H. C. BENSON.

Lead and Crayon Holder.

No. 223,467. Patented Jan. 13, 1880.

Fig. 1.

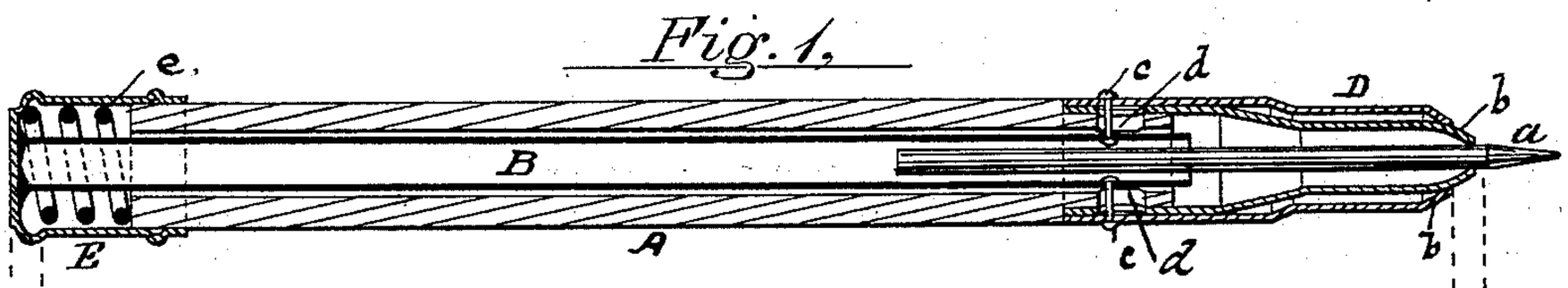


Fig. 2.

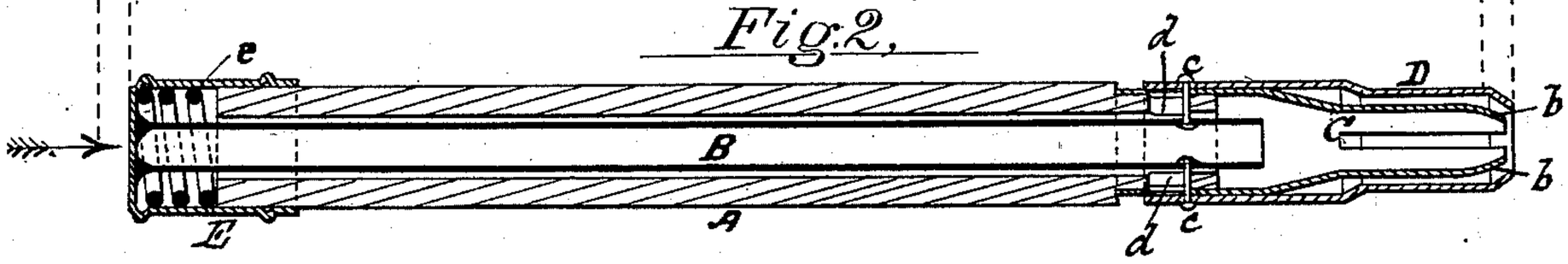
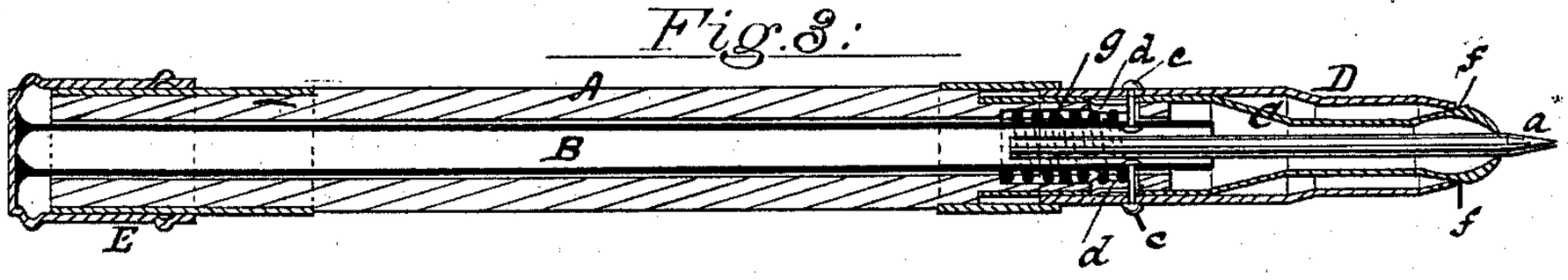


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY C. BENSON, OF NEW YORK, N. Y., ASSIGNOR TO JOSEPH RECKENDORFER, OF SAME PLACE.

