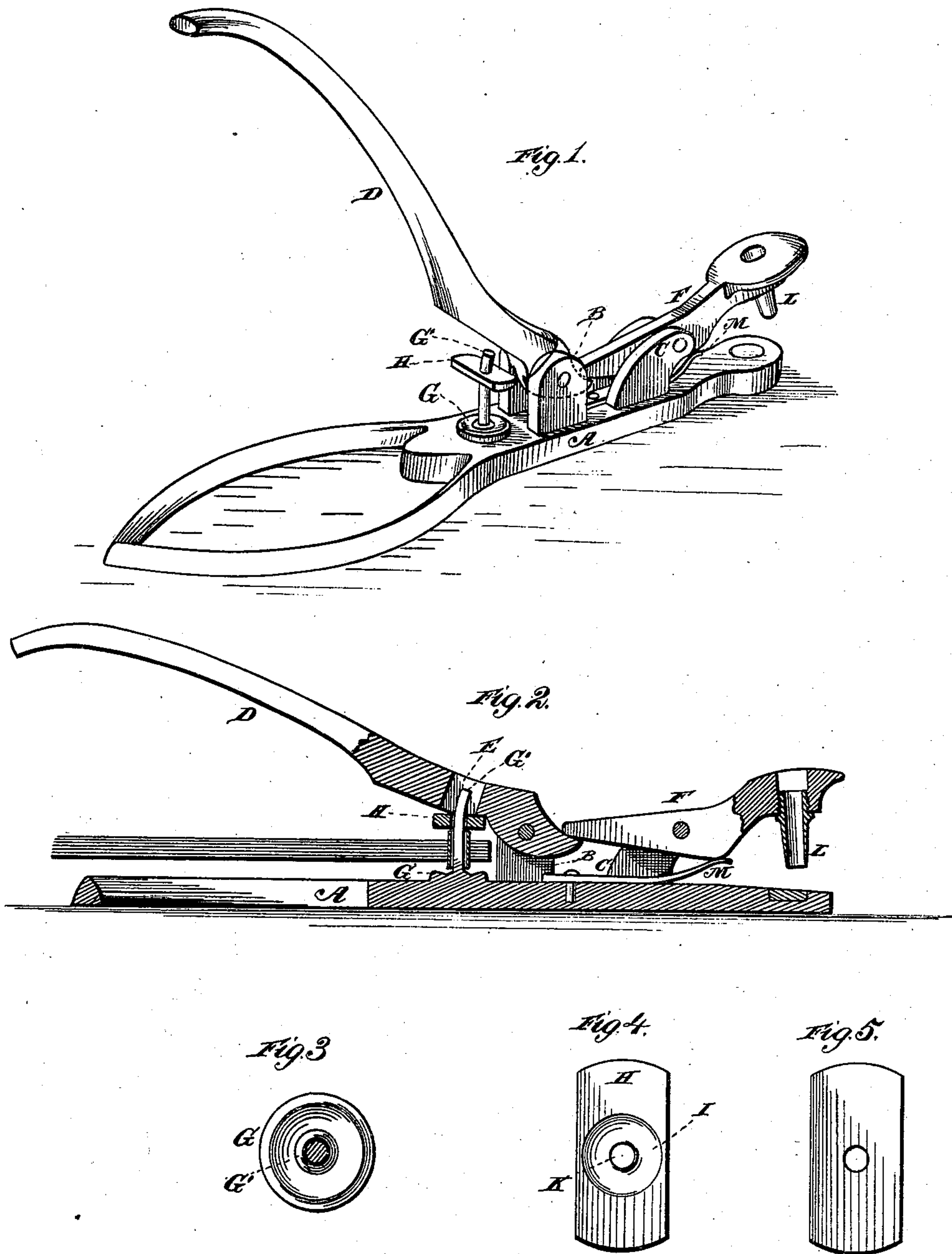


(No Model.)

F. J. LIPPITT.
Eyelet Punches for Paper Fasteners.

No. 230,296.

