

(No Model.)

W. H. H. KNIGHT.
LEAD OR CRAYON HOLDER.

No. 277,139.

Patented May 8, 1883.

Fig. 1.

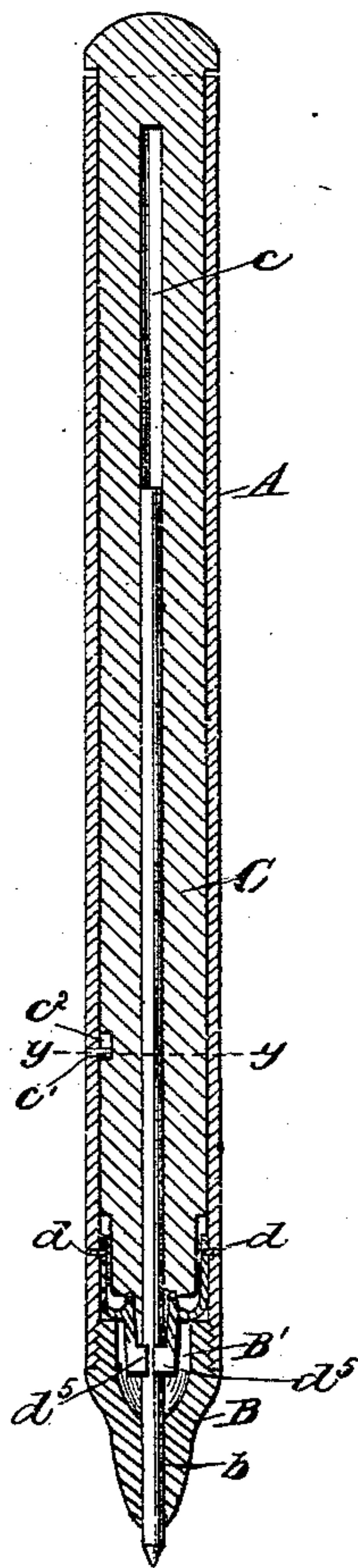


Fig. 4.

