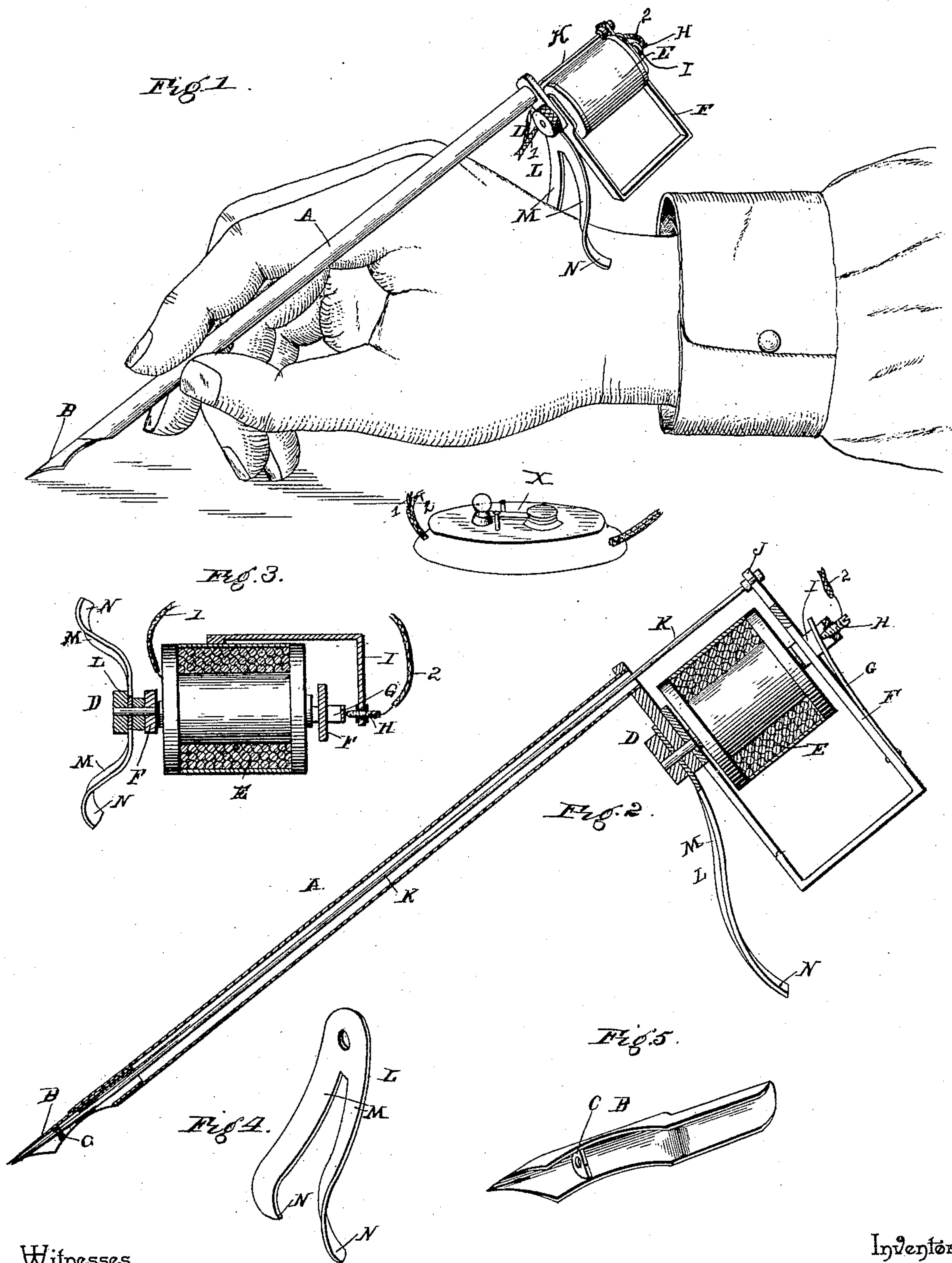


(No Model.)

A. D. LEWIS.  
ELECTRIC PERFORATING PEN.

No. 485,767.

Patented Nov. 8, 1892.



Witnesses

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# UNITED STATES PATENT OFFICE.

AARON D. LEWIS, OF CANTON, MISSOURI.

## ELECTRIC PERFORATING-PEN.

SPECIFICATION forming part of Letters Patent No. 485,767, dated November 8, 1892.

