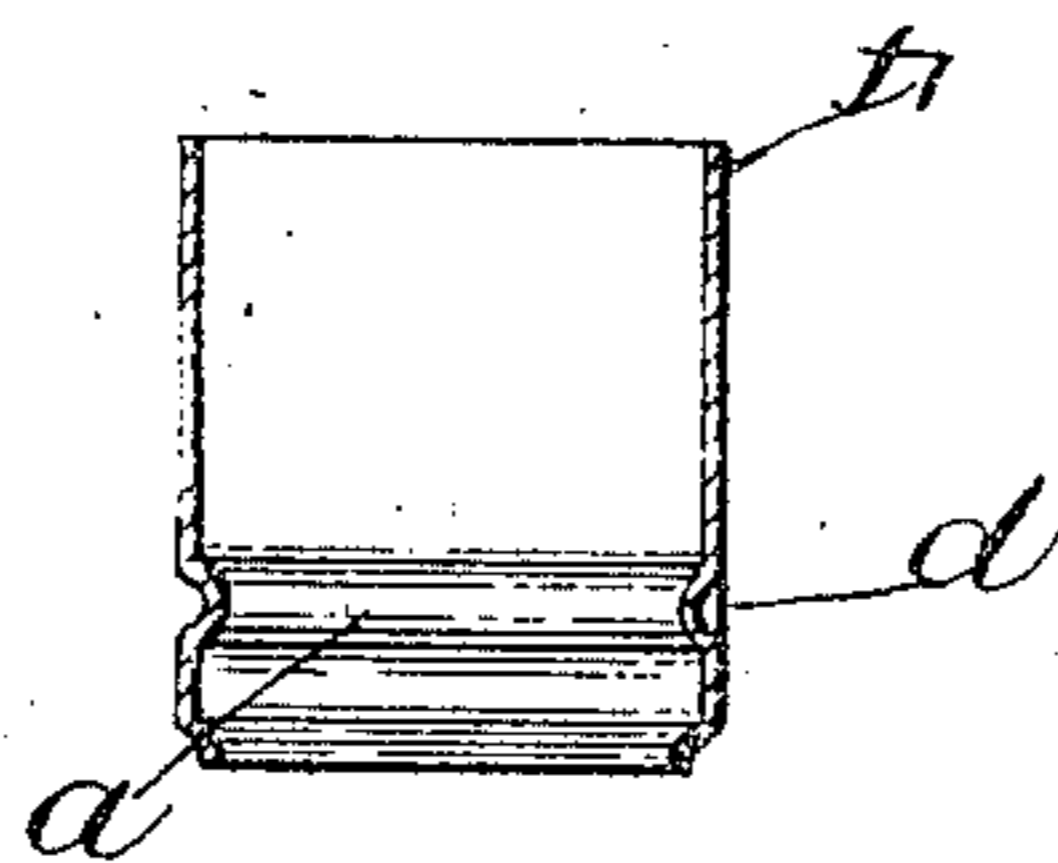


Fig. 3.

