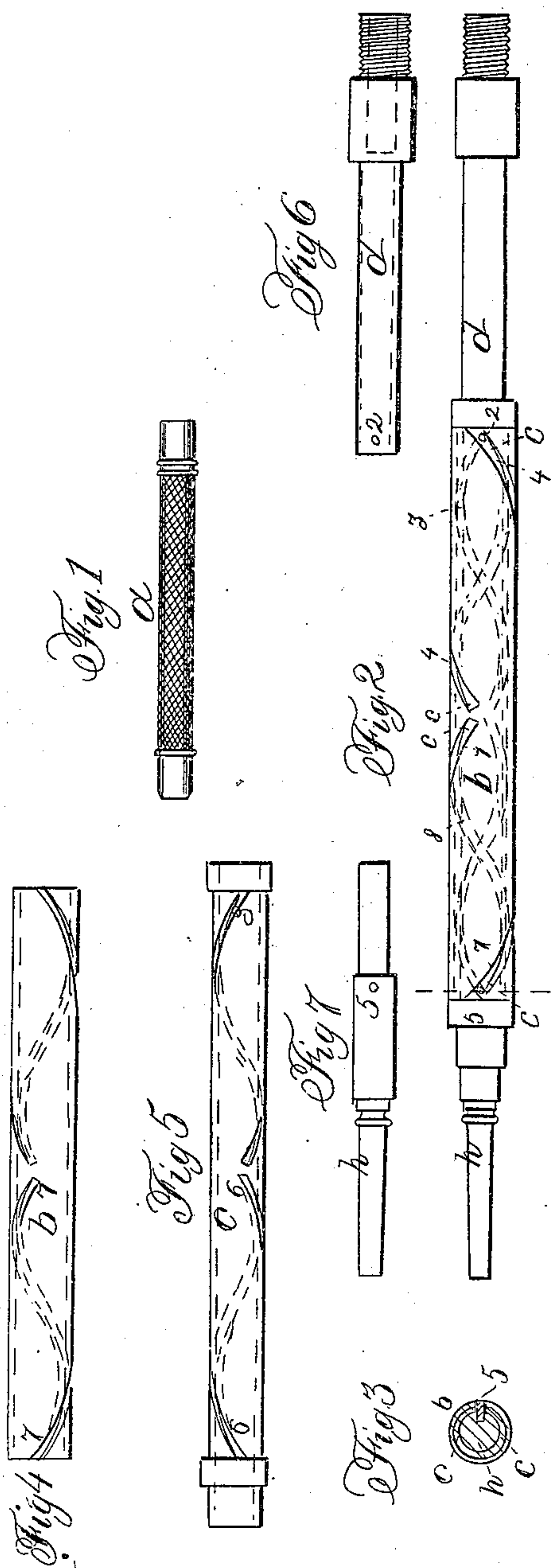


W. A. Ludden.
Pencil Case

No. 92853.

Patented July 20, 1869.



Wm. A. Ludden

Witness

Geo. D. Waesche
Geo. T. Pomeroy

United States Patent Office.

WILLIAM A. LUDDEN, OF BROOKLYN, NEW YORK.

Letters Patent No. 92,853, dated July 20, 1869.

IMPROVEMENT IN PENCIL-CASES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM A. LUDDEN, of Brooklyn, in the county of Kings, and State of New York, have invented and made a certain new and useful Improvement in Extension Pencil-Cases; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 represents the pencil-case closed;

Figure 2 shows the pencil and case extended, and the exterior barrel of the case removed, to show the slotted cylinders; and

Figure 3 is a cross-section of the pencil, showing the cylinders or barrels thereof.

Figures 4, 5, 6, and 7, are detached views of parts of my improved pencil-case.

All of the figures of the drawing are shown in enlarged size, except fig. 1.

Similar marks of reference denote the same parts.

The object of this invention is to project or retract the case at one end of the main case, simultaneously with the ever-pointed pencil at the other end of the case, so that but one movement is required to increase the length of the case, and to project the pencil.

I accomplish these operations by means of two tubes, fitted to turn, one on the other, and each provided with right and left-hand slots, diverging from near the centre of the tubes, and at opposite angles, so that a pin introduced in the extension portion of the case, is projected or retracted at one end of the case, simultaneously with the movement of a pin and the pencil at the other end of the case, the cylinders or tubes being turned, the one on or in the other.

In the drawing—

a is the outer case or tube.

b is the tube next within the same, and attached thereto.

The tube *a* should be of gold or other ornamental metal.

The tube *b* is formed with diverging, or right and left-handed slots, in an inclined or screw-form, and *c* is a cylinder or tube within *b*, in which are similarly-formed slots, but standing at the opposite angle or inclination, so that the slots cross or intersect each other.

Within the tube *c* is the extension-tube or case *d*, with a pin, 2, in the slots 3 and 4, and the pencil-point *h*, and its tube and pin 5, in the slots 6 and 7.

If, now, the cylinder *b* is turned or revolved, and the cylinder *c* kept from revolving, the pins 2 and 5 will be moved toward the ends, or toward the middle of the pencil-case, according to the direction of rotation, or the same effect will be produced if the cylinder *c* is turned, and *b* held stationary.

It will, however, usually be the case that the extension *d* will be pulled out and partially revolved, to simultaneously project the pencil-point *h* at the other end, or, by the reverse movement, to retract the same.

By this construction the case and point are extended or retracted more rapidly, and with less effort than heretofore.

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

The tubes *b* and *c*, slotted in the manner described, in combination with the extension-case *d* and point *h*, with their respective pins 2 and 5, and the enclosing-case *a*, as and for the purposes set forth.

In witness whereof, I have hereunto set my signature, this 22d day of April, A. D. 1869.

Witnesses:

WM. A. LUDDEN.

GEO. D. WALKER,

GEO. T. PINCKNEY.