Application filed June 30, 1892. Serial No. 438,605. (No model.)

*To all whom it may concern:*

Be it known that I, AARON D. LEWIS, a citizen of the United States, residing at Canton, in the county of Lewis and State of Missouri, have invented a new and useful Electric Perforating-Pen, of which the following is a specification.

This invention relates to electric perforating-pens; and it has for its object to provide an improvement in devices of this character adapted to be used in connection with an ordinary pen to provide means for perforating and indenting the writing material in order that no alterations or erasures can be made in the writing without detection; and to this end the invention contemplates supplemental improvements upon a contemporaneous joint application filed by me and Silas Witherell April 23, 1892, Serial No. 430,384.

With these and many other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of an electric perforating-pen in the hand of the operator. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail in perspective of the hand-rest. Fig. 5 is a detail perspective view of the writing-pen.

Referring to the accompanying drawings, A represents a tubular hollow penholder having at one end the ordinary pen-receiving socket, which receives the writing-pen B, adapted to be used in the ordinary manner, said writing-pen B being provided upon the under side thereof in rear of its point with a perforated guide-lug C, adapted for the purposes to be presently set forth. The upper end of the penholder A is open and has secured thereto an offstanding electrically-controlled perforating attachment comprising the magnet-frame D, dropping to one side or below the same and carrying the electro-magnet E. Secured at one end to the magnet-frame and arranged to play over the core of the magnet is the vibrating armature F, to which is secured the auxiliary leaf contact-spring G, which is arranged to strike the up-

per adjustable contact-screw H. The said contact-screw H is adjustably mounted in one end of the side bracket-arm I, secured to a suitable point of attachment and having its upper end lying directly over said contact-spring, so that as the current is passed through the magnet means are provided for rapidly vibrating the armature. Wires 1 and 2 are connected with the magnet-wire and said contact-screw, respectively, to complete the electric circuit, as will be at once apparent, and may be connected with an ordinary switch X, if desired.

The free end of the armature is provided with a connecting-slot J, which loosely receives the upper end of the reciprocating perforating-needle K. The said perforating-needle passes through the hollow penholder and has the point thereof passed through the under perforated guide-lug C of the pen and works under the pen and in a direct line with the point thereof. It will be readily seen that the perforated guide-lug C not only holds the perforating-needle in a position in a direct line with the point of the pen, but also serves to hold the pen itself to its proper position in writing. As the armature is vibrated by the magnet the reciprocating needle is rapidly forced beyond the point of the pen and withdrawn back of said point, so that as the writing is proceeded with regular indentations or punctures are made directly in the writing, and thus cause the ink to run through the paper or into the other material which is being written upon, so that changes, alterations, or erasures of any character whatever are out of the question.

Removably secured at one end to the under side of the magnet-frame D is the forked hand-rest L. The said forked hand-rest L is provided with the opposite rest-arms M, diverging from each other and projecting below the under side of the magnet-frame and terminating at their lower ends in the curved feet N, which rest about at the juncture of the wrist and back of the hand, so that the upper heavier end of the pen carrying the magnet is held up from the back of the hand without any effort on the part of the fingers, and also holds the pen in the proper position for writing.

The many advantages for the improvement



herein described are thought to be apparent without further description.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an electric perforating-pen, the hollow penholder, the writing-pen inserted in one end of said penholder and provided with a perforated guide-lug upon its under side, an electro-magnet mounted upon the other end of said penholder, a vibrating armature controlled by said magnet and provided with a connecting-slot at one end, and an elongated perforating-needle passing through said hollow penholder, loosely connected at one end to the slotted end of the armature and adapted to have the pointed end thereof work through said perforated guide-lug upon the under side of the pen and in a direct line with the point thereof, substantially as set forth.

2. The combination, with a writing-instru-

ment, of an offstanding electrically-controlled perforating attachment secured to the upper end of the instrument and a forked hand-rest removably secured to the under side of said attachment and comprising opposite depending divergent rest-arms terminating at their lower ends in curved feet adapted to rest upon the back of the hand, substantially as set forth.

3. The combination, with a writing-instrument, of an offstanding electrically-controlled perforating attachment secured to the upper end of the instrument and a forked hand-rest removably secured to the under side of said attachment, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

AARON D. LEWIS.

Witnesses:

B. H. SMITH,  
JAS. E. OLDHAM.