

(No Model.)

F. B. POWERS.
LEAD AND CRAYON HOLDER.

No. 246,339.

Patented Aug. 30, 1881.

Fig. 1.

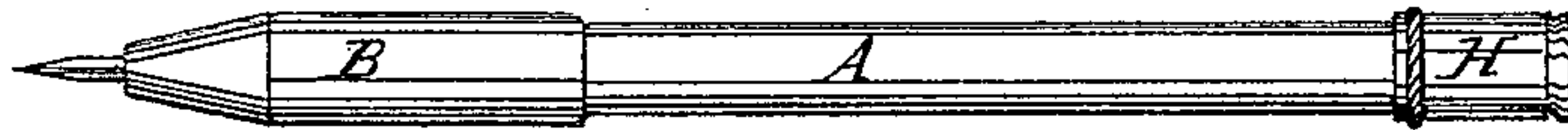


Fig. 2.

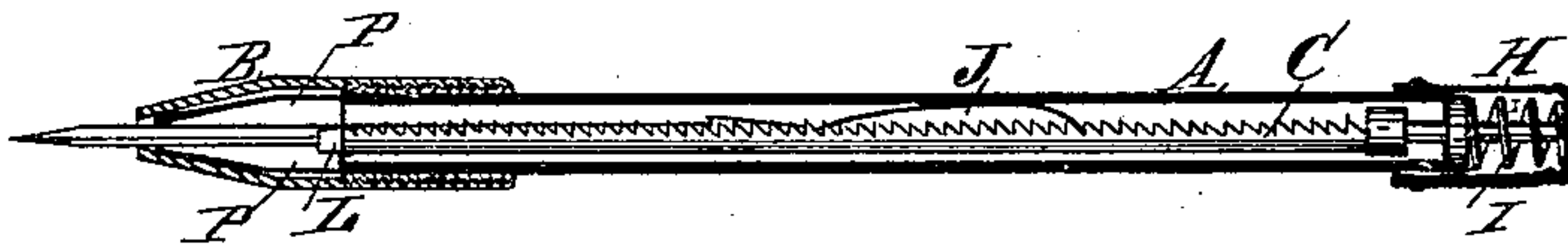


Fig. 3.



Fig. 4.



Fig. 5.

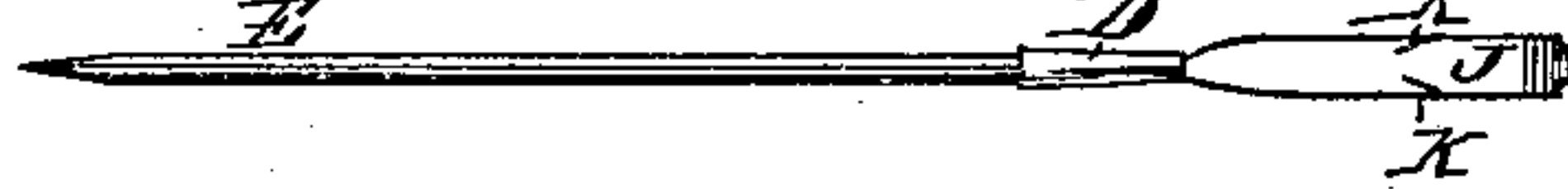
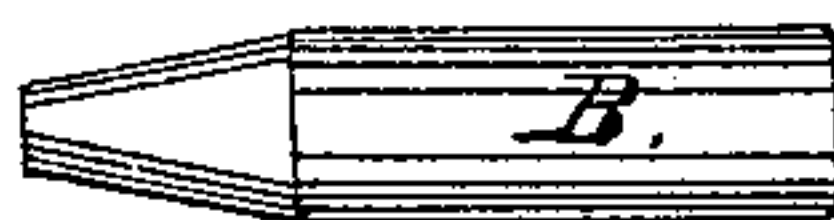


Fig. 6.



WITNESSES:

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LEAD AND CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 246,339, dated August 30, 1881.

Application filed March 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANK B. POWERS, of Springfield, county of Hampden, State of Massachusetts, have invented a new and useful Improvement in Automatic Lead and Crayon Holders, which is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side view of my improved automatic lead or crayon holder; Fig. 2, a central section of the same; Figs. 3 to 6, inclusive, detached views of the several parts.

My improvement consists in combining a longitudinally-movable notched slide, having a cap containing a retracting-spring, a lead-carrier within an unslotted sheath, provided with two or more claspingsprings, and a detachable tip, operating together to feed a lead or crayon from the aperture of the tip step by step, and adapted to employ leads or crayons of different sizes.

A is the sheath; B, the detachable tip; C, the movable slide; D, the lead-carrier; E, the lead or crayon; H, the cap; I, the retracting-spring; J, the pawl on lead-carrier D; K K, small teeth thereon; L L, the spring-hooks at the lower end of slide C; P P, the claspingsprings.

The operation of these several parts is as follows: Lead-carrier D is placed within notched slide C; pawl J engaged with a tooth thereof. Slide C is inserted within sheath A until hooks L L catch at the lower end thereof. Pressing cap H moves slide C and carrier D forward. Releasing the pressure, retracting-spring I returns cap H and slide C to their former positions. The friction of pawl J on the inner surface of sheath A, assisted by the engagement of small teeth K K also therewith, prevents carrier D, with the lead or crayon attached, from retracting by the catching of pawl J in the next lower tooth of the slide C. Continuing this action until the point of the lead or crayon reaches the small end of tip B, the next pressure on the cap leaves the lead projecting just far enough for use. When a new lead is needed tip B is removed, carrier D drawn out from the lower end of sheath A, and the fresh

lead inserted in carrier D. Pressing hooks L L together, retracting-spring I will at once force slide C and cap H from the upper end of sheath A, whence slide C may be withdrawn at will.

To adapt my improved holder to leads or crayons of various sizes, sheath A or slide C is provided with claspingsprings P P, which are caused to firmly embrace any lead smaller than the aperture at the end of tip B by the pressure of the tip on the shoulders of the springs, regulated by the firmness with which the tip is pressed or screwed upon the base of the springs, which base is the lower extremity of sheath A. The lead-receiving portion of carrier D is tapered, and a thread cut inside thereof, to more firmly retain leads or crayons of different sizes. The tip also acts as a point-protector, being movable on the sheath.

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

1. A lead or crayon holder provided with a feeding device consisting of a lead-carrier provided with a pawl and a notched slide movable longitudinally, and adapted to advance the carrier step by step by a pawl-and-ratchet movement, and hold it at the point to which it is so advanced, substantially as and for the purpose set forth.

2. The combination of movable tapering tip B, claspingsprings P P, and tapering lead-carrier D, adapted to act in conjunction upon leads of varying sizes, substantially as set forth.

3. The combination of a sheath, a notched slide, a lead-carrier, and a retracting-spring cap, constructed and operating together substantially as described.

4. The combination of a sheath provided with lead-claspingsprings, a movable tapering tip fitting the sheath, a lead-holder, and a notched slide, acting together substantially as and for the purpose described.

FRANK B. POWERS.

Witnesses:

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JOHN W. RIPLEY.