

(No Model.)

C. H. DOWNES.
Stylographic Fountain Pen.

No. 233,924.

Patented Nov. 2, 1880.

Fig 1

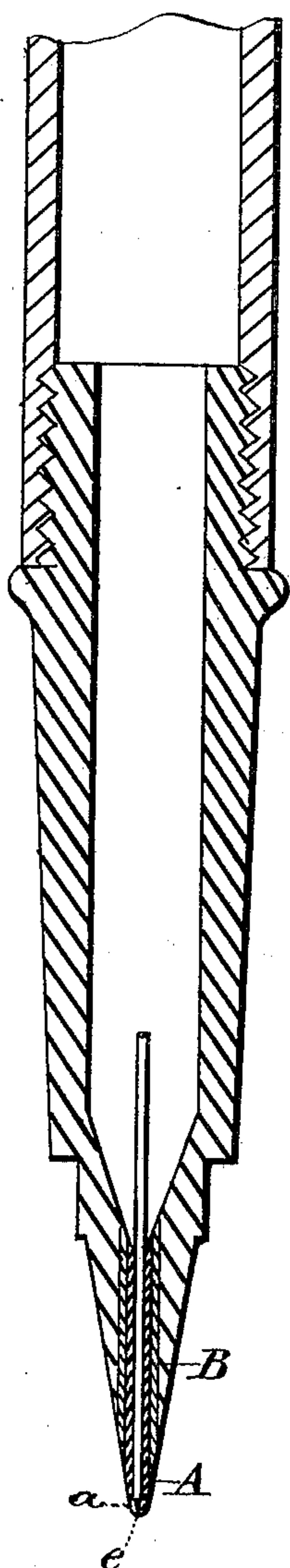


Fig 2

Fig 3

Fig 4

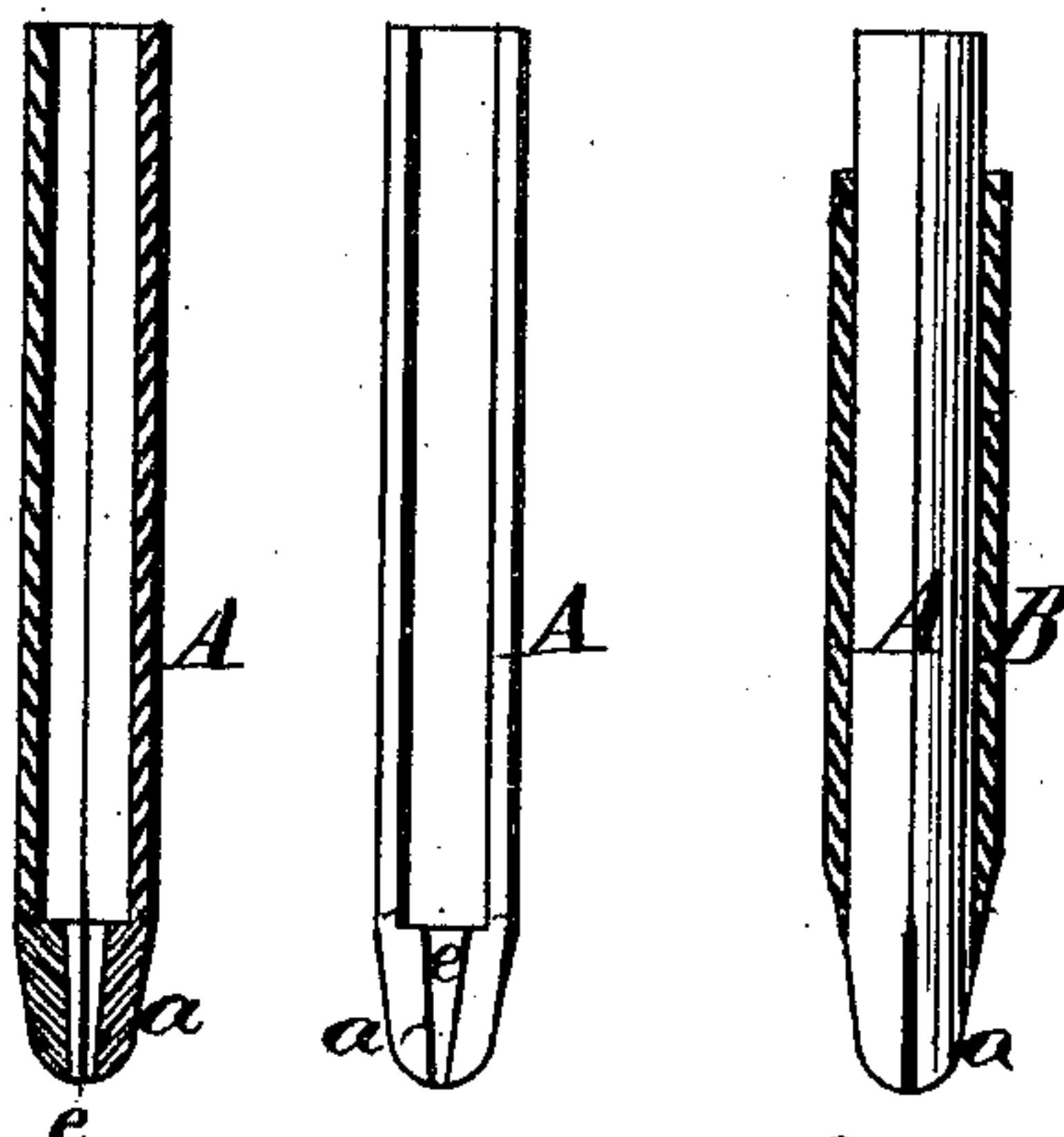
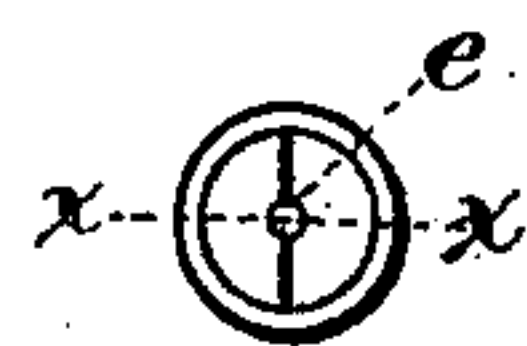


