

(No Model.)

S. F. MERRITT.  
METHOD OF PLATING ON SOLID WIRE.

No. 428,727.

Patented May 27, 1890.

Fig. 1.

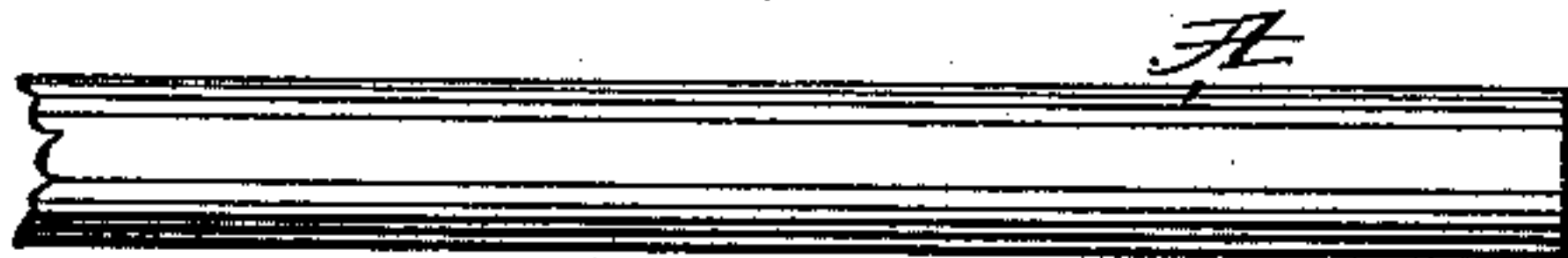


Fig. 2.

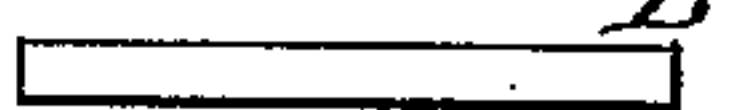


Fig. 3.



Fig. 4.

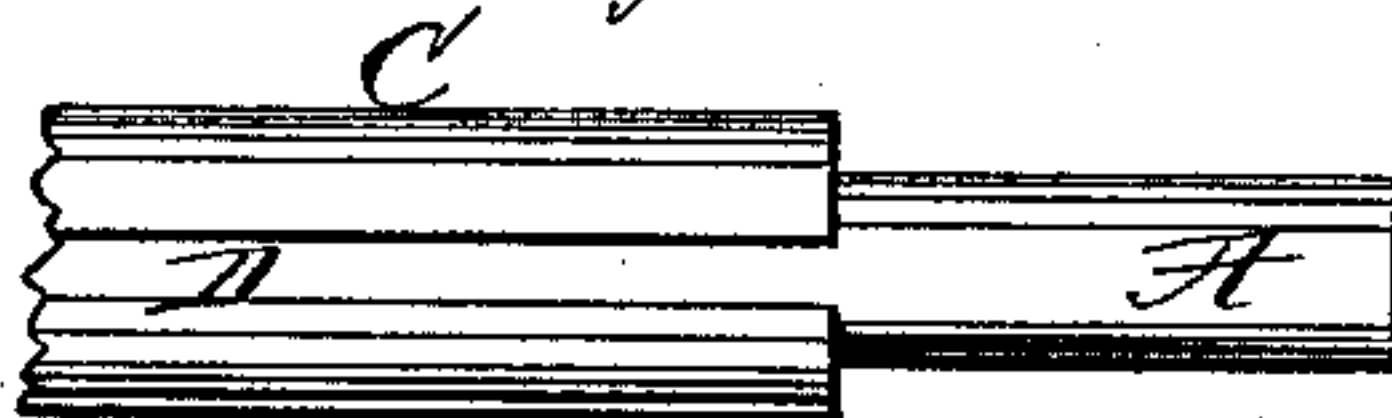
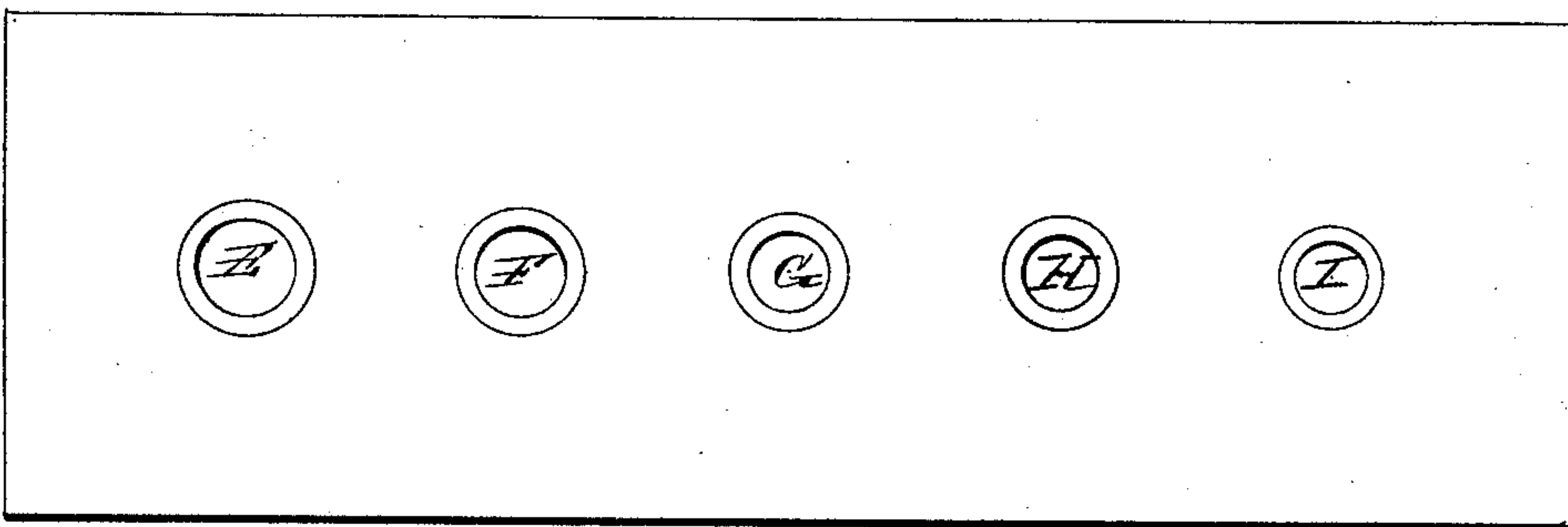


