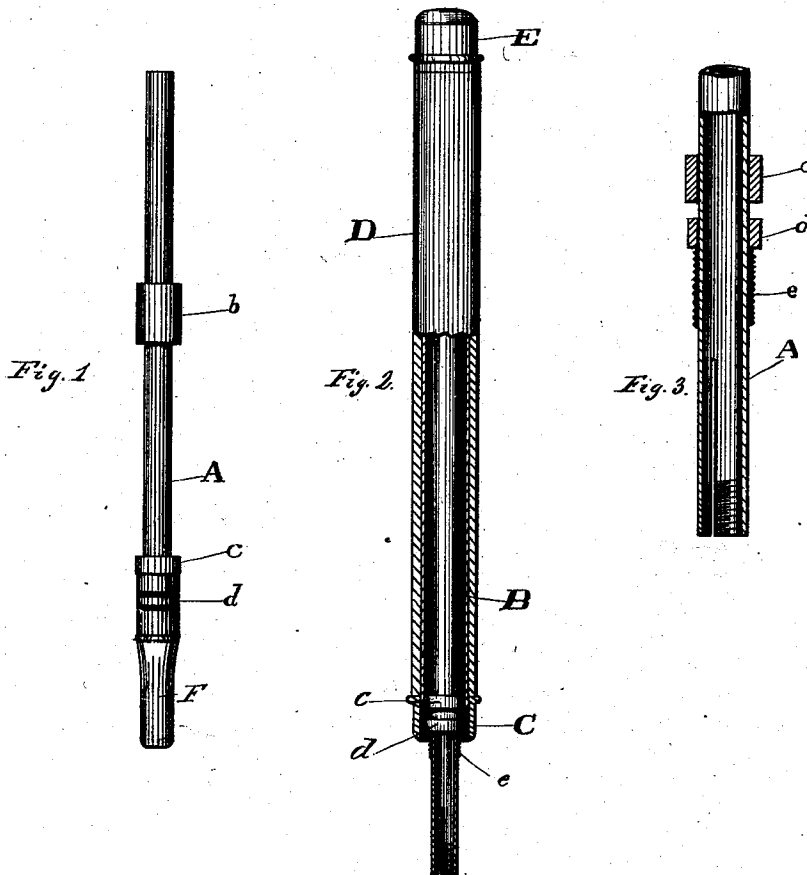


(No Model.)

J. HOLLAND.  
LEAD HOLDER FOR PENCILS.

No. 292,313.

Patented Jan. 22, 1884.



ATTEST

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# UNITED STATES PATENT OFFICE.

JOHN HOLLAND, OF CINCINNATI, OHIO.

## LEAD-HOLDER FOR PENCILS.

SPECIFICATION forming part of Letters Patent No. 292,313, dated January 22, 1884.

Application filed March 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN HOLLAND, of Cincinnati, county of Hamilton, State of Ohio, have invented certain new and useful Improvements in Lead-Holders for Pencils, of which the following is a specification.

The object of my present invention is to hold the lead or crayon in pencils from slipping back within the tube when pressed upon by the act of writing, without danger of breaking the lead.

Lead-tubes now in common use are usually slotted at the lower end to form elastic clamping-fingers, which fingers are closed upon the lead, near its point end by a sleeve or tube which moves longitudinally over the fingers. These fingers are either smooth upon the inside, or terminate at their ends in sharp inward projections or claws. The first kind soon become so smooth that the lead slips back when borne upon in the act of writing, and the second frequently breaks the lead when the clamping-sleeve is tightened up, and when tightened up carefully the lead often breaks in use, when writing with the pencil inclined. I overcome both of these objections by making a fine screw-thread within the lower end of the tube before it is slotted to form the clamping-fingers.

In the accompanying drawings, Figure 1 is an elevation of the lead-tube, detached from the case, and having the clamping-sleeve in position. Fig. 2 is a central vertical section of the lower part of the case and the lower end of the slotted lead-tube. The upper portion of the case and the lead-tube are shown in elevation. Fig. 3 is a longitudinal central section of the lower part of the lead-tube, greatly enlarged. In this view, as in Fig. 2, the clamping-sleeve is removed.

The lead-tube A is provided with three collars, *b*, *c*, and *d*.

To the collars *c* and *b* is secured a tube, B, and upon this is secured the outer finish of the case, as follows: The perforated lower cap, C, is soldered or otherwise suitably secured upon the lower end of said tube B. The outer shell, D, is slipped over tube B until it strikes the lower cap, leaving the upper end of said tube B exposed to receive the cap E, which is slipped down against the upper end of tube

D, and suitably secured. The lower end of lead-tube A is internally tapped with a fine screw-thread, after which the tube is slotted up, dividing the lower end into three elastic fingers. Above the slots in the tube is a small screw-threaded tube, *e*, to receive the internal screw in the upper end of the clamping-sleeve, F, which is screwed over the lower end of tube A until stopped against the collar *d*.

The clamping-fingers may, instead of being screw-threaded upon the inside, be serrated or roughened to accomplish the same result; but the screw-thread is much better, because by this means a uniformly-even roughened surface can be made within the lower end of the tube at comparatively small expense; and, as these pencils are designed to take the place of the common lead-pencil, they must be made cheaply to insure their introduction into general use.

I am aware that it is old to provide a pencil-case for holding ordinary lead-pencils with a sliding ring, to which are secured spring-clamps having their holding-surfaces serrated, and having their shanks bent to approach each other, then jut outwardly and downwardly at their free ends, so that a ring-slide may be moved upon said shanks to cause the free ends of the clamps to grasp or release a pencil; and I am also aware that it is old to provide the lead-holding tube of a pencil with an interior thread and a single slot. I therefore do not claim either of these devices.

I claim as my invention—

1. As a new article of manufacture, a lead-tube for pencils consisting, substantially as before set forth, of a tube provided at one end with internal or female threads and two or more longitudinal slots to form threaded fingers.

2. The combination, with the lead-tube provided at one end with internal threads and two or more longitudinal slots, of a clamping-sleeve adapted to be adjusted upon the slotted end of the tube to press the threaded fingers upon a lead, substantially as described.

JOHN HOLLAND.

Witnesses:

M. W. OLIVER,  
GEO. J. MURRAY.