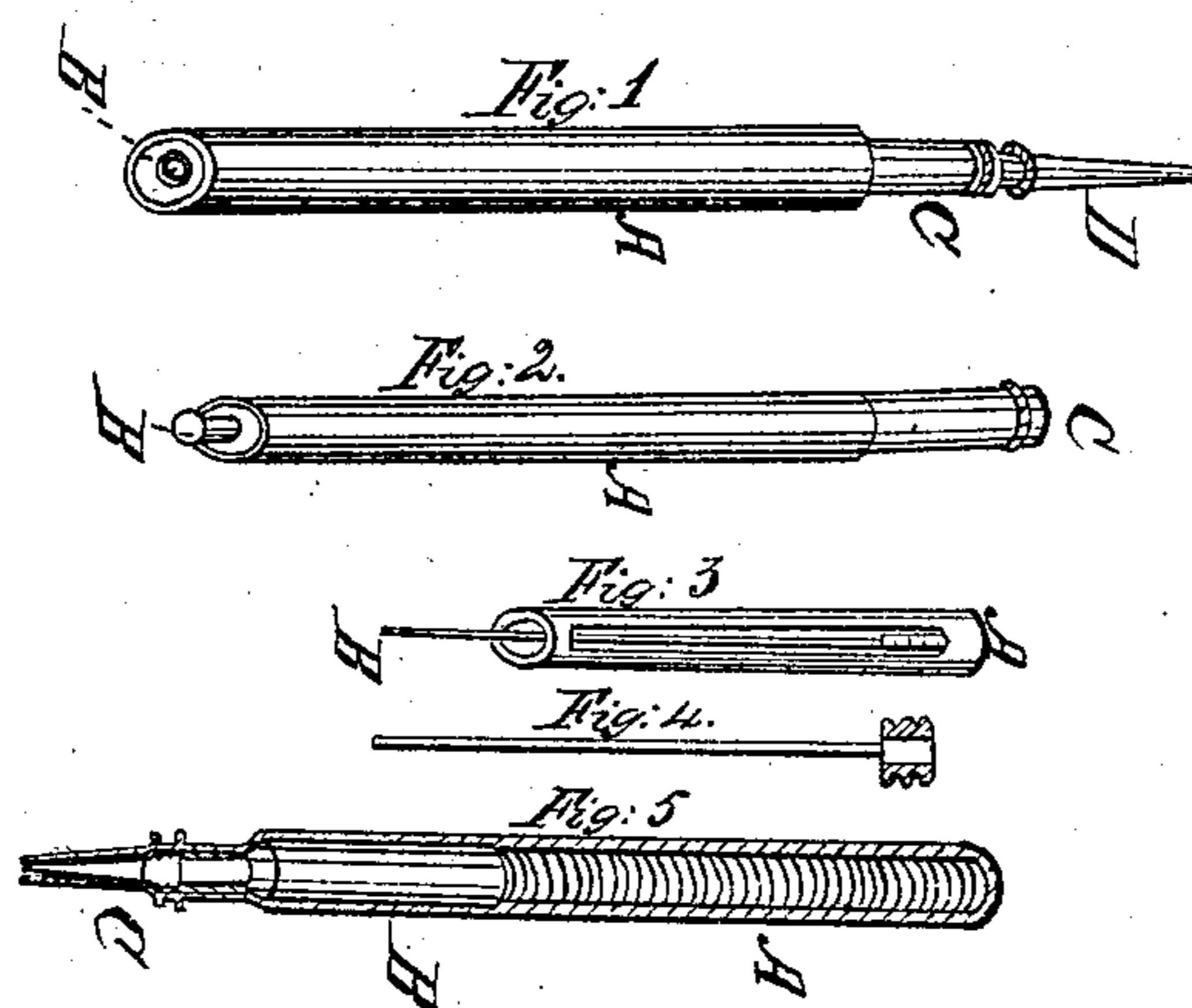


J. Boss.
Pen & Pencil Case.
N^o 4651. Patented Jul. 20, 1846.



UNITED STATES PATENT OFFICE.