Fig 5



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES H. DOWNES, OF JERSEY CITY, NEW JERSEY.

STYLOGRAPHIC FOUNTAIN-PEN.

SPECIFICATION forming part of Letters Patent No. 233,924, dated November 2, 1880.

Application filed September 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. DOWNES, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Stylographic Fountain-Pen, of which the following is a specification.

My invention relates to the tips or writing-points for stylographic fountain-pens in which the ends of the tubes through which the ink passes to the paper are tipped with iridium.

My object is to dispense with the process of drilling the points and to facilitate and cheapen the manufacture of iridium points for stylographic fountain-pens by slitting the iridium, which is soldered or "sweated" on the end of the tube; also, to combine with a tube so constructed an outer tube or case, as will be hereinafter shown.

Figure 1 is a highly-magnified sectional view of part of a pen having my improved writing-point and showing the needle passed through it. Fig. 2 is a diametrical section through the split and pointed tube, taken in the plane indicated by dotted line *x x*, Fig. 5. Fig. 3 is a view of one-half of the pointed tube. Fig. 4 is an external view of the slitted tube inclosed in the outer tube or case, which latter is in section; and Fig. 5 is an end view of the slitted tube inclosed in the outer tube or case.

Similar letters refer to similar parts.

I take a metal tube of suitable length and diameter and solder on one end of it a piece of the metal known as "iridium," in a similar manner to the process of soldering iridium on

the end of a gold pen. After the iridium is suitably ground to a writing-point I then divide the tube into two longitudinal halves. The inside of the iridium facets I then groove by "burring," and thus form the hole *e* for the passage of ink to the paper during the act of writing. The two halves of the tube are then tightly inserted into an outer tube or case, and the point is finished by grinding it round and smooth.

A is the tube, provided with an iridium point, *a*, perforated at *e* and slitted, as described, and B is the tube which incloses and holds the tube A. The handle of the pen and other parts appertaining to it may be made in the usual well-known manner of constructing stylographic fountain-pens.

I make no claim, broadly, to the use of the metal iridium on the point of a pen, as this is very old and well known; neither do I claim a solid perforated piece of iridium applied to a stylographic fountain-pen.

I claim as my invention—

1. A tube, A, pointed with iridium, slitted and ground out to allow a spindle to pass through it, substantially as described.

2. In a stylographic fountain-pen, a slitted tube pointed with iridium and held by an outer tube, substantially as and for the purposes described.

CHAS. H. DOWNES.

Witnesses:

JAS. M. CLARK,

CHAS. L. DOWNES.