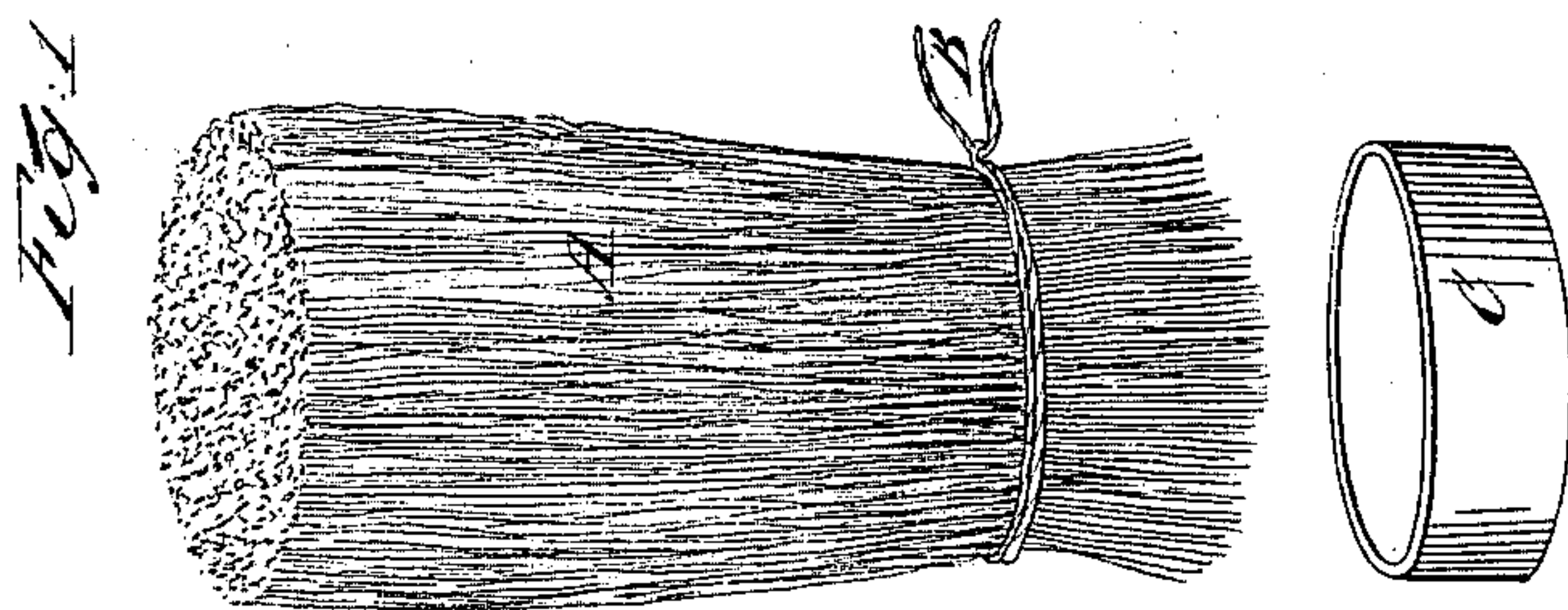
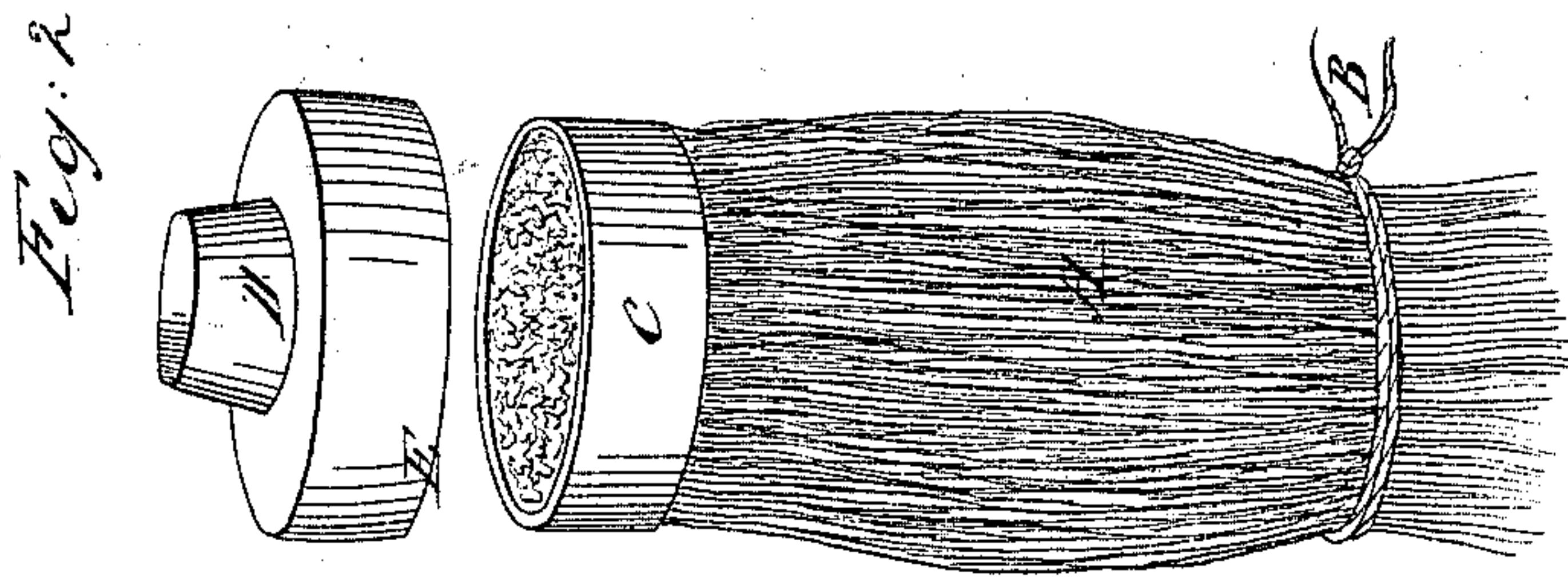
