

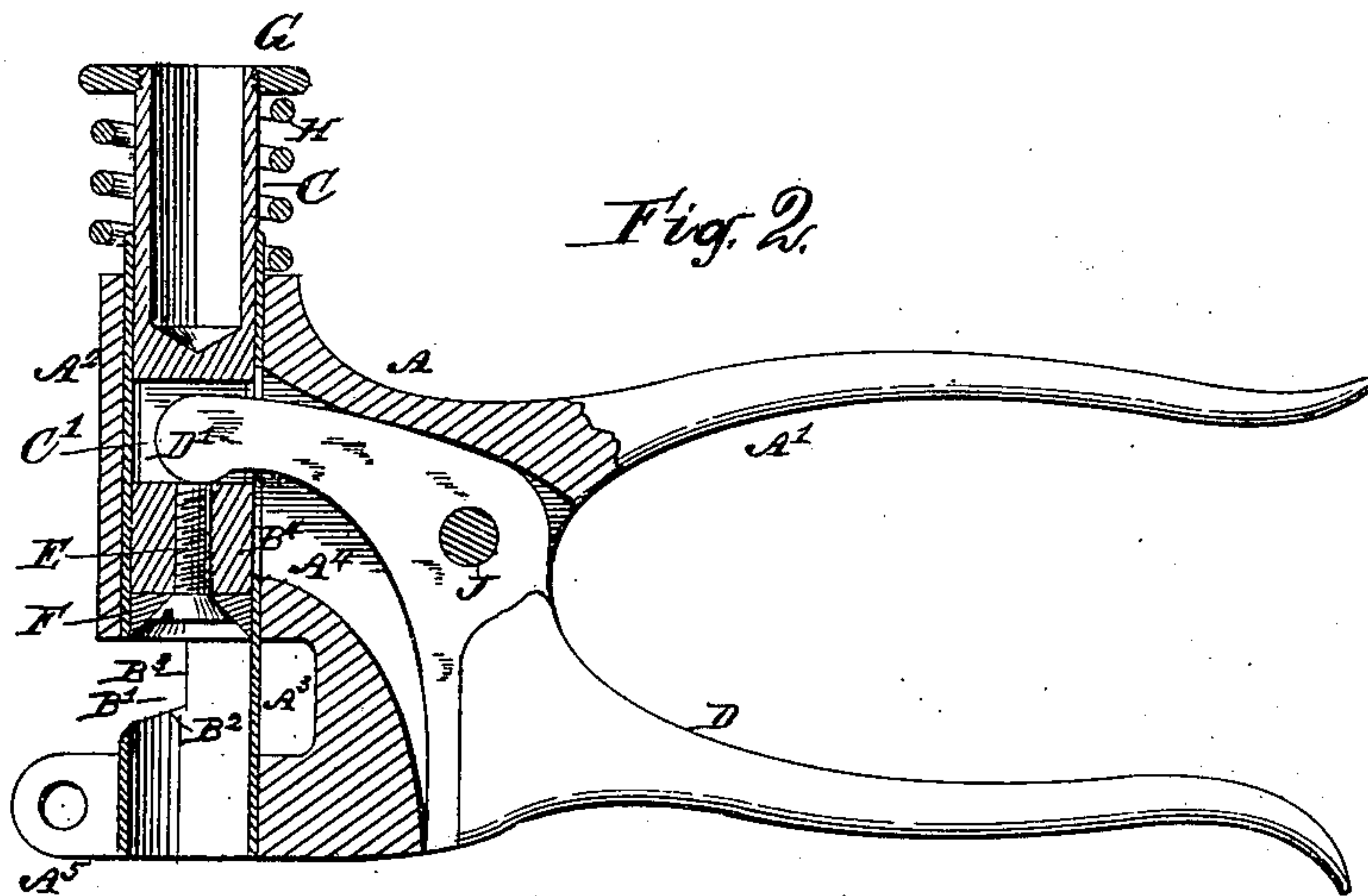
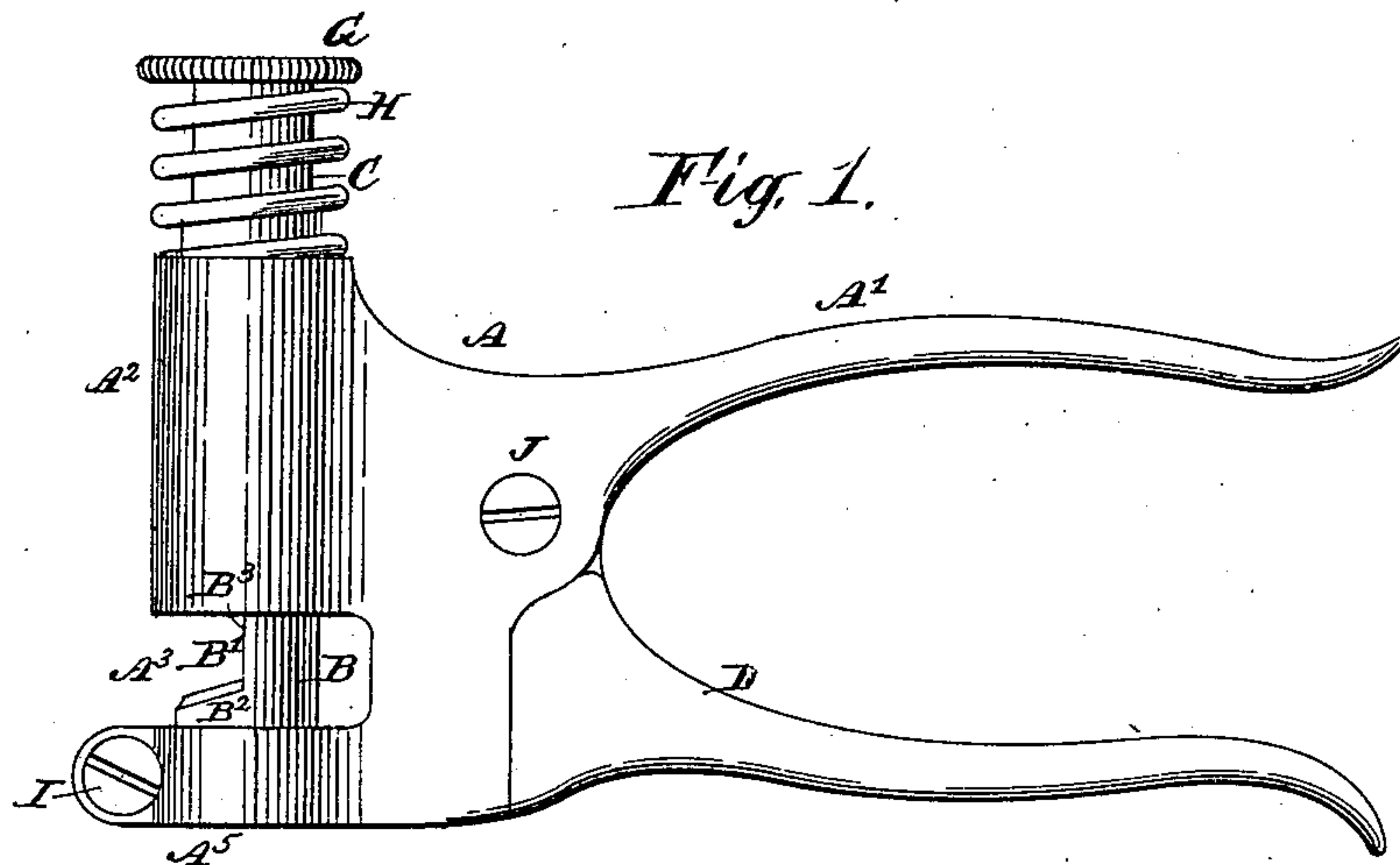
No. 669,231.

