(No Model.)

S. T. NAKASHJIAN.

PUNCH.

No. 395,342. Patented Jan. 1, 1889.

Fig. 3.

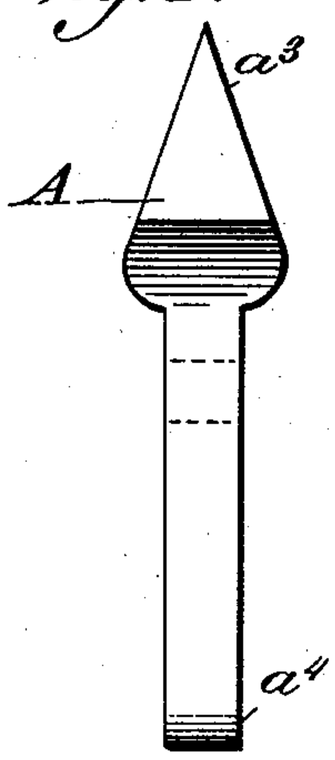


Fig. 6.

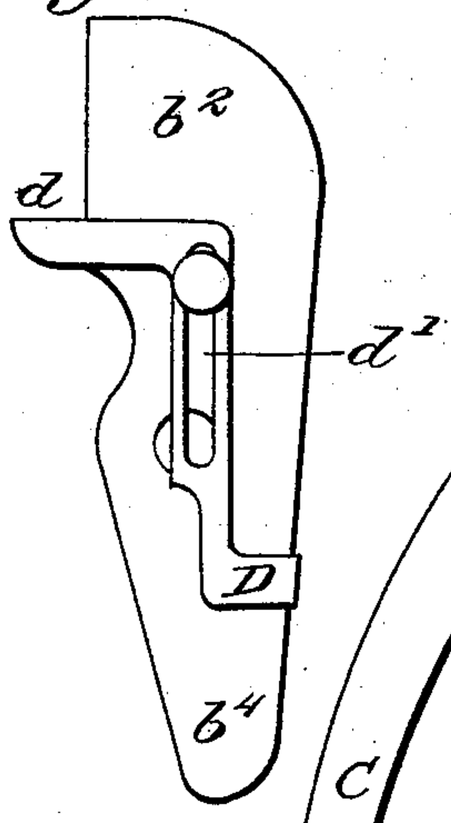


Fig. 1.

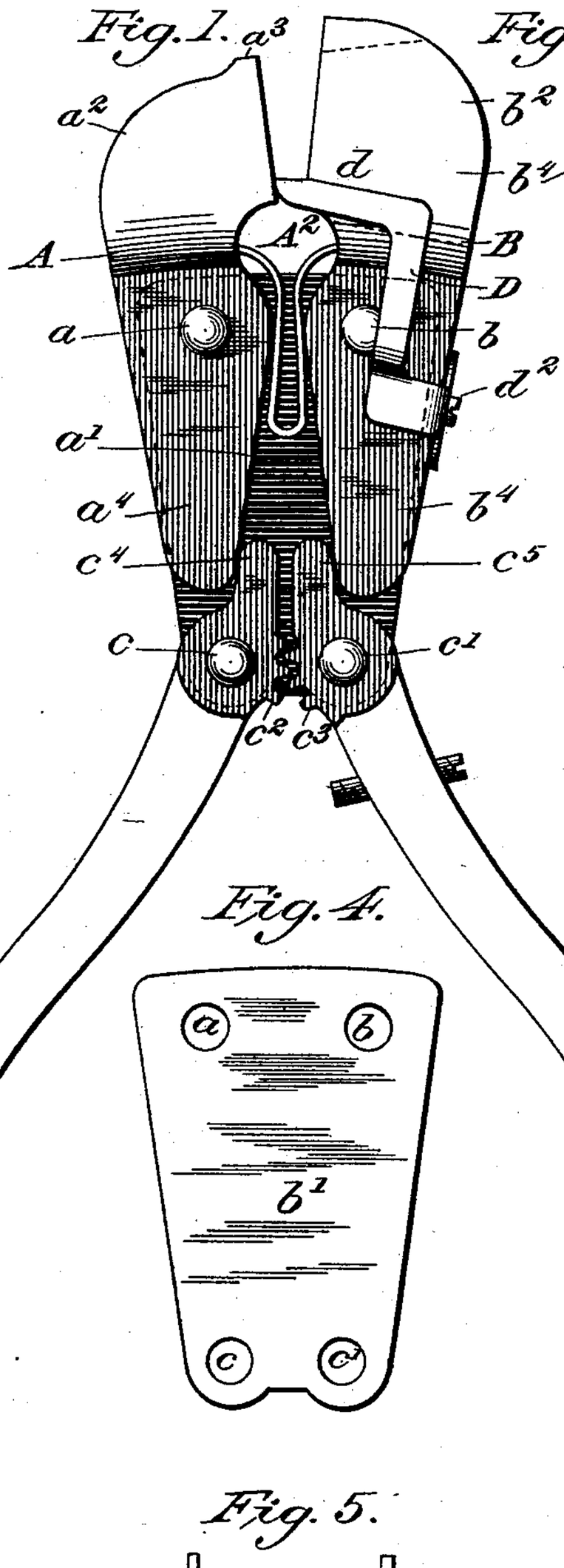


Fig. 2.