Fig. 5.



Witnesses

John W. Ripley.

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Samuel Fowler Merritt Inventor

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# UNITED STATES PATENT OFFICE.

SAMUEL FOWLER MERRITT, OF SPRINGFIELD, MASSACHUSETTS.

## METHOD OF PLATING ON SOLID WIRE.

SPECIFICATION forming part of Letters Patent No. 428,727, dated May 27, 1890.

Application filed January 7, 1890. Serial No. 336,192. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL FOWLER MERRITT, of Springfield, county of Hampden, State of Massachusetts, have invented a new and  
5 useful Improved Method of Plating on Solid Wire, which is fully set forth in the following specification.

The purpose of my invention is to so cover  
10 a composition rod with a plating of gold that it will be solid and seamless when completed without waste of gold.

Heretofore the method followed in jewelry  
manufacture was to cover a block of composition with a layer of gold soldered or sweated  
15 thereon. The block was rolled to the desired thickness, curved into a tube, and the joint soldered or not, as was preferred. The tube was drawn down into the wire, a hole being  
20 necessarily left in the center, no matter how finely the wire was drawn, which hole prevented making a solid point at the end of a piece cut therefrom. In making the point the end was hammered flat and a piece clipped  
25 off lengthwise, the piece going into the scrap subject to waste in remelting.

In the drawings, Figure 1 is a side view of the solid composition rod; Fig. 2, an end view of the prepared sheet; Fig. 3, an end view of the tube ready for the reception of the solid  
30 composition rod; Fig. 4, a top view of the solid composition rod inserted within the tube; Fig. 5, a front view of the draw-plate.

In these figures, letter A represents a solid composition rod; B, a thin sheet of gold; C, the tube formed thereof; D, the joint between  
35 its edges; E, F, G, H, and I, holes of different diameters in the draw-plate.

My improved method is to cut prepared sheet B into widths proportionate to the size of solid composition rod A to be covered. 40 Sheet B is then curved about composition rod A, leaving an open space or joint D between the edges of sheet B. After pickling and cleaning rod A and sheet B, rod A is reinserted within tube C and a piece of silver 45 solder laid in the open space or joint D between the edges of tube C. Flowing the solder fills the space between rod A and tube C, leaving joint D open. Drawing this gold-covered rod through a draw-plate, presenting 50 successively diminishing holes of compression E, F, G, H, and I, gradually closes the space or joint D between the edges of tube C until it is unrecognizable, obliterating the joint and leaving the edges apparently con- 55 solidated. This rod may then be drawn down through smaller and smaller holes to any desired fineness, and a pin-point made at any point of severance will be solid, as rod and plate are homogeneous. The rod is left long 60 enough to make a point for drawing, so that no gold is lost by clipping or filing.

What I claim, and desire to secure by Letters Patent, is—

The process within described of plating a 65 rod by flowing solder about the same between the tube and rod, closing the joint, and attenuating the consolidated tube and rod, in the manner and by the means set forth.

SAMUEL FOWLER MERRITT.

Witnesses:

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