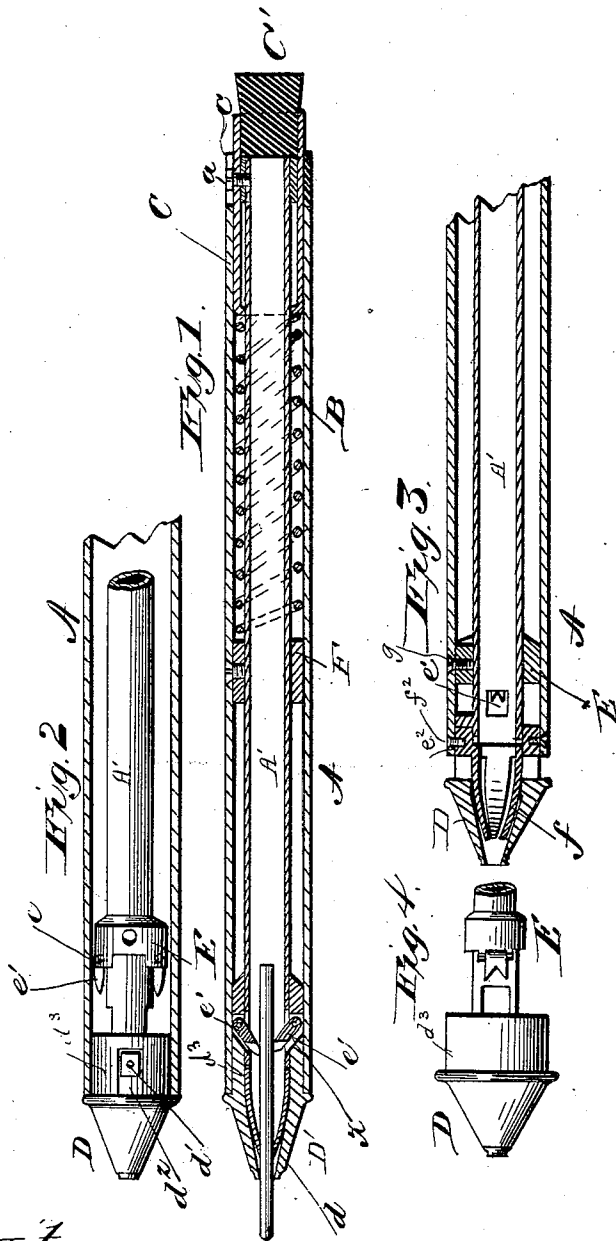


(Model.)

C. FREDERICK.
Lead and Crayon Holder.

No. 240,399.

Patented April 19, 1881.



Witnesses
H. L. O'Connell
J. J. McCarthy.

Inventor
Charles Frederick
By Alexander T. Watson

UNITED STATES PATENT OFFICE.

CHARLES FREDERICK, OF NEW YORK, N. Y., ASSIGNOR TO JAMES GRIFFITH, OF SAME PLACE.

LEAD AND CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 240,399, dated April 19, 1881.

Application filed September 27, 1880. (Model.)

To all whom it may concern:

Be it known that I, CHARLES FREDERICK, of New York, in the county of New York, and in the State of New York, have invented certain new and useful Improvements in Lead and Crayon Holders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in pencils of that class in which an adjustable lead or crayon is employed; and it has for its objects to provide a means whereby the adjustment of such lead or crayon may be readily effected, and whereby different-sized leads may be employed and held firmly in position for writing, as more fully hereinafter specified. These objects I attain by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal sectional view, showing my device complete with the parts in a normal position. Fig. 2 represents a view, partly in section and partly in elevation, showing the devices for clutching the lead thrown back of their normal position, in order to better illustrate such parts. Fig. 3 represents a longitudinal sectional view taken at right angles to the view represented in Fig. 1; and Fig. 4 represents a detached elevation of the lower end of the pencil, showing the clutch mechanism.

The letter A indicates the exterior casing of the pencil, which is simply a tubular section of suitable length and diameter and constructed of any proper material.

The letter A' indicates an inner tube, extending through the tube A and concentric therewith. The said tube A' is provided with a hollow conical head, D, at its lower end, which head, for a portion of its length, is cylindrical, as indicated by the letter d^3 , the said portion d^3 fitting snugly within the lower end of the outer casing, A, and being adapted to slide thereon.

The letter e^2 indicates a small annulus, fitted and adapted to slide back and forth in the head D, the said annulus carrying a series of

converging spring-fingers, f , which are adapted to bear against and be compressed by the inner conical wall of the head D when the parts are in a normal position, so as to hold the lead or crayon lightly and truly center the same, of whatever diameter it may be. The said annulus is provided with lateral lugs d' , which project through longitudinal slots d^2 in the cylindrical portion of the head, and which are flush with the outer wall thereof, the said lugs being secured rigidly to the outer casing, A, by means of the screws f^2 , as shown in Fig. 3.

The letter E indicates an annulus, secured within the casing A, just above its lower end, by means of a set-screw, g , the inner tube, A', being adapted to work longitudinally through said annulus. The said annulus is provided with two loosely-pivoted clutches, e' , which set through the slots e in the tube A', and are adapted to engage the lead or crayon, as more fully hereinafter specified.

F indicates an annular abutment, secured within the casing A, against which one end of a spiral spring, B, encircling the tube A', bears, the other end of said spring bearing against the lower end of a tubular cap, C, secured to the upper end of the tube A' in such manner as to hold and return said tube A and its parts to a normal position.

C' indicates a rubber, located in the rear end of the tubular cap C. The cap C is secured to the tube A' by means of a screw, a , which sets through a longitudinal slot, c , in the rear end of the outer casing, so as to permit the inner tube, A', to have the proper longitudinal movement in the outer casing.

The operation of my invention is as follows: The parts being in a normal position, as shown in Fig. 1, the lead or crayon will be held in proper position for writing. When the lead or crayon is worn, in order to project a fresh portion the inner tube, A', is projected downward by pressing upon its rear end. This causes the fingers f and the clutches e' to slip back upon the lead or crayon. Upon relieving the pressure upon the rear end of the tube A' the spring throws it back to its normal position, causing the fingers to close gently on the lead and guide and center the same, while the clutches grasp and hold it.

I do not claim, broadly, a crayon-holder provided with a sheath or handle, and a longitudinally-movable lead-containing tube, combined with a lead-grasping jaw inside of and
5 connected with the sheath extending into the tube through one or more openings therein, so as to have contact with the lead and operated by the tube, according to the direction of its movement, to clamp and release the lead. Nor
10 do I claim the sheath or handle, the longitudinally-movable lead-containing tube, the pressure-cap, and the retracting-spring, combined with grasping-jaws inside of and connected with the sheath, arranged to enter an opening
15 in the tube, so as to grasp the lead therein when the tube is retracting, and to be removed from the opening out of contact with the lead when the tube is moved forward.

Having thus fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

In combination with the outer casing, the inner tube, provided with a conical head at its lower end, the annulus secured within the outer casing, provided with spring-fingers extending into said head, and the annulus carrying loosely-pivoted clutches, setting through slots in the inner tube and adapted to grasp the lead, and the spring by which said inner tube is held and returned to a normal position, substantially as and for the purposes specified.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of September, 1880.

CHAS. FREDERICK.

Witnesses:

H. AUBREY TOULMIN,

J. J. MCCARTHY.