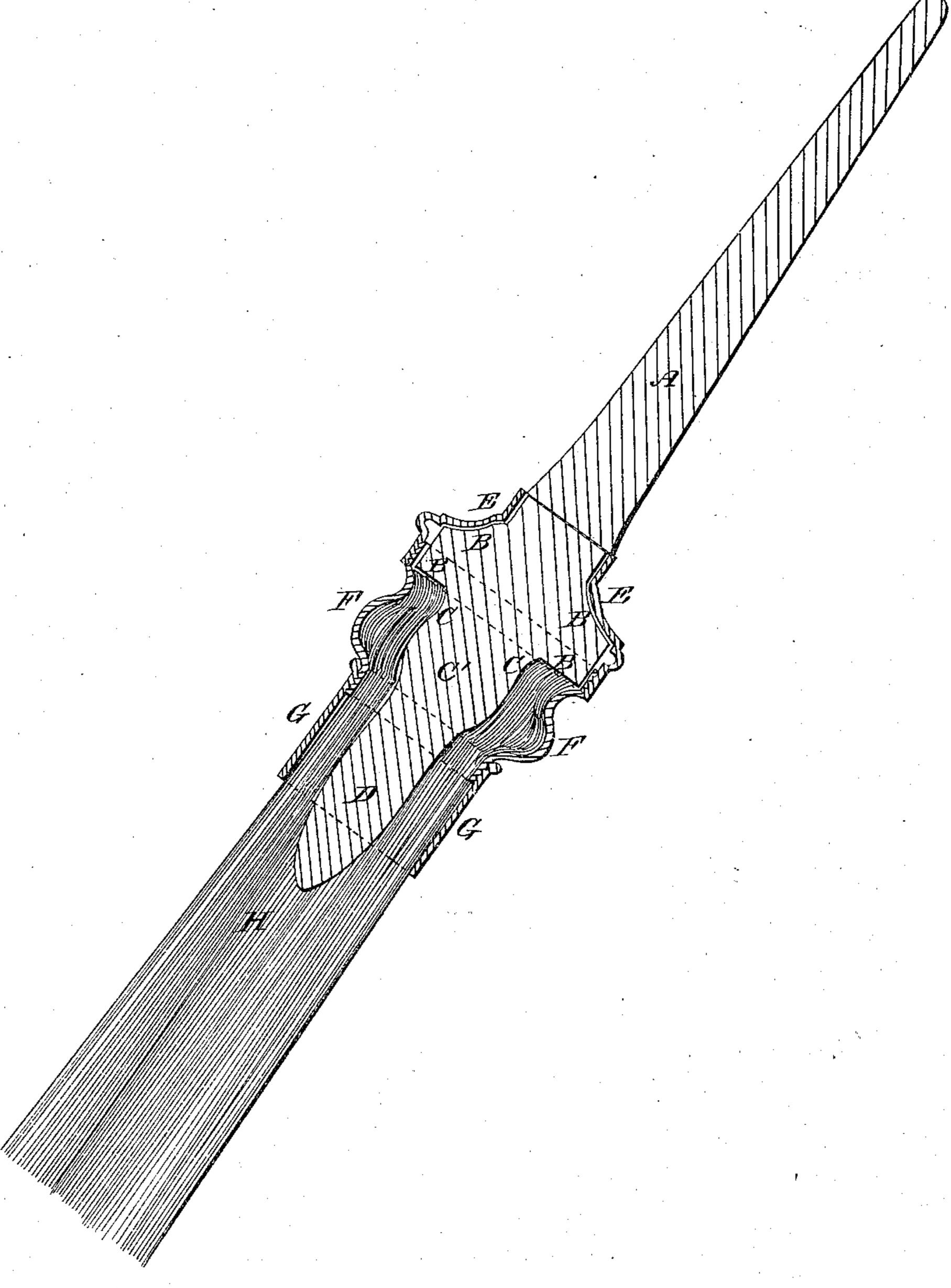
## B. A. Mille Bruss.

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Witnesses. Henry Green Schu G. Cucker

Inventor. Benjamin a Dsay tow.

## Anited States Patent Pffice.

## BENJAMIN ADAMS DRAYTON, OF UTICA, NEW YORK.

Letters Patent No. 66,475, dated July 9, 1867.

## IMPROVED PAINT-BRUSH.

The Schedule referred to in ihese Aetters Patent and making part of the same.

Be it known that I, BENJAMIN A. DRAYFON, of Utica, Oneida county, New York, have invented a new and useful Improvement in Paint and similar Brushes.

The nature of my invention consists in binding or securing the bristles to the handle by means of a metallic cap and thimble, and in the form of the handle; and I do hereby declare that the following is a full, clear, and exact description of the said improvements, reference being had to the accompanying drawing, which represents a sectional view of all the parts.

A is the handle; BB are shoulders thereon; C is a depression below the shoulder; C', a bulb; D is the lower end or point of the handle; E is the metallic cap; F is a thimble; G, a second thimble; H, the bristles. The cap and thimbles are of spun brass or other suitable metal. The cap has a hole in the centre to slip on the handle A, while its under side fits the upper shoulder B and its lower end screws on to the upper end of the thimble F. The thimble F binds or secures the bristles to the handle. It is of ogee form on its side, having its ends straight or parallel to its axis, but the upper end being larger than the lower end. Each end has a male screw thereon—the upper one on which to screw the cap E, and the lower one on which to screw the other ferrule G, which said G is a plain thimble surrounding the bristles. The curved or ogee form of the middle of the thimble F, when combined with the curved form of the shank of the handle to be described, allows the upper end of the bristles to be turned outward and inward twice each, as seen in the drawing, and by means of which they are firmly held in place, while the lower end of the ferrule, being straight or parallel to the axis of the thimble, turns all the bristles parallel to the axis of the thimble or ferrule, which gives them their best direction, neither pinching them too close nor causing them to spread too much. G is a plain thimble surrounding the bristles also, and which screws on to the lower end of F. The handle is of wood, and the upper end of the usual form. Toward the lower end is an enlargement, forming an upper and a lower shoulder, B B, and below this are curves C and C', conforming to the ogee form of the thimble F, and it terminates in a point, D, as seen in the drawing. The bristles to form the brush are placed in the thimble F, in about the position they will occupy when the brush is completed, and the buts being brought even and the other end grasped firmly the point D of the handle is inserted in the centre of the buts and pressed down until the lower shoulder rests on the upper curve or shoulder of F, as seen in the drawing. This pressure, with the form of the lower part of the handle C and C', causes the bristles to spread outwardly into the curves of F, as is also seen in the drawing. The cap C is then slipped over the upper end of the handle A and brought down on the upper shoulder B and screwed on to the upper end of F, which keeps the handle in place. The thimble G is then passed over the point of the bristles and screwed on to the lower end of the thimble F. The object of this thimble is to give firmness to the bristles while the brush is new, and it is made separate from F that it may be removed from the brush when the bristles become shorter or stiffer by wear.

The advantages of a brush thus made are that it may be made cheaply by spinning up brass, and presents a neat and tasty appearance, and permits the bristles to be renewed as often as they wear out, as well as giving it the proper stiffness at all times.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is-

- 1. The thimble F, constructed in the form and manner herein described and for the uses and purposes mentioned.
- 2. The thimble F and cap E and the shoulders B B of the handle, in combination for the uses and purposes, mentioned.
  - 3. The thimbles G and F and cap E, in combination for the uses and purposes mentioned.

BENJAMIN ADAMS DRAYTON.

Witnesses:

HENRY GREEN, John G. Crocker.