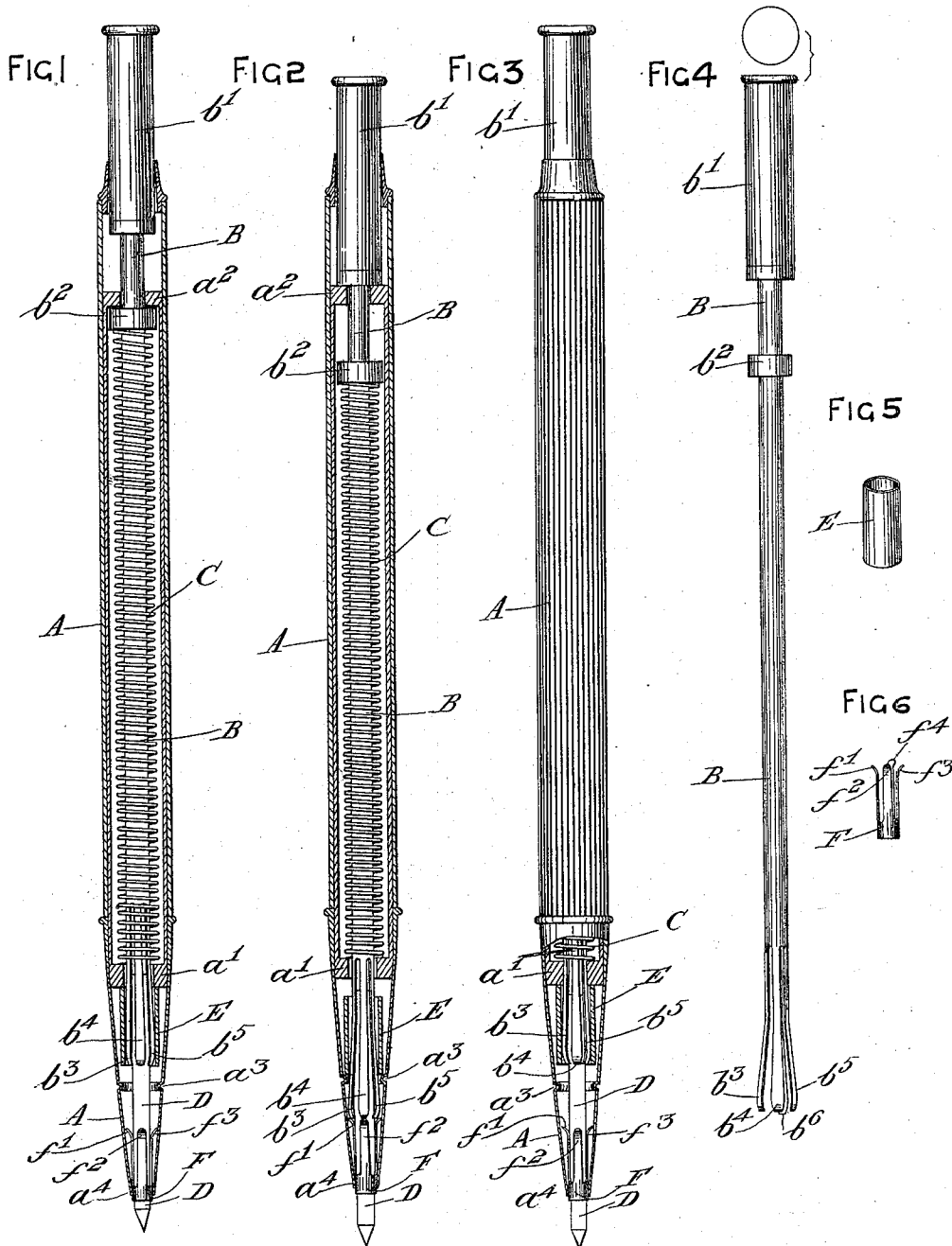


(No Model.)

J. CLEMENT.
LEAD PENCIL CASE.

No. 566,444.

Patented Aug. 25, 1896.



WITNESSES,

Charles Bosworth Kelley.
Herbert Whitehouse

INVENTOR

John Clement

UNITED STATES PATENT OFFICE.

JOHN CLEMENT, OF BIRMINGHAM, ENGLAND.

LEAD-PENCIL CASE.

SPECIFICATION forming part of Letters Patent No. 566,444, dated August 25, 1896.

Application filed February 26, 1896. Serial No. 580,821. (No model.) Patented in England October 27, 1894, No. 20,573.

To all whom it may concern:

Be it known that I, JOHN CLEMENT, a subject of Her Majesty the Queen of Great Britain and Ireland, residing at Birmingham, in the county of Warwick, England, have invented certain new and useful Improvements in Lead-Pencil Cases and other Like Cases or Holders, of which the following is a specification, this invention having been patented to me in Great Britain under date of October 27, 1894, No. 20,573.

My invention has reference more particularly to lead-pencil cases, but can also be applied to other like cases or holders, such, for instance, as cases or holders for crayons, toothpicks, and crochet-hooks; and this invention consists of the herein-described improved means for propelling the lead (or the crayon, toothpick, or crochet-hook) from the case by a step-by-step movement ready for use and for permitting the return of the same to the case when not in use.

