

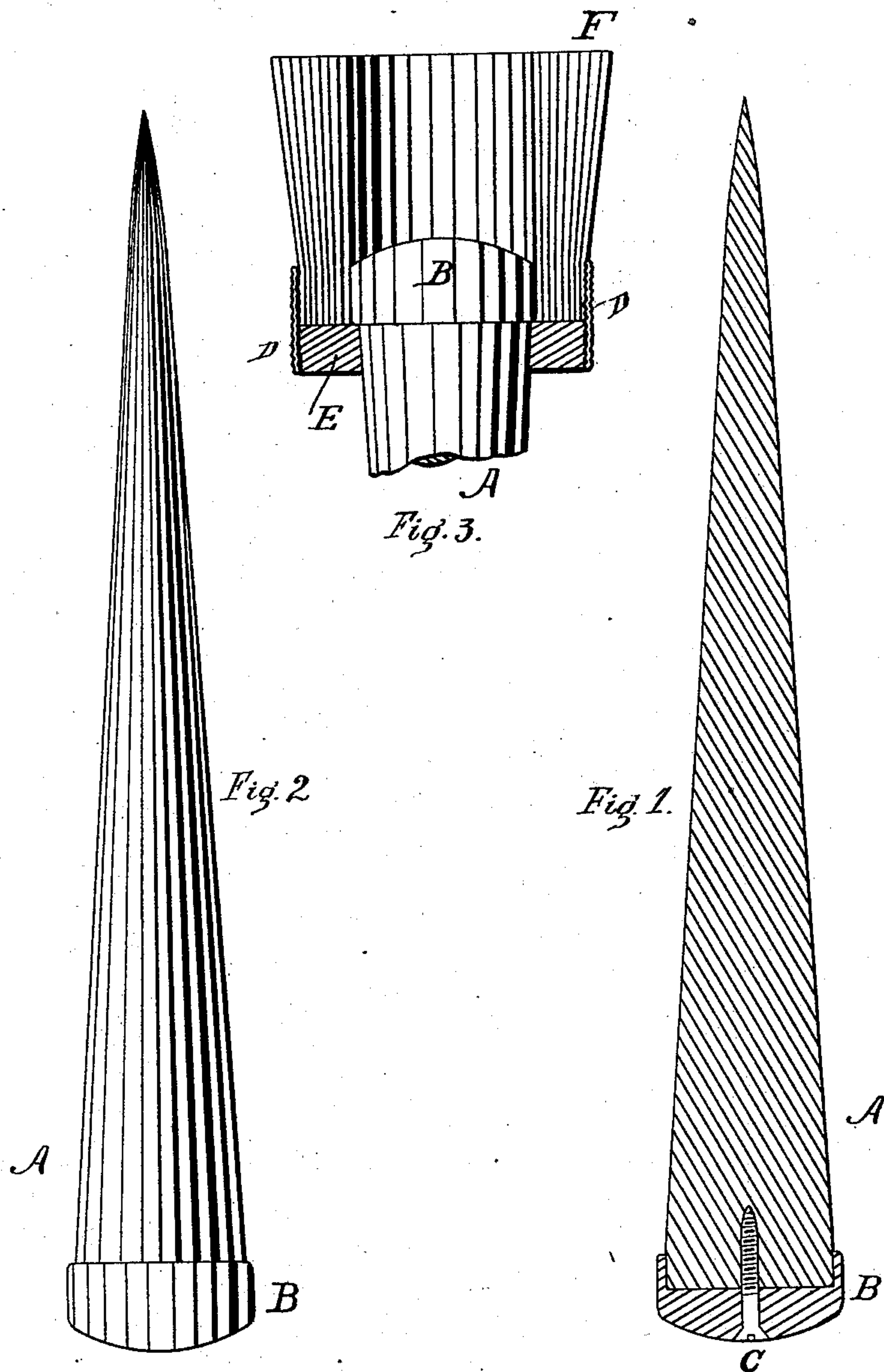
(No Model.)

S. K. HAWKINS.

BRUSH.

No. 277,899.

Patented May 22, 1883.



Witnesses,  
Francis J. Wing  
Robert B. Lewis

Samuel H. Hawkins, Inventor.

By Geo. C. Tracy & Co.  
Attorneys

# UNITED STATES PATENT OFFICE.

SAMUEL K. HAWKINS, OF CLEVELAND, OHIO, ASSIGNOR TO THE BUCKEYE  
BRUSH COMPANY, OF SAME PLACE.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 277,899, dated May 22, 1883.

Application filed December 1, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL K. HAWKINS, of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Brushes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the accompanying drawings, and to letters of reference marked thereon.

My invention relates to certain new and useful improvements in the manufacture of brushes, and has for its object the production of a more durable brush than by other means; and, while the efficiency of the article is in no way lessened, there is a great saving in time required in the manufacture and also in the quantity of material employed.

In the drawings, Figure 1 is a sectional view of the handle with the wedge; Fig. 2, an outside or perspective view of the same; and Fig. 3, a sectional view of the cap or ferrule in which the bristles are fixed.

Like letters of reference denote like parts in all the views.

A is the wooden handle, of the usual shape and of any size desirable, to the lower or larger end of which is attached the metallic wedge or cap B, so made as to act as a ferrule or rim around the wooden handle. This is held securely in place by the common screw C.

D is a ferrule or ring, of metal, corrugated to represent the binding of wire usually employed in fastening the bristles, and also for the purpose of crimping and more effectually holding the bristles than could be done with a smooth surface. In this ring is set the wooden head

E, which has an opening, F, in its center some what smaller than the larger end of the handle A.

In making these brushes the bristles are first prepared on their ends with a suitable adhesive substance, and then inserted in the ring, so as to be brought up against the wooden head. After setting, the point of the handle A is inserted between the bristles into the opening in the head E, and by hydraulic or other pressure the handle is driven home to its place, as shown in Fig. 3, thus crowding the bristles against the corrugated inner surface of the ring, and holding them so firmly that no shrinking of the parts of the brush, shaking, or handling can remove them.

I am aware that brushes have been made having a metallic cap-disk combined with a socket-handle and wooden ring, and I do not therefore claim the same as my invention; but,

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

As a new article of manufacture, the within-described brush, having over the end of the handle A the metallic cap or wedge B, forming a socket or ferrule for said handle, and held in place by centrally-inserted screw, C, in combination with the head E and ring D, as and for the purposes set forth.

This specification signed and witnessed this 16th day of November, 1882.

SAMUEL K. HAWKINS.

Witnesses:

JAMES PARMELEE,

RICHARD M. PARMELY.