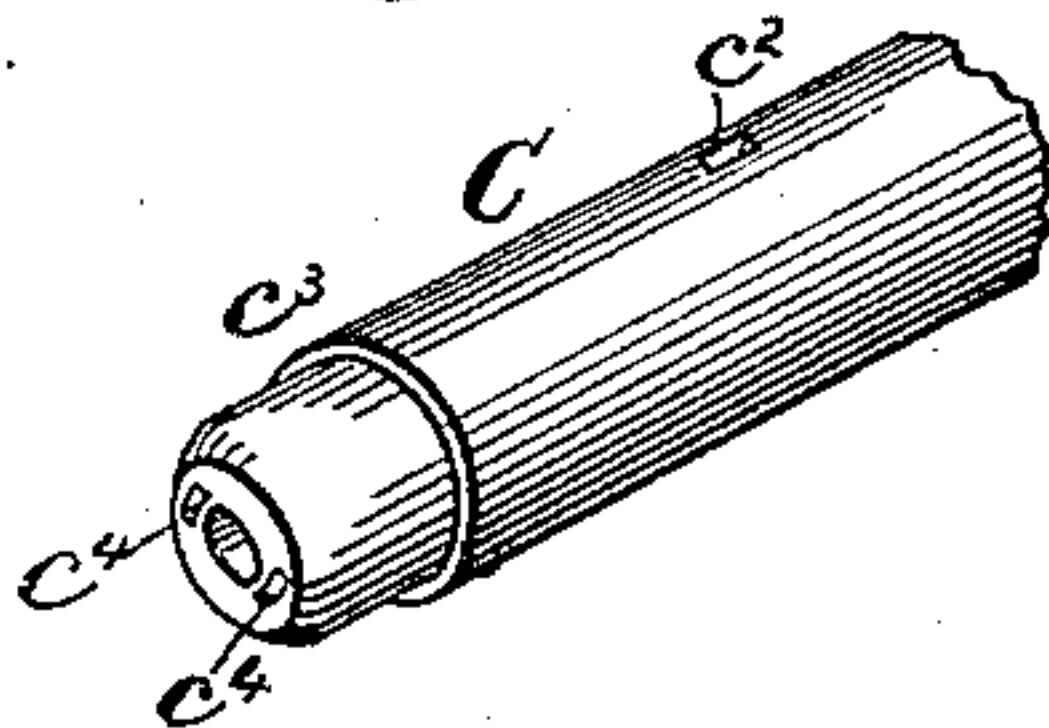


Fig. 2

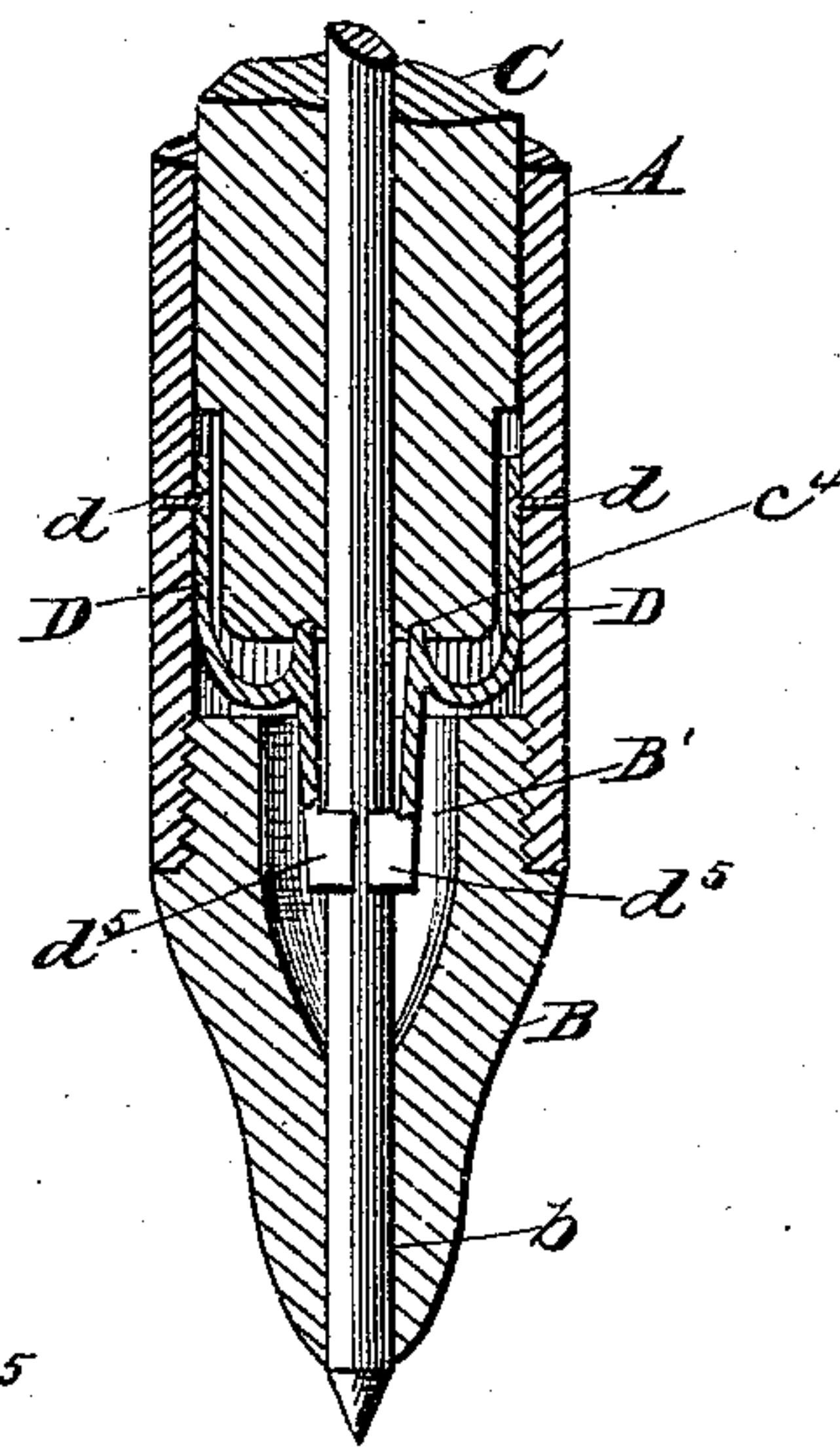


Fig. 3

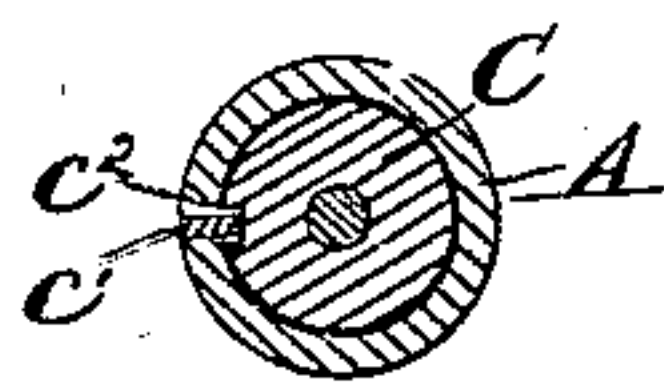
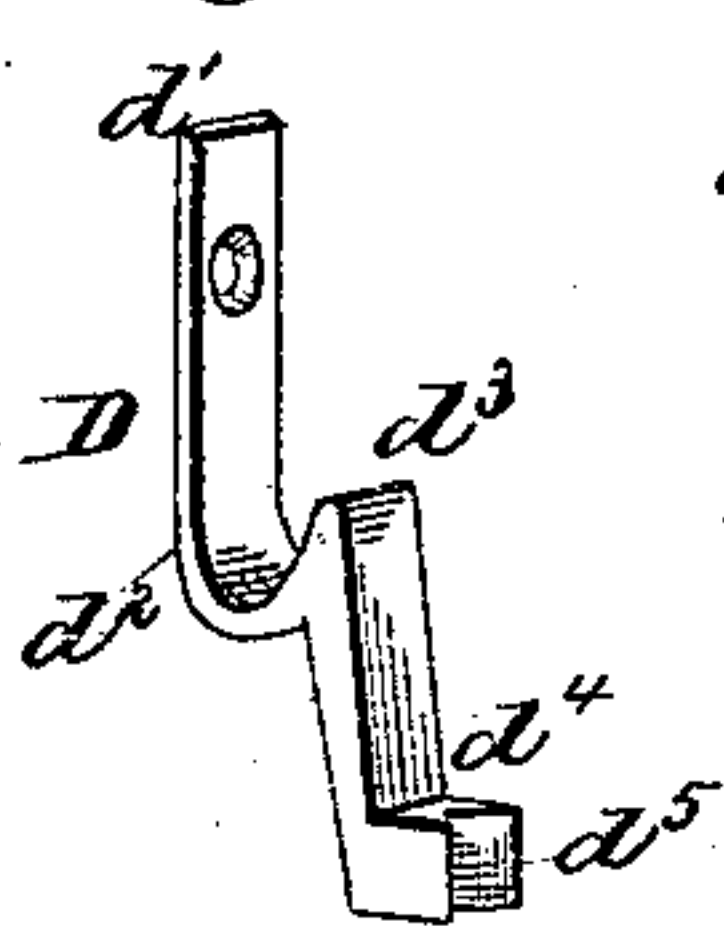


Fig. 5.



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WILLIAM H. H. KNIGHT, OF WASHINGTON, DISTRICT OF COLUMBIA,
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LEAD OR CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 277,139, dated May 8, 1883.

Application filed February 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. H. KNIGHT, a citizen of the United States; residing at Washington, in the District of Columbia, have
5 invented a new and useful Improvement in Lead or Crayon Holders, of which the following is a specification.

In the drawings, Figure 1 is a longitudinal section of a pencil-case embodying my invention. Fig. 2 is a similar sectional view of the
10 lower end or tip enlarged. Fig. 3 is a cross-section on the line *y y*. Fig. 4 is a detail perspective view of the lower end of the plunger. Fig. 5 is a detail perspective view of one of
15 the springs for clamping the lead or crayon, and also for retracting the plunger.