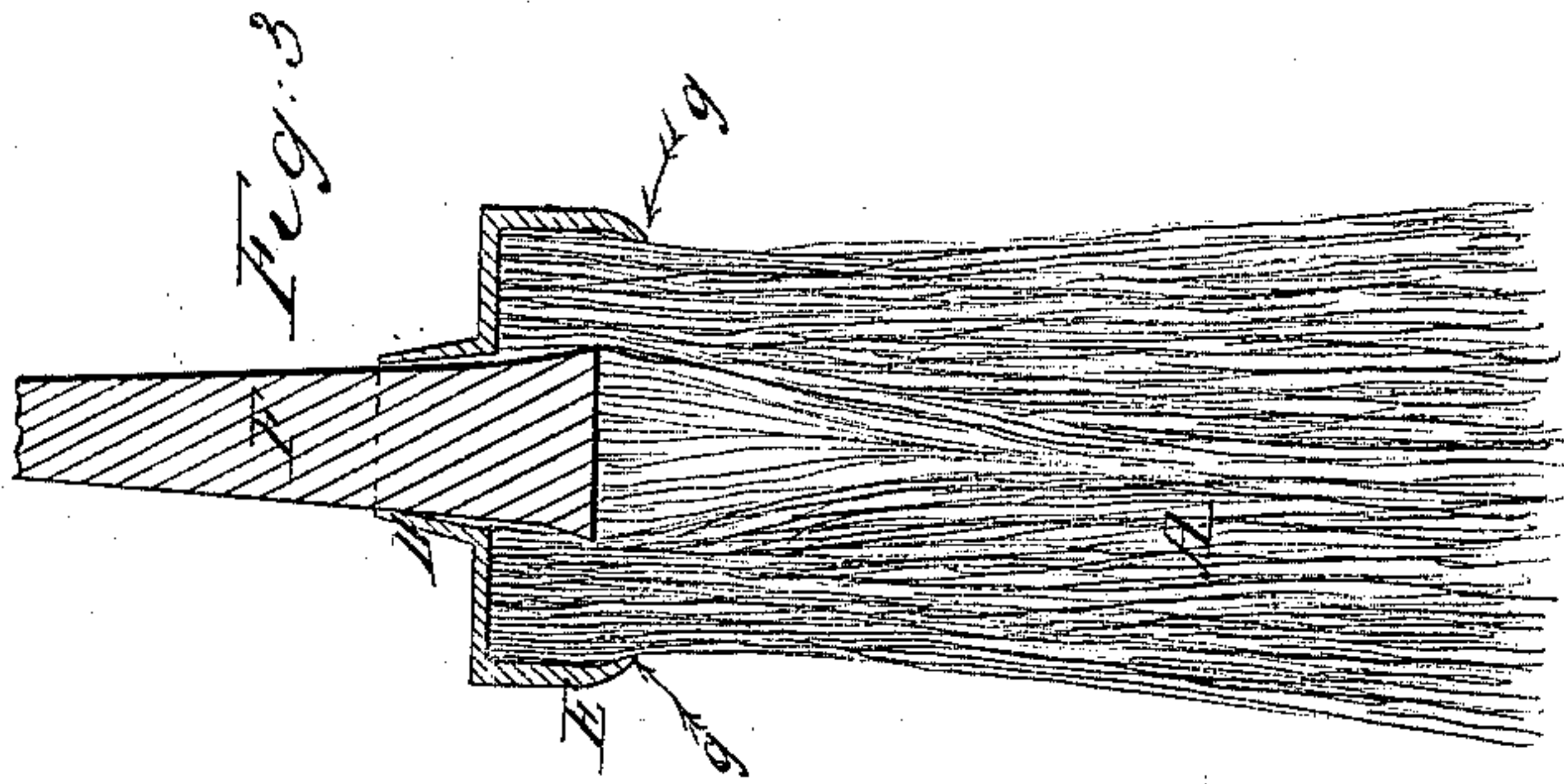


