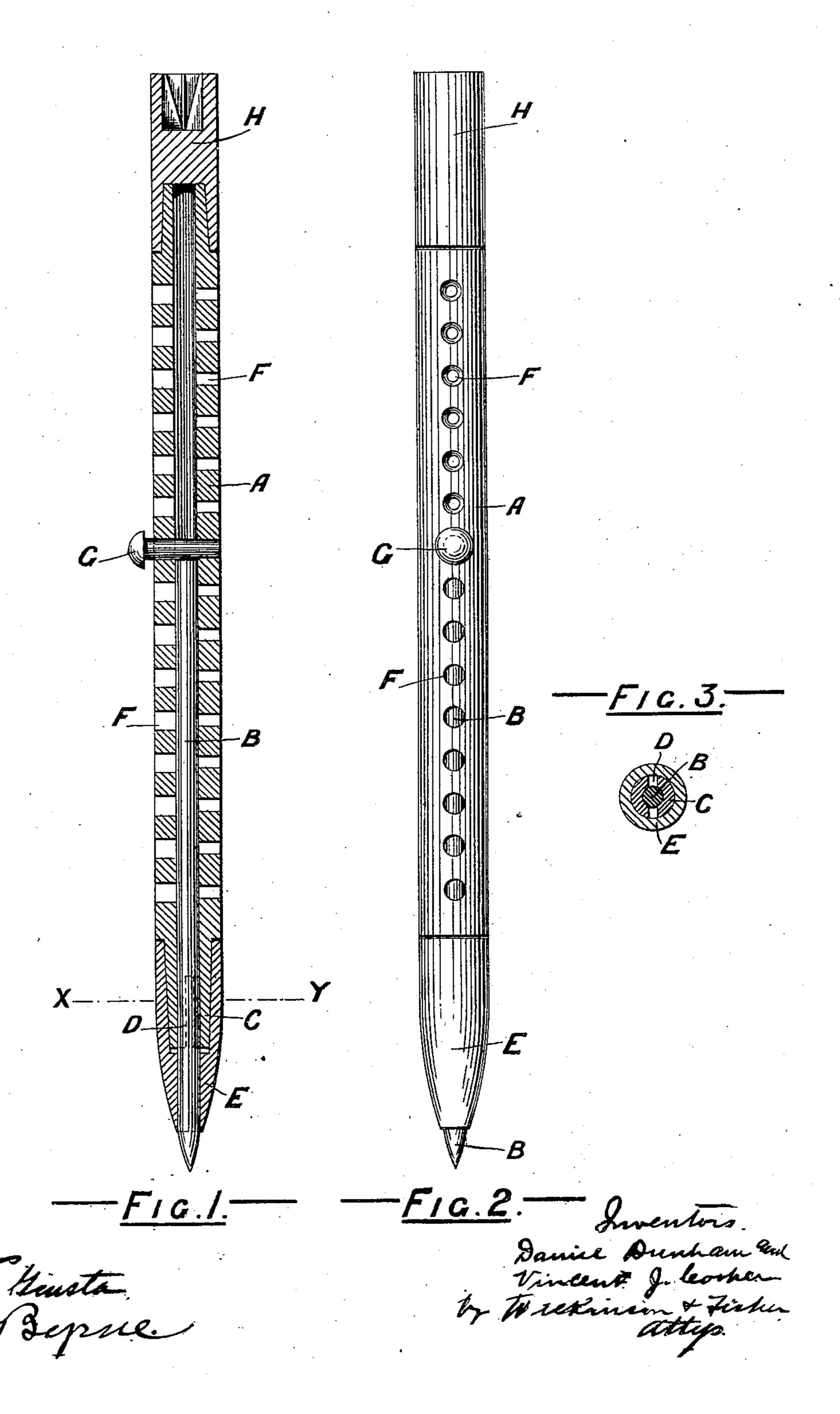
## D. DUNHAM & V. J. COOPER.

LEAD PENCIL.

(Application filed Feb. 5, 1902.)

(No Model.)



## United States Patent Office.

DANIEL DUNHAM AND VINCENT JOHN COOPER, OF LONDON, ENGLAND.

## LEAD-PENCIL.

SPECIFICATION forming part of Letters Patent No. 700,632, dated May 20, 1902.

Application filed February 5, 1902. Serial No. 92,689. (No model.)

To all whom it may concern:

Be it known that we, DANIEL DUNHAM and VINCENT JOHN COOPER, subjects of the King of Great Britain, residing at London, England, have invented a certain new and useful Lead-Pencil; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved arrangement of lead-pencil, and mainly consists of novel means for holding and adjusting a loose lead of usual form within a suitable sheath.

To enable the invention to be properly understood, we will describe the same with aid of the accompanying drawings, in which—

Figure 1 is a sectional elongation of a pencil according to this invention; Fig. 2, an outside view of same, and Fig. 3 a cross-section on line X Y of Fig. 1.

According to our invention we preferably employ a wooden tube A, of usual pencil form, 25 to carry a usual loose lead B. The point end C of the pencil-tube A is tapered and reduced. The lead-hole through same is normally of the same size as that of the penciltube A. The part C is slotted for a portion 30 of its length, as shown at D, Fig. 3. Arranged to be fitted on the reduced end C is a point-cap E, made of a shape to form a continuation of the pencil-tube A and to represent a cut point. The socket part of this 35 cap when pressed onto the reduced part C compresses the slot, and so secures the lead from dropping out if the pencil is held point downward. To insert a lead, the cap E is removed. The pencil is transversely perfo-

rated, as shown at F, either right through or 40 only into the tube, and a peg G is provided to be inserted in such perforations. When the pencil is required for writing, the cap E is removed, the lead drawn out sufficient to allow the point to project beyond the cap 45 when fitted on the part C, the lead being secured at this position by inserting the peg G in one of the holes F, so that the peg comes close behind the inner end of the lead. When the pencil is to be carried in the pocket, 50 the peg is removed and set one or two holes farther back to allow the lead to be pushed in and so protect it. Upon the end of the pencil a suitable and usual kind of pointsharpener H can be fitted on, as shown.

It will be understood that a lead-pencil made as above described has all the advantages of a wooden pencil without the necessity of the wooden part ever being required to be cut.

Having now fully described our invention, what we desire to secure by Letters Patent of the United States is—

A lead-pencil consisting of a tubular pencil part to carry a usual loose lead, a slotted tapered part on point end of pencil, a point-cap to fit on same and to compress the slotted part to pinch the lead, a series of transverse holes in pencil part, a peg to insert in such holes to prevent the loose lead from being 70 pushed in by writing, all substantially as hereinbefore described.

DANIEL DUNHAM. VINCENT JOHN COOPER.

Witnesses:

G. F. WARREN, GEO. J. B. FRANKLIN.