C. H. DOWNES.

EXTENSION PENCIL-CASE.

No. 174,122. Patented Feb. 29, 1876.

Fig. 1.

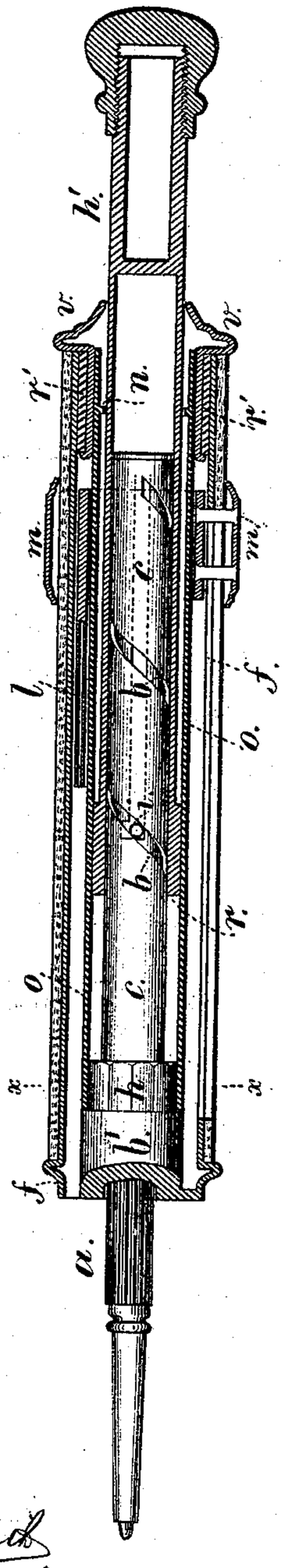
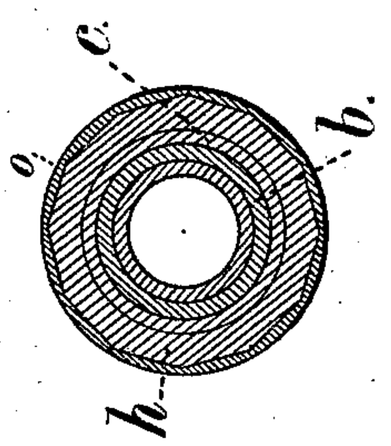


Fig. 2.



Witnesses

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IMPROVEMENT IN EXTENSION PENCIL-CASES.

Specification forming part of Letters Patent No. **174,122**, dated February 29, 1876; application filed November 1, 1875.

To all whom it may concern:

Be it known that I, CHARLES H. DOWNES, of Jersey City, in the county of Hudson and State of New Jersey, have invented an Improvement in Extension Pencil-Cases, of which the following is a specification:

Pencil-cases have been made with an ever-pointed pencil sliding in a slotted tube, with a pin passing through the slot to a slotted screw-cylinder, that is revolved to project or retract the pencil.

My present improvement relates to this class of pencil-cases, and consists in combining, with the before-mentioned parts, a tube, within which the extension-case slides, and which tube is connected with the screw-tube; and I also make the extension-tube of the pencil with a polygonal base, sliding within the tube that is connected with the screw-tube, whereby the parts are conveniently rotated by the extension-case, whether drawn out or not. By this construction the pencil and its mechanism can be larger than heretofore without increasing the size of the extension-case, and the parts are stronger and more easily made.

In the drawing, Figure 1 is a longitudinal section of the pencil-case of about double the usual size, and Fig. 2 is a cross-section of the polygonal tube and base at the line *x x* of a still larger size.

The ever-pointed pencil *a* and its operative mechanism are of ordinary construction. Upon the inner cylindrical portion thereof is a pin, *i*, that projects through a longitudinal slot in the tube *b*, in which tube *b* the pencil is moved endwise to project or retract the same by the tube *c*, with a screw-slot receiving this pin *i*, said screw-tube *c* being rotated. The base *b'* of the tube *b* is soldered to the external case *f*, and where there is a pen-holder, *l*, the same slides within the case, as usual, and there is a band, *m*, for moving this pen-holder. The screw-tube *c* has a base, *h*, and the tube *o* is of a polygonal shape, or fluted, to fit such base, in order that the base and tube may remain firmly connected by simply pressing the tube over the said base, and it is not necessary to use solder, as heretofore employed. The extension case or tube *h'* slides within the tube *o*, and has a polygonal base at *r*, fitting the flutes inside this tube *o*, so that the two tubes turn freely together, regardless of the extended or retracted position of the said case *h'*, and a stop at *n* prevents the parts separating. If a pen-holder is not used, the ornamental exterior case will be outside the tube *o* and attached to the base *b'*. If the collar surrounding the extension-tube *h'*, and filling this end of the pen-holder tube, were stationary, as has heretofore been usual, the surface of the extension-tube *h'* may be scratched by revolving within it. I therefore provide a collar, *v*, that is in contact with the tube *o* and revolves with it, and the said collar is within a cylindrical bush, *r'*, that fills the exterior tube *f*, and is either soldered to it or remains in place simply by the friction. By this construction the parts are simple, cheap, and not liable to injury, and the pencil can be easily taken apart, if necessary.

I claim as my invention—

1. The screw-tube *c*, provided with a base, *h*, and the tube *o*, fitting upon such base *h*, and polygonal or fluted internally, in combination with the extension case or tube *h'* and its polygonal base *r*, sliding within the tube *o*, and serving to revolve both the tube *o* and screw *c*, as set forth.

2. The collar *v*, revolving freely within the bush *r'*, in combination with the extension-tube *h'*, for the purposes specified.

Signed by me this 29th day of October, A. D. 1875.

CHAS. H. DOWNES.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.