I will describe my invention as applied to a lead-pencil case and refer to the accompanying drawings, on which—

Figure 1 is a sectional elevation of a lead-pencil case constructed according to this invention, shown with the lead protruding ready for use. Fig. 2 shows the same parts as Fig. 1, but with the lead moved down a step by pressing the cap, as hereinafter described. Fig. 3 is a part sectional elevation of the said pencil-case, showing the propelling parts in the same positions as in Fig. 1, but with the lead protruded as in Fig. 2. Figs. 4, 5, and 6 show separate parts of the lead gripping and propelling mechanism of the said pencil-case.

The same letters of reference indicate the same parts in all the figures.

Within the outer casing A of the pencil-case and protruding through the top of the same I provide a tubular pusher B, made with a cap b' at the top or otherwise arranged so that the pusher can be pushed down the pencil-case to propel the lead. A coiled spring C within the outer casing A acts between the collar a' , fixed in the pencil-case, and the collar b^2 , fixed on the pusher B, thus moving the pusher B back to its normal position (shown in Fig. 1) with the collar b^2 resting against the stop-collar a^2 ,

fixed in the pencil-case. The pusher B is made tubular, so that the lead can be inserted therein by first removing the cap b' . The bottom end of the pusher B is slit longitudinally and formed as jaws, preferably four in number, marked $b^3 b^4 b^5 b^6$, adapted to grasp the lead D when pressed together by the loose collar E, (shown separately by Fig. 5,) which is provided on the lower part of the pusher B, and which is free to move up and down the same through a short space. The outside surfaces of the jaws $b^3 b^4 b^5 b^6$, on which the collar E fits, are, as shown, made conical or taper larger toward the bottom, so that when, as hereinafter described, the pusher B is by the spring C moved up the pencil-case the collar E comes in contact with the stationary collar a' or stop fixed in the outer casing, and is thereby moved down the outer-inclined surfaces of the jaws $b^3 b^4 b^5 b^6$, thus forcing the jaws together and causing them to grasp the lead, as shown in Figs. 1 and 3. When the pusher B, with the collar E on the jaws $b^3 b^4 b^5 b^6$, has been moved down, as hereinafter described, and shown in Fig. 2, through a certain space, the collar E comes in contact with the tuck or stop a^3 , formed in the lower part of the pencil-case A, so that the motion of the collar E is thereby arrested, and as the jaws $b^3 b^4 b^5 b^6$ then move out of the collar E they spring open, as in Figs. 2 and 4, and release the lead D. In front of the jaws $b^3 b^4 b^5 b^6$ of the pusher B, and within the nose or bottom end a^4 of the pencil-case, through which the lead D protrudes when the pencil is in use, there is a spring F, (shown separately by Fig. 6,) which is made with upwardly-projecting spring-jaws, preferably four in number, $f' f^2 f^3 f^4$, which grip the lead D, but not so tightly as to prevent the lead D being pushed forward between the jaws $f' f^2 f^3 f^4$ by the pusher B, as hereinafter described.

The pencil-case above described acts as follows: When the pencil-case is in use and the parts are in their normal positions, as shown by Fig. 1, the lead D is grasped by both the spring F in the nose a^4 of the pencil-case A and by the jaws $b^3 b^4 b^5 b^6$ of the pusher B. To propel the lead D by a step-by-step movement, the pressure-cap b' is pressed into the case A, so that the pusher

B, grasping the lead D, will be moved forward through a short space until the collar E is arrested, as shown in Fig. 2, by coming in contact with the tuck or stop a^3 , which
 5 causes the jaws $b^3 b^4 b^5 b^6$ to release the lead D, the forward movement of which latter now ceases. Upon the pressure being removed from the pressure-cap b' the coiled
 10 spring C moves the pusher B upward again, (the lead D meanwhile being held stationary by the spring F in the nose a^4 of the pencil-case,) so that after the pusher B has been moving through a short space the collar E
 15 will, by the jaws $b^3 b^4 b^5 b^6$, be also moved up with the pusher B until the collar E is arrested by the fixed collar a' , which will then force the jaws $b^3 b^4 b^5 b^6$ together to take a fresh grip on the lead D as they come to rest. The parts are shown in this position by Fig.
 20 3. Then when the pusher B is again pressed down the lead D is again carried forward by the jaws $b^3 b^4 b^5 b^6$ through a short space, as above described, until again released by the collar E coming in contact with the tuck or
 25 stop a^3 , and then when the pressure is released the lead D is held stationary and the jaws $b^3 b^4 b^5 b^6$ return again and take a fresh grip on the lead D, as stated above, and thus the lead D is propelled a short distance each
 30 time the pressure-cap b' is pressed down.

This invention is applied to cases or holders for crayons, toothpicks, crochet-hooks, and the like, similarly as above described with reference to a lead-pencil case, the crayon, toothpick, crochet-hook, or the like 35 taking the place of the lead D.

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

In a pencil-case or other like case or holder the combination of the outer casing made 40 with a spring at its lower end adapted to grip the lead or the like protruding therethrough, a tubular pusher containing the lead or the like pressed upwardly through the top of the case by a spring the lower end of said pusher 45 being made with grasping-jaws which tend to spring outwardly and release the lead or the like, a loose collar on said grasping-jaws, and stops in said casing which limit the travel of said collar so as to close the jaws onto the 50 lead or the like and allow the jaws to spring open at the proper times and force the lead or the like forward by a step-by-step movement, substantially as described.

In witness whereof I have hereunto set my 55 hand in presence of two witnesses.

JOHN CLEMENT.

Witnesses:

CHARLES BOSWORTH KELLEY,
HERBERT WHITEHOUSE.