J. T. Steer,
Making Brushes,

N^o 16,950.

Patented Mar. 31, 1857.



UNITED STATES PATENT OFFICE.

JAMES T. STEER, OF NEW YORK, N. Y.

MANUFACTURE OF PAINT-BRUSHES.

Specification of Letters Patent No. 16,950, dated March 31, 1857.

To all whom it may concern:

Be it known that I, JAMES T. STEER, of the city, county, and State of New York, have invented certain new and useful Improvements in Making Paint-Brushes; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, like letters designating the same parts, in which—

Figure 1 is a representation of a bunch of bristles having the binding ferrule around the bristles. Fig. 2, shows the bunch of bristles with the binding ferrule slipped up to the end, of the same, and also, the cap ferrule in position to be slipped over the end of the bristles. Fig. 3, is a vertical section of the brush, cut through its center, showing the inner construction of the same.

The nature of my invention consists in the combination of the binding ferrule and the cap ferrule, and handle with the bristles for forming a more perfect and substantial brush, as hereinafter described.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

In the construction of the ferrules and handle, I use any of the known materials for such purposes, using for the ferrules either iron, brass or zinc or any other compounded metal for the purpose, I may choose.

In Fig. 1, A is a bunch of bristles, B is a cord tied around the brush end of the bristles bringing them together in a compact form, so that they can be passed into the binding ferrule C, which is a metallic ferrule, of proper size to correspond with the size of the cap ferrule, which is of the size I wish to make my brush.

In Fig. 2 A is the bunch of bristles B the cord drawn tightly around the small or bush end of the bristles C the binding ferrule on the butt or thick end of the bristles, having been forced up to that end, E, is the cap ferrule, ready to be put over the butt end of the bristles. D is the extended shank of the ferrule E for the purpose of holding the handle. In Fig. 3, A the brush, E the cap ferrule, D the shank of the same F the handle. g shows how the bristles are pressed against the inner portion of the cap ferrule E by the handle F.

In the operation of my invention I take in weight the amount of bristles I wish to form the brush of the size required. I then bind the cord B around the bristles compressing them sufficiently to pass them through the binding ferrule C which is of the requisite size, I then slide it up as far as I can easily by hand until it becomes too tight as the butt end is much larger than the bush end of the bristles. I now by the means of a mallet as I hold the ferrule and bristles in my left hand drive the bristles gradually striking them first around the outer edges, and then toward the center as I turn the bristle and ferrule in my hand, until the whole is forced down into the ferrule until the bristles are even with it as seen at c Fig. 2. I then take the cap ferrule E, and place it on the upper edge of the ferrule (c) and commence driving it down until the bristles come in contact with the cap as seen at a Fig. 3. The ferrule C having given place in its decent, to the ferrule E, the handle having been made of the cone shape as seen in F Fig. 3, and of the proper size to fit the shank. I then enter it, at the brush end of the bristles, and in the center of the same, with the small end and drive it up until it fits right in the shank D, and the lower end is nearly even with the lower end of the cap ferrule as seen at g in Fig. 3, thus perfecting the operation. A brush thus constructed is not liable to break, and come loose nor is the handle liable to come out, as is the case with brushes bound with twine, or with those with metallic ferrules which have the cone driven in from the top as it is impossible to make them firm and unyielding in use, as is known to painters.

Having thus fully described the construction and operation of my invention what I claim and desire to secure by Letters Patent is;

The use of the binding ferrule C, for the purpose of effecting, as herein described, the introduction of the bristles into the cap ferrule E, the said cap ferrule being made in one piece with its cap and shank, as described, for the purpose of making an improved paint brush, as set forth.

JAMES T. STEER.

Witnesses:

CHARLES L. BARRITT,
H. S. LINCOLN.