LEAD AND CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 223,467, dated January 13, 1880.

Application filed November 14, 1879.

To all whom it may concern:

Be it known that I, HENRY C. BENSON, of the city, county, and State of New York, have invented certain new and useful Improvements in Pencil or Lead and Crayon Holders, of which the following is a specification.

My invention relates to that class of pencil or lead and crayon holders in which lead-holding jaws and a clamp by which the same are closed on the lead are combined with a sheath or handle and a lead-containing tube or receiver, longitudinally movable with respect to one another, and operating when moved in one direction to cause the release, and when moved in the other direction to cause the contracting, of the jaws.

My invention consists in the combination, substantially as hereinafter set forth, with the said handle or sheath and lead-containing tube or receiver, longitudinally movable with respect to one another, of lead-holding jaws fixed to the sheath and a clamping-sleeve external to the jaws, but attached to and moving with the lead-receiving tube. With said parts may be combined a spring adapted to move the tube or sheath in a direction opposite to that in which either must be moved by hand.

The nature of my invention and the manner in which the same is or may be carried into effect will be understood by reference to the accompanying drawings, in which—

Figure 1 is a longitudinal central section of one form of pencil-holder embodying my invention with the jaws closed. Fig. 2 is a similar section of the same device with the jaws relaxed. Fig. 3 is a similar section of a pencil-holder, of modified construction.

A is the tubular sheath or handle, within which is contained the lead-receiving tube B, which extends loosely through the longitudinal bore of the sheath. To the front end of the sheath are attached the lead-holding jaws C, made in this instance of a tubular piece of metal drawn to the proper shape and split at its front end, so as to form the usual jaws for grasping the lead *a* inserted between them. Upon the exterior of the jaws is mounted a sleeve, D, which in this instance acts as the jaw-clamping device. The sleeve is provided with a contracted front end, which, when moved in the proper direction, acts upon inclines *b* on the jaws for the purpose of closing the same. The lead-receiving tube B and the clamping-sleeve D are connected by pins *c*, which extend through longitudinal slots *d*, of proper length, formed in the sheath and jaw-tube, as shown.

The lead-receiving tube preferably extends beyond the rear end of the sheath, and has firmly attached to it a metal cap, E, whose sides extend down upon and overlap the rear end of the sheath.

Under this arrangement it will be seen that when the sheath and the tube are moved in one direction longitudinally with respect to one another the clamping-sleeve will be caused to slide upon the jaws in such manner as to close them upon the lead, as seen in section in Fig. 1, and when moved in the opposite direction with respect to one another the clamping-sleeve will be removed from the jaws to a sufficient extent to permit the latter to relax, and so release the lead, as indicated in Fig. 2.

In order to provide means for automatically retracting the clamping-sleeve upon the jaws, I make use of a retracting-spring, which in this instance is shown at *e* interposed between the head of the cap E and the rear end of the sheath. The cap is pushed forward by hand against the stress of the spring in order to release the lead. The moment this pressure is taken off the spring expands and returns the sleeve to its clamping position.

In Fig. 3 I have represented a modified arrangement of the parts above described, in which the same general organization is retained; but the clamping-sleeve acts to clamp the jaws by a forward movement instead of a rearward movement, as in the preceding figures.

To this end the jaws are provided with reverse inclines *f*, which are acted on by the contracted front end of the clamping-sleeve, as indicated in Fig. 3. The lead-receiving tube in this case is drawn back to move the sleeve in a direction to release the jaws, and a spiral spring, *g*, arranged in a suitable recess in the front of the sheath around the lead-receiving tube, bearing at its front against the pins *c* and at its rear against the sheath or a shoulder thereon, tends to force the tube and

clamping-sleeve forward in the requisite direction to clamp the jaws.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The tubular sheath or handle and lead-holding jaws attached to the same, in combination with the lead-containing tube arranged within and longitudinally movable with respect to said handle, and the clamping-sleeve mounted upon said jaws and attached to and moving with the lead-receiving tube, substantially as herein set forth.

2. The tubular sheath and lead-holding jaws attached to the same, the lead-receiving tube arranged within and longitudinally movable with respect to said sheath, and the external clamping-sleeve attached to and moving with the lead-containing tube, in combination with the spring by which said parts are moved in a direction to cause the sleeve to clamp the jaws, substantially as herein set forth.

In testimony whereof I have hereunto signed my name this 13th day of November, A. D. 1879.

HENRY C. BENSON.

Witnesses:
JOE W. SWAINE,
M. BAILEY.