J. HOLLAND.

Fountain-Pen Point.

No. 202,655. Patented April 23, 1878.

Fig. 1

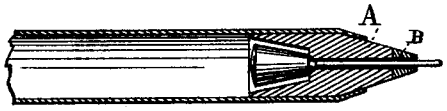
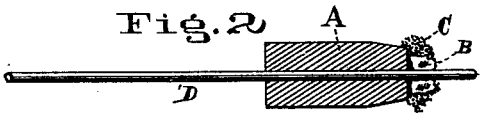


Fig. 2



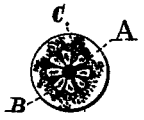


Fig. 3

Attest

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UNITED STATES PATENT OFFICE.

JOHN HOLLAND, OF CINCINNATI, OHIO.

IMPROVEMENT IN FOUNTAIN-PEN POINTS.

Specification forming part of Letters Patent No. **202,655**, dated April 23, 1878; application filed March 23, 1878.

To all whom it may concern:

Be it known that I, JOHN HOLLAND, of Cincinnati, county of Hamilton, and State of Ohio, have invented a new and useful Improvement in Writing-Points for Fountain-Pens, which improvement is fully set forth in the following specification and accompanying drawings.

Heretofore points of this kind have been usually made of some malleable metal or of glass, and in use would soon wear out or be broken, thus rendering the pen worthless; or if made of iridosmine they would require to be drilled, which, owing to the extreme hardness, is a very difficult and tedious operation.

The object of my invention is to provide a cheap means of fitting pens of this kind with iridium points, without the expense and trouble of boring or drilling the iridium.

The invention consists in placing grains of iridosmine around a core of an easily-drilled metal or substance, firmly embedding the grains in gold or some non-corrosive solder, and afterward drilling out the core.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a central longitudinal section of a pen fitted with one of my points. Fig. 2 is a similar view of a partly-finished point; and Fig. 3 is a transverse section taken in front of the point, Fig. 2.

In all the figures the view is greatly enlarged, to clearly show the construction.

A is a tube of silver or other non-corrosive metal. B represents the grains of iridosmine placed upon one end of the tube, around the copper wire D, which closely fits the tube, and is of about the size of the required perforation in the writing-point. C is the solder, which secures the grains together and to the tube A.

The mode of constructing my point is as follows: The tube A, with core D passed through it, as shown, is held in a vertical position. A grain of iridosmine of the proper size is picked up by a fine brush or pencil, which had been previously dipped in a paste of borax or other flux, and placed on the end of the tube against the core, the paste holding it in place. Another grain is placed against the first, and the operation continued until the core is surrounded. The solder is then fused around and over the whole, firmly uniting all the grains together and to the tube A, and filling up all the spaces left by the unevenness of the grains. The core is then drilled out and the point dressed to the proper size and shape. This last can be done either before or after the point is fitted to its place on the pen.

I have described the process of making the points singly, and this I think the best plan, as by the same operation the iridium is also secured to its tube A; but it is evident the iridium may be built around the core in lengths that may be divided into several points.

I claim—

As a new article of manufacture, a tube of iridium composed of a number of grains soldered together, substantially as and for the purpose specified.

JOHN HOLLAND.

Witnesses:
GEO. J. MURRAY,
E. D. GRAFTON.