Patented July 20, 1880.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANCIS J. LIPPITT, OF WASHINGTON, DISTRICT OF COLUMBIA.

EYELET-PUNCH FOR PAPER-FASTENERS.

SPECIFICATION forming part of Letters Patent No. 230,296, dated July 20, 1880.

Application filed June 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS J. LIPPITT, a citizen of the United States, resident at Washington, in the District of Columbia, have invented certain new and useful Improvements in Eyelet-Punches for Paper-Fasteners; and I 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in apparatus for securing the paper-fasteners for which Letters Patent of the United States were granted to me the 19th day of November, 1878, No. 210,132, the said fastener consisting of a short conical or cylindrical tube of malleable metal.

The object of my invention is to provide a device by means of which the ends of the tube may be upset and caused to clamp the sheets to be secured on both sides, so as to hold the same firmly together. These objects I accomplish by the device illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved device; Fig. 2, a longitudinal section thereof; Fig. 3, a top view of the lower upsetting-die. Fig. 4 is a bottom plan of the upper upsetting-die provided with an annular recess in its under face; and Fig. 5 is a bottom plan of the upper upsetting-die made plain.

The letter A indicates the base of the device, which is constructed of metal, and is provided with upright standards B and C.

The letter D indicates a hand-lever fulcrumed between the standards B, and provided with a slot or opening, E, for the purpose hereinafter described.

The letter F indicates a short lever fulcrumed between the standards C, the rear end of which bears upon the forward end of the hand-lever D, so that the lever F will be operated by the said lever D.

The letter G indicates the lower upsetting-die, which is formed with an annular recess on its face, and from its center rises a pin, G',

for the reception of the tubular metallic paper-fastener.

The letter H indicates the upper upsetting-die, which is preferably plain, but may be formed with an annular recess, I, on its lower face, and with a central aperture, K, to permit it to be placed upon the pin of the lower die, for the purpose hereinafter explained.

The forward end of the short lever F is provided with a cutting-punch, L, and the forward end of the base with a soft-metal seat to support the article to be perforated for the reception of the fastening-tube.

The letter M indicates a spring, by which the levers are held in and returned to a normal position.

The operation of my invention is as follows: The papers or other articles to be united are placed under the punch, and by depressing the hand-lever the punch is brought down, making the necessary perforation. Upon releasing the hand-lever the parts of the device assume their normal position, when the paper or article may be removed. One of the metallic fasteners is then placed upon the pin, and the perforated paper is placed upon the fastener and forced down thereon until it rests upon the face of the lower die. The upper die, with its annular recess downward, (when the die is formed with such recess,) is then placed upon the pin G', and by depressing the hand-lever the said upper die is forced down upon the fastener, causing the ends of the same to expand and upsetting the same, so as to securely clamp the papers together, the pin G' entering the slot E.

It is evident that the upper die, instead of being in the form of a detached piece, may be permanently secured to the lever by means of connecting devices that will permit it to follow the curve of the pin, and that the general construction of the device may be varied considerably.

It is further obvious that a straight pin may be employed, instead of the curved pin above mentioned, by so arranging the upper die that it may have a longitudinal movement, or, in other words, may slide back and forth in the slot to accommodate itself to the movement of the lever.

Having thus fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

1. The combination, in a device for securing paper-fasteners, of a plain upper die, having
5 an aperture in its center, and a countersunk lower die, having a projecting pin to support the fastener secured to the base A, with the slotted lever D, substantially as specified.

2. In combination with the base of the de-
10 vice provided with upright standards and carrying an upsetting-die provided with a central pin, the slotted hand-lever adapted to force the upper die, having an aperture in its center, upon the fastening-tube, for the purpose
15 of upsetting the same, substantially as specified.

3. The compound tool herein described for securing paper-fasteners, consisting of the base A, having the countersunk upsetting-die G and pin G', the plain upper die, H, the slot- 20 ted lever D, pivoted in the standards B, and the punch-lever F L, fulcrumed in the standards C, substantially as herein specified.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS J. LIPPITT.

Witnesses:

ROBERT EVERETT,
THEO. MUNGEN.