Patented Mar. 5, 1901.

J. T. CARMODY.  
HAND PUNCH.

(Application filed Aug. 10, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## HAND-PUNCH.

SPECIFICATION forming part of Letters Patent No. 669,231, dated March 5, 1901.

Application filed August 10, 1900. Serial No. 26,486. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN T. CARMODY, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Hand-Punches; 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.

The object of this invention is to produce a simple and efficient hand-punch for punching semicircles, and used more particularly in nicking the leaves of indexes and the like.

The nature of the invention will appear by reference to the accompanying drawings and in the description and claims following.

In the drawings, Figure 1 is a side view of a punch embodying my invention, and Fig. 2 is a mid-section of the same in the same plane as Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the body of the punch, which is extended to form a handle at A'. Through the head A<sup>2</sup>, which has a throat A<sup>3</sup>, is bored a hole perpendicular to the handle, and in this is fitted a tubular cutter and guide B. The front part of this tube is notched at B', and the lower inclined portion of the notched part is brought to a cutting edge, as shown at B<sup>2</sup>. The side of the tube at B<sup>3</sup> serves as a stop for the sheet of paper or other material punched. In the upper portion of this tube is mounted a plunger C, slotted at C' to receive the rounded end of an arm D', forming a part of a handle or lever D, pivoted in the body A of the punch, which is chambered at A<sup>4</sup> to receive it. The back side of the tube is also slotted at B<sup>4</sup> to allow for the movement of the lever. To the lower end of the plunger is attached by a screw E a circular cutter F, which is simply a disk countersunk and sharpened on the lower side. The upper portion of the plunger extends above the head A<sup>2</sup>, and to its upper end is screwed a cap G. Between this cap and the head is mounted a coil-spring H, which serves to restore the parts to the idle position shown. The plunger is bored out at the upper end to reduce its weight; but this feature is not of special importance.

The tube B is clamped in the punch-head by a screw I, the lower jaw A<sup>5</sup> being split for that purpose. A screw J serves as a pivot for the lever D. The internal cutter F may be quickly removed for sharpening or replacing by means of a screw-driver and with the other parts all in position. By loosening the clamp-screw I and removing the pivot-screw J the whole punch may be taken apart in a moment.

In practice the punch has been found to be a very practical, efficient, and easily-operated implement for the purpose for which it is intended.

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

1. In a hand-punch, the combination with a suitable body and lever, of a plunger provided with a cutter at the lower end, and a tubular guide forming a long continuous bearing therefor notched on one side to form a cutting-lip coacting with the plunger-cutter, substantially as described.

2. In a hand-punch, a body, a plunger and means to operate the same, a cutting-disk on the end of the plunger, a tubular guide forming a long continuous bearing for said plunger, said guide being notched on one side, one edge of said notch being oblique to the length of the tube and sharpened to coact with the effective portion of the cutting edge of said cutting-disk, as and for the purpose described.

3. In a hand-punch, the combination of the punch-body substantially as described, a hand-lever pivoted therein, a slotted plunger engaging the inner arm of said lever, and having a cutter or die at its lower end, a tubular guide for said plunger, slotted to admit the hand-lever, notched at one side to form a cutter opposed to that on the plunger, and clamped in the lower jaw of the punch-body, a cap at the upper end of the plunger, and a spring between it and the punch-head, substantially as and for the purpose set forth.

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

JOHN T. CARMODY.

Witnesses:

J. M. ST. JOHN,  
JOHN C. HEALD.