(No Model.)

J. HOFFMAN.

LEAD AND CRAYON HOLDER.

No. 261,455. Patented July 18, 1882.

Fig 1.

Fig 2.

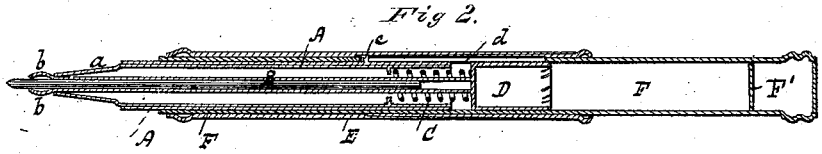


Fig 3.

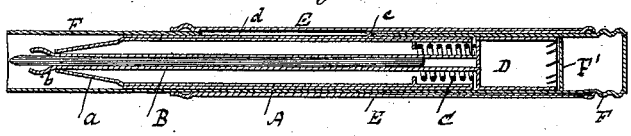
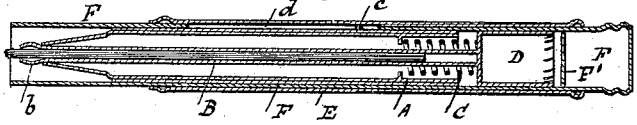


Fig 4.



WITNESSES

E. M. Howard

E. A. Dick

INVENTOR

Joseph Hoffman

by M. Bailey

his Attorney

UNITED STATES PATENT OFFICE.

JOSEPH HOFFMAN, OF NEW YORK, N. Y., ASSIGNOR TO JOSEPH RECKENDORFER, OF SAME PLACE.

LEAD AND CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 261,455, dated July 18, 1882.

Application filed March 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HOFFMAN, of the city, county, and State of New York, have invented a certain new and useful Improvement in Lead and Crayon Holders, of which the following is a specification.

In Letters Patent No. 240,712, dated April 26, 1881, I have shown and described an automatic pencil or lead and crayon holder provided with an extension-piece which acts at the same time as the "pressure-cap," so-called, by which the lead-grasping device is caused to open against the stress of a reacting spring, in order to release the lead. It is my object in this improvement to impart to that piece an added function, so that it shall not only be an extension-piece and pressure-cap, but a point-protector as well.

The improvement is also applicable to automatic extension-pencils in which the extension-piece acts only as a pressure-cap.

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

Figure 1 is a side elevation of a pencil embodying my improvement with the sheath extended. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a like section of the pencil with the sheath pushed far enough forward to act as a pressure-cap to release the hold of the lead-clamping device on the lead. Fig. 4 is a like section with the sheath or handle contracted and the jaws closed on the lead.

A is the tubular sheath or case, provided with the usual tip or contracted nozzle, *a*.

B is the lead-containing tube, longitudinally movable with respect to the sheath, and terminating at its front end in jaws *b*, (constituting the lead-clamp in this instance,) which project through the tip, and are acted on by the latter when the tube is retracted to close upon the lead.

C is the retracting-spring, and D is the cap.

The parts thus far described constitute in effect a pencil similar in its general characteristics to the pencil now well known in the market as the "automatic."

External to and surrounding the case A is a ferrule or sleeve, E, which may be of any suitable size, external conformation, and material, and is firmly united to the inner case, A, by a lug, pin, or rivet, *c*, or its equivalent, which will serve to fasten the two parts together. Between the inner case and the exterior ferrule or sleeve, E, is an intermediate sliding tube, F, which is the extension-piece hereinbefore referred to. This tube fits snugly on the exterior of the case A, and at the point where it meets the pin *c* is provided with a longitudinal slot, *d*, which is of sufficient length to permit it to slide the requisite distance in each direction. The rear portion of the tube constitutes the pressure cap, and to this end there is in the present instance fixed at a proper point inside the tube a disk or block, F′, which, when the tube is pushed forward far enough, as shown in Fig. 3, bears on the inner cap, D, and thus causes the clamping-jaws to release the lead. The tube is of such length that when the sheath is contracted or shortened, as shown in Fig. 4, the front end of the tube will extend forward far enough to cover the point of the pencil, thus constituting a point-protector. In this position the extension-piece exerts no pressure on the inner cap, D. The arrangement is such that the front projecting part of the tube forms a gage by which the extent to which the lead shall project from the jaws may be determined. By drawing back the extension-piece as far as permitted by the slot *d* the point of the pencil is uncovered and the handle is extended to its full length, as indicated in Figs. 1 and 2. The sleeve or ferrule E covers the point between the extension-piece and the body of the pencil. It can be made an ornamental feature of the pencil, and is of use in manipulating it. It may be of any desired size, and, as hereinbefore intimated, is a useful device in connection with the inner case and the intermediate extension-piece, whether the latter is long enough to act as a point-protector, as herein shown, or is a mere extension-piece, as in my Patent, No. 210,712, hereinbefore referred to.

The improvement is applicable not only to the special form of automatic pencil herein

described, but to other pencils of that general type in which other devices besides jaws are used to clamp the lead.

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

1. The combination, with the inner case, the lead-clamp, the lead-clamp-operating mechanism, and the reacting spring, of the outer sleeve or ferrule fast to the inner case and a sliding extension-tube intermediate between the said sleeve and case, adapted to move the lead-clamp-operating mechanism against the stress of the reacting spring, and also to be moved back and forth so as to lengthen or shorten the handle of the pencil, substantially as hereinbefore set forth.

2. The intermediate combined extension-piece, pressure-cap, and point-protector, in combination with the outer sleeve or ferrule, the inner case, the lead-clamping mechanism, and the reacting spring, substantially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 1st day of March, 1882.

JOSEPH HOFFMAN.

Witnesses:

JOE W. SWAINE,

C. S. BRAISTED.