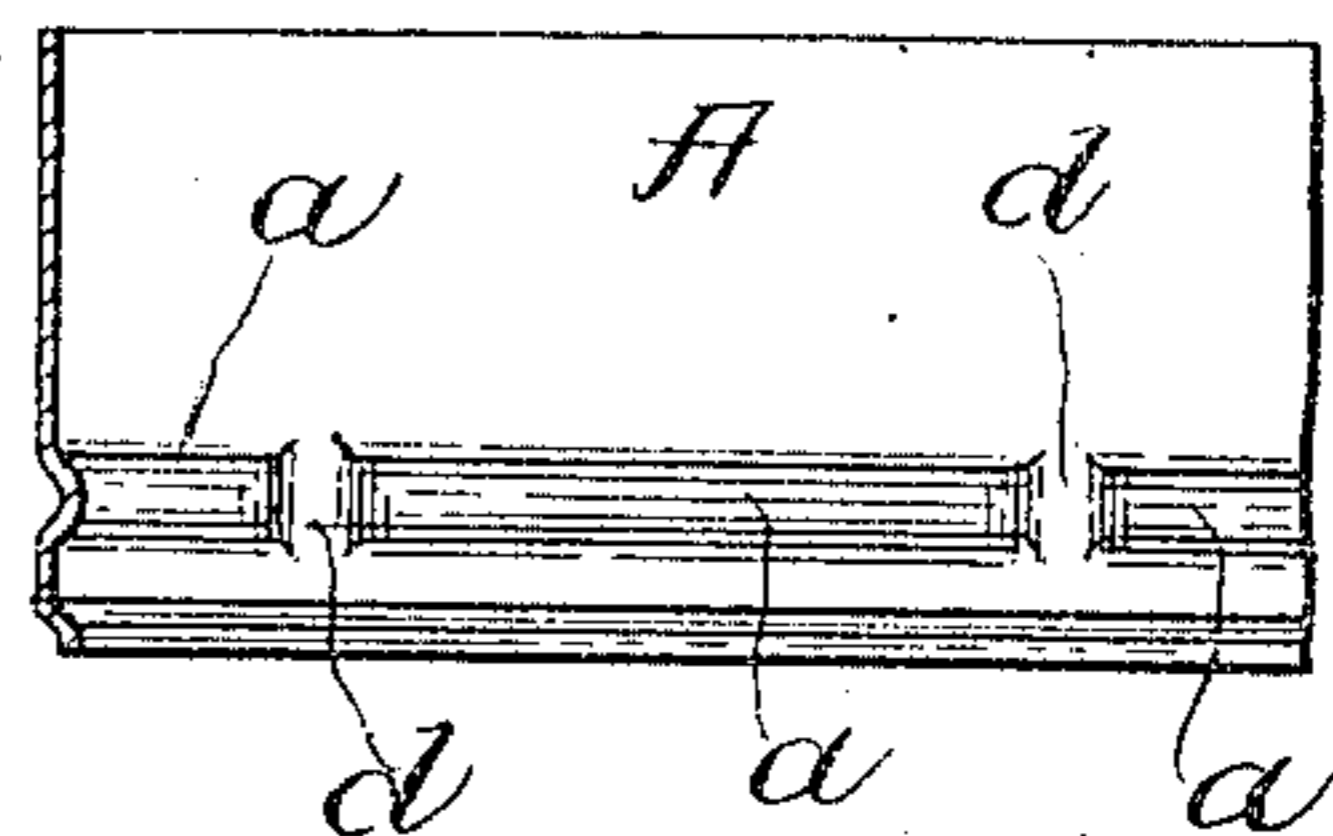


Fig. 5.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE D. PUSHEE, OF WESTON, MASSACHUSETTS.

BRUSH.

960,582.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE D. PUSHEE, of Weston, in the county of Middlesex and State of Massachusetts, have invented a new and useful Brush, of which the following is a specification.

The object of my invention is to improve the construction of brushes, and my invention consists mainly in a ferrule so made that when the nails are driven from one side between the roots of the bristles to the other side, the latter side will be pierced by the nails at the proper location and without injury to the points of the nails.

In the drawings Figure 1 is an elevation partly in section of a brush embodying my invention, the handle being broken away; Fig. 2 is a section of the same on line 2—2 of Fig. 1 in the direction of the arrow; Fig. 3 is a section of the ferrule on line 3—3 of Fig. 1; and Figs. 4 and 5 are details of the ferrule.

It is highly desirable to vulcanize bristles in a ferrule whose inner surface is rough and I therefore use ferrule A having an inwardly projecting rib *a*. In the form shown the ferrule is continuously grooved at the outside of the ferrule but the groove or the continuity are not essentials except in the preferred form of my invention. The rib is perforated at *b b* and opposite these perforations it is flattened at *d d* for a purpose hereinafter described.

In assembling the parts of the brush I prefer to place the roots of the bristles E within the ferrule and then apply vulcanizable material to them. I then pass nails F F through the perforations *b b* and between the roots of the bristles to the opposite side of the ferrule. Heretofore it has been a practical impossibility to make sure that the nails will pierce the rib at the proper point as a slight deflection of the nail in its passage will cause it to strike the rib above or below its center in which case the nail will pass through the wall of the ferrule above or be-

low the rib even if the point of the nail is not bent. When, however, the point strikes the flattened portions *d d* the point of the nail will not be bent, and the nail will pierce the flattened portion at exactly the desired location and may be clenched upon the flattened portion which improves the clenching. I prefer to make the rib continuous and then flatten it at intervals, but other ways of accomplishing the purpose may be employed.

My invention is of especial value in cases where the nails are passed through before the bristles are vulcanized because in that case there is no rigid guide for the nails and the deflection above referred to is more likely to happen but my invention is applicable also to cases in which the bristles have been vulcanized in the ferrule before the nails are applied.

When the bristles are in place and the nails have been applied the ferrule may be attached to the handle in any suitable way, such as by directly nailing it thereto by nails G G.

What I claim is:

1. A ferrule for brushes having an inwardly projecting perforated rib at one side and having at the opposite side opposite said rib an inwardly projecting rib flattened opposite said perforation.

2. A brush comprising bristles; a handle; a ferrule connecting the handle with the bristles and comprising an inwardly projecting rib at one side and at the opposite side opposite said rib an inwardly projecting rib and a flattened portion; and a nail passing through the first-mentioned rib, between the bristles and through said flattened portion, and clenched on the outside of the ferrule at said flattened portion.

GEORGE D. PUSHEE.

Witnesses:

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