My invention relates to that class of pencil or crayon holders wherein hollow plungers, in combination with gripping-springs, operate to
20 retain or release the lead or crayon within and from a pencil case or sheath.

The invention relates more particularly to the peculiar form of springs employed to effect the above-named object, said springs operating
25 not only to hold a lead or crayon within the sheath, but also to return the plunger to its normal position after said plunger has been pressed downward for the purpose of releasing the lead or crayon from the pressure of
30 said springs. Many devices have been made to produce the above-named result, but each and all have heretofore failed to accomplish the end sought for without the employment of a second or auxiliary spring, the use of which
35 renders the pencil-holder complicated and liable to get out of order.

To provide a simple, cheap, and durable device for the purpose indicated has been the object of this invention; and to this end it consists in a pencil-case provided with a hollow
40 plunger operated from the top or upper end, and also provided with a spring fulfilling the twofold function of retaining the lead within the sheath and of returning the plunger to its normal position when released from downward
45 pressure, substantially as hereinafter described and claimed.

Referring to the drawings, in which similar letters denote like parts in each figure, A rep-

resents the case or sheath, provided at its lower end with a tip or nozzle, B, perforated at *b* to admit a lead or crayon.

C represents a plunger provided with a hollow center, *c*. The plunger C is held within the case A by a small stud or pin, *c'*, which
55 passes through the shell of the sheath A and enters a small recess, *c''*, in the plunger. Said stud or pin *c'* and recess *c''* limit the longitudinal movement of the plunger C. I preferably make the lower end, *c''*, of the plunger somewhat smaller in diameter than the remaining
60 portion thereof, in order that it may pass downward between the springs D without binding said springs; and I also preferably provide the extreme lower end of said plunger with
65 recesses *c'''*, for purposes hereinafter indicated.

D represents gripping and retracting springs, the upper ends of which springs are attached to the sheath A, on the inner side thereof, by
70 rivets *d*, from which point they extend toward the tip or nozzle, and are for a short distance comparatively straight, as shown in Fig. 5, between the points *d'* and *d''*. From the latter point they bow or curve inwardly and upwardly
75 to a point, *d'''*, thence downwardly straight, as shown, between the points *d'''* and *d''''* of same figure, and at the latter point they are provided with gripping-jaws *d''''*.

The tip or nozzle B is provided with an interior chamber, B', into which and within
80 which said gripping-jaws *d''''* extend and operate, by which means the whole of the lead or crayon can be completely used.

The operation of my device is as follows: When it is desired to introduce a lead or crayon
85 within the sheath, pressure is applied to the upper end of the plunger, the lower end of which, bearing upon the upward part of the spring D, operates to press said part downward, and so throw the gripping-jaws *d''''* open. On
90 removing the pressure from the plunger the springs operate to return said plunger to its normal position, and also to tightly grasp the lead or crayon within the jaws *d''''*. When it is desired to release the pencil from the gripping-
95 jaws the operation is repeated, as will be readily understood.

It will be seen from the above description

that the peculiar form of spring I employ operates not only to grasp the lead or crayon, but also operates to return the plunger without the use of a second or auxiliary spring; 5 and inasmuch as said plunger and spring are not attached to each other either or both may be removed or replaced at will without disturbing the other.

Having thus described my invention, what 10 I claim is—

1. In a lead or crayon holder, the spring D, having the inwardly and upwardly curved part between the points d^2 d^3 and straight downwardly-projecting part between the points 15 d^3 d^4 , having gripping-jaws d^5 , substantially as described.

2. In a lead or crayon holder, the combination of the gripping and retracting springs D, constructed as described, with the hollow plunger C, and sheath A, substantially as de- 20 scribed.

3. In a lead or crayon holder, the combination of the sheath A, provided with a guide pin or stud, c' , with the plunger C, having recess c^2 to receive the guide-pin c' , recesses c^4 c^4 , 25 springs D, constructed as described, and tip B, substantially as described.

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Witnesses:

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ANSON S. TAYLOR.