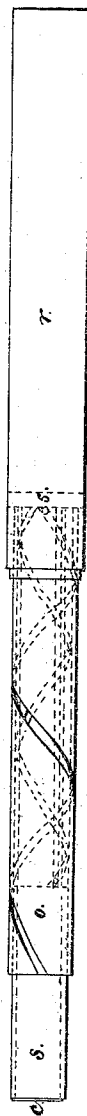
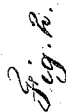
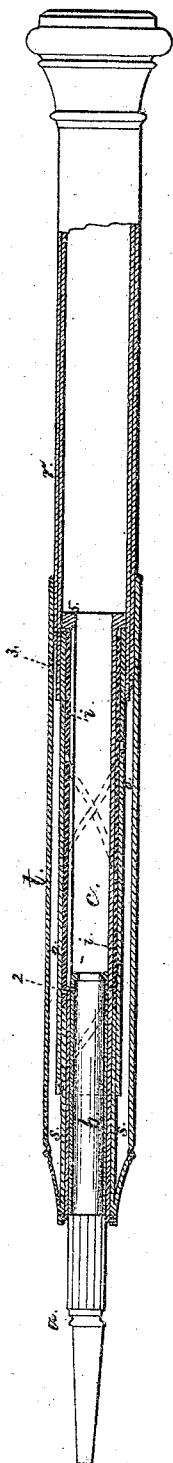
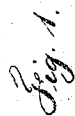


WILLIAM A. LUDDEN.
Improvement in Pencil Cases.

No. 119,935.

Patented Oct. 17, 1871.



Misses,

Chas. H. Smith
Harold Small

William A. Ludden

Samuel W. Perrell

UNITED STATES PATENT OFFICE.

WILLIAM A. LUDDEN, OF FLUSHING, NEW YORK.

IMPROVEMENT IN PENCIL-CASES.

Specification forming part of Letters Patent No. 119,935, dated October 17, 1871.

To all whom it may concern:

Be it known that I, WILLIAM A. LUDDEN, of Flushing, in the county of Queens and State of New York, have invented an Improvement in Extension Pencil-Cases; and the following is declared to be a correct description of the same.

My invention is made for allowing the outer case of the pencil to be revolved without affecting the slotted screw-tubes that are employed for projecting the pencil at one end as the case at the other end is drawn out. The said invention consists in a sleeve that is around the inner cylinder of the case and can turn thereon, and to which sleeve the external ornamental case is connected; thereby the external case is free to be revolved around the sliding case and screw-cylinders that intervene between the said sleeve and case; and by this construction the cost of the case is lessened, because I am able to dispense with a cylinder that has heretofore been used for receiving the exterior case and allowing of the same being revolved on such cylinder. The screw-cylinders are connected to each other, and do not draw apart, as has been usual in this class of pencils; but the exterior screw-cylinder surrounds the said sleeve and is permanently connected to the interior screw-cylinder. Upon drawing out the extension-case the two screw-cylinders will be revolved together, and the inner one will project the pencil. The reverse movement draws the pencil into the case.

In the drawing, Fig. 1 is a longitudinal section in enlarged size of the pencil as extended, and Fig. 2 is an elevation of the extension.

The ever-pointed pencil *a* and the tube *b*, in which is a screw for projecting the pencil, are of the usual construction. The tube *b* is connected to a collar and slides up and down in the cylinder *c*, and is guided by a pin, 2, running in a longitudinal slot in *c*, and said pin projects so as to be actuated by the screw-cylinder *i*. Around this screw *i* is a second screw or slotted cylinder,

o, the inclined opening in which stands at the opposite angle to that in the screw *i*; and these two slotted cylinders are permanently connected together by rivets or solder, or otherwise, so as to move together, and also to sustain and strengthen each other. The collar 5 retains the screws *o* and *i* upon the cylinder *c*, but allows of their being revolved. The extension-case *r* slides inside the ornamental case *t*; and said case *t* is connected to a sleeve, *s*, that surrounds the end of the cylinder *c*, and is loose thereon, but retained by the end of *c* being turned over.

It will now be evident that if the case *r* is revolved or turned it and the pencil-point and screw-cylinder will all move together, but the case *t* can be held stationary, and the other parts revolve without injury, and also without changing the position of any of the working parts, the motion being allowed between the sleeve *s* and tube *c*; hence an inexperienced or careless person cannot injure the pencil-case.

When the case *r* is pulled endwise, its pin, working in the screw-slot of *o*, revolves that and also turns the screw-cylinder *i* in the direction to project the pencil. The reverse movement causes the pencil to draw into the case as the case *r* at the other end is pushed into the case *t*.

The case *r* is slotted lengthwise, at 3, where it remains within the tube *t*, and slightly enlarged to make a range of springs that prevent looseness in the case.

I claim as my invention—

The sleeve *s* around the cylinder *c*, and connected with the exterior case *t*, in combination with the extension *r* and screws *i* and *o*, substantially as and for the purposes set forth.

Signed by me this 31st day of July, 1871.

WM. A. LUDDEN.

Witnesses:

HAROLD SERRELL,
GEO. T. PINCKNEY.

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