JAMES BOSS, OF PHILADELPHIA, PENNSYLVANIA.

EVER-POINTED PENCIL.

Specification of Letters Patent No. 4,651, dated July 20, 1846.

To all whom it may concern:

Be it known that I, JAMES BOSS, of the city and county of Philadelphia and the State of Pennsylvania, have invented a new and useful improvement in the machinery of lead-pencils for the purpose of supplying the pencils with leads without the trouble of removing the head and point whenever a lead shall have been used, to be called the "self-feeding ever-pointed lead-pencil."

The nature of my invention, consists in adding to the works of the former lead pencil, an elongated cylinder of brass, which contains a female screw in the upper end (A Figure 5) in which the head of the wire works, and a box in the lower part of same cylinder (B Fig. 5) to contain the leads.

To enable others skilled in the arts, to use my invention, I will proceed to describe the whole machinery used in my "self feeding ever pointed lead pencil."

Fig. 1 represents the machinery connected together, so as to be used in conjunction with the usual case, and consists of a hollow brass cylinder (marked A) which is intended to be stationary, and is connected to another cylinder (B) by a pin proceeding through the heads of both, and confining (B) so that it cannot revolve; inclosed within (A) and surrounding (B) is another cylinder (Fig. 2) the lower end of which only can be seen at C, which revolves, and has cut on the superior and interior portion a female screw, as seen at (A, Fig. 5), in which screw work the teeth of the head of the wire (Fig. 4) so that the wire may pass up and down and regulate the lead in the point.

Fig. 2, represents the same divested of the outside cylinder (A, Fig. 1) and the point (D, Fig. 1) and shows the outside of cylinder of which a longitudinal bisection, disclosing the interior of the same, is seen at (Fig. 5,) and which contains (Fig. 3,) the upper end of which may be seen protruded at B, it likewise contains a box, as seen at (B Fig. 5) for receiving the leads, which are supplied at the lower end (C) and when the box is filled the point is replaced, so that no lead can come out except the wire be first drawn up, by revolving the cylinder (A, Fig. 2); when the screw (A, Fig. 5) acts upon the head of the wire (Fig. 4) causing it to ride to the upper part of the cylinder (A, Fig. 3) upon which by holding

the point of the pencil downward, and raising the hand and suddenly depressing the same (as though to shake dirt out of the pipe of a key) another lead drops into the point without removing the same, and is adjusted by revolving the wire in a contrary direction.

Fig. 3 represents a smaller cylinder likewise of brass perforated longitudinally, and containing in said cylinder, the wire (Fig. 4), with flat brass head, the edges of which are cogged, so as to work in nut (A Fig. 5) and thereby to adjust the lead to the point, and upon being drawn up permits another lead to fall into the point from box (B Fig. 5).

Fig. 4, represents the wire above alluded to, with cogs or teeth on the sides of its head.

Fig. 5, represents a longitudinal bisection of cylinder marked (A Fig. 2) so as to show the interior of the same, and exhibits the female screw or nut A in the upper part, and the lead box (B) in the lower part, which last is filled by removing the point C and dropping the leads into the box B which will contain from 8 to 12 or 20 leads according to the size of the case and prevents the necessity of taking off the point, whenever a new lead is required, and needing to be filled only once a year or 18 months.

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

The application to the pencil (now in use) of the combination, described in Figs. 2 and 5 to wit the elongation of cylinder (A Fig. 2), the increase length of screw (A, Fig. 5) and particularly the box (B Fig. 5) to contain the leads, which will allow them to come out only one at a time, through the point alone, and that by so slight an exertion as to be styled "a self feeding ever pointed lead pencil," and I do hereby disclaim the former invention now in use, in the common lead pencils.

In witness whereof I, JAMES BOSS do to these presents, in the presence of the underwritten attesting witnesses, affix my signature this 9th day of July in the year of our Lord, one thousand eight hundred and forty six (1846).

JAMES BOSS.

In the presence of—

CHAS. JEANNERET,
SAMUEL M. HOPPER.