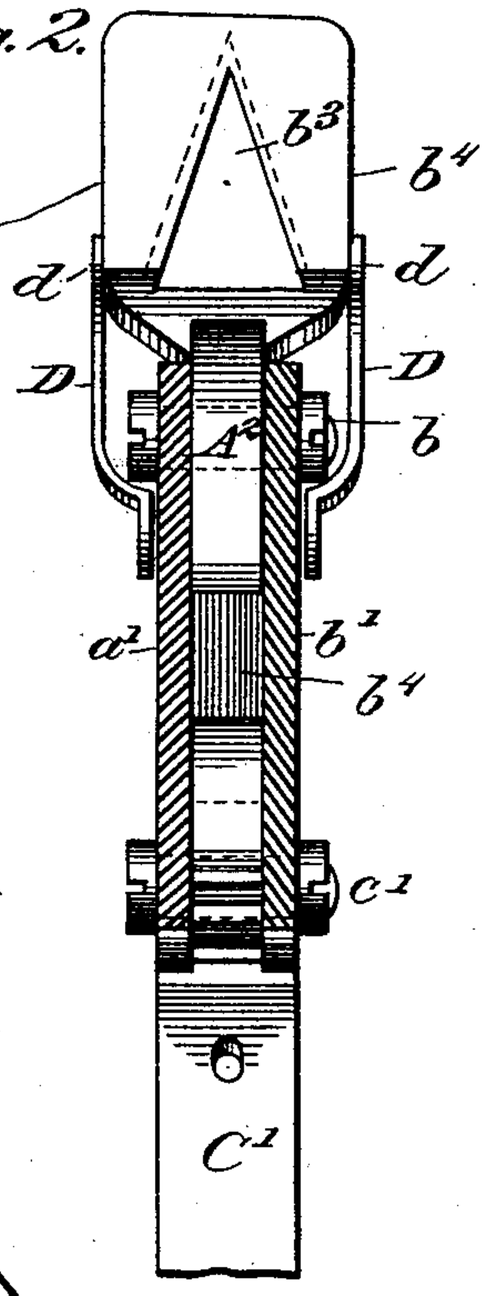
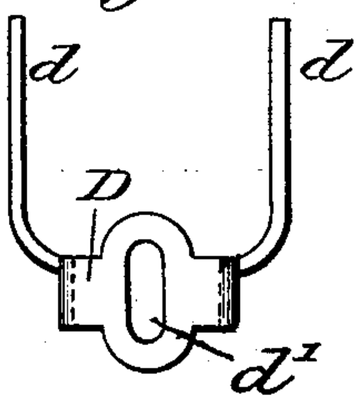


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

STEPHEN T. NAKASHJIAN, OF BOSTON, MASSACHUSETTS.

PUNCH.

SPECIFICATION forming part of Letters Patent No. 395,342, dated January 1, 1889.

Application filed July 19, 1888. Serial No. 280,441. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN T. NAKASHJIAN, residing in Boston, in the State of Massachusetts, formerly a resident of Harpool, Turkey, and a subject of the Sultan, have invented a new and useful Improvement in Punches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to a punching implement having the specific construction hereinafter specified.

Referring to the drawings, Figure 1 is a view of my hand punching-tool, one of the side plates of the device being removed to better illustrate the construction. Fig. 2 is a view in section upon the dotted line of Fig. 1. Fig. 3 is a view in plan of the punch-lever from its under side. Fig. 4 is a view of one of the side plates. Fig. 5 is a view of the gage. Fig. 6 is a view illustrating a slight modification in the form and manner of attachment of the gage to the die-head.

The implement is represented as provided with a punch and die suitable for cutting or punching from thin sheet metal or other material V or triangular shaped pieces; but I would here say that the punch and die may have any desired configuration other than a triangular shape.

The implement comprises the punch-lever A and the die-lever B, each of which levers is pivoted at *a b*, respectively, to the side plates, *a' b'*, and the operating levers or handles C C', pivoted to said side plates at *c c'*, respectively, and preferably geared or connected together at their pivot-points by the segmental gears c^2 c^3, and having extensions c^4 c^5, the first of which extends to come in contact with the inner surface of the end of the punch-lever, and the other of which extends to come in contact with the inner surface of the end of the die-lever.

In addition, the implement has the opening-spring A^2, placed between the punch-lever and the die-lever, to automatically separate the punch and die, and the adjustable gage D, attached to the die-lever. The punch-lever has the head a^2, which has the extension a^3, forming the punch, and which is integral with the head. It also has the arm a^4, which is also integral with the head. The die-lever has the head b^2, the upper surface of which is level or plain, and the sides of which are parallel, and through which is a die-recess, b^3, extending from the upper surface through the block and gradually enlarged from the upper surface. This head b^2 has integral with it the arm b^4. There is attached to the die-lever b^3 a gage, D, preferably having two arms, *d*, which extend above the upper surface, b^4, of the die-block, and are made adjustable lengthwise the same, preferably by means of the slot *d'* in the cross-section or part which unites the two arms of the guide, and a set-screw, d^2, which screws into the lever. By loosening the set-screw the gages may be simultaneously moved or adjusted to bear any desired relation to the die and punch. In lieu of this method of securing the gage to the die, that represented in Fig. 6 may be employed, where each arm of the gage is represented as having a long slot through which passes a set-screw entering the side of the die-head.

It will be seen that by pivoting the punch and die levers as specified and shaping the surface of the punch and die-block as shown and described the punch has a shearing movement in relation to the die, which is a very great advantage in the operation of the tool.

The advantages of the invention arise from the simplicity and cheapness of the construction.

I would say that I do not confine myself to the particular form of handles or levers for operating the punch-lever and the die-lever.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The punching implement herein described, the same comprising the punch-lever A, having the head a^2 and punch a^3 integral therewith, the die-lever B, having the die-block b^2 integral therewith, provided with a flat surface, and a die-recess, b^3, extending from said surface through the block, the side plates, *a' b'*, the lever-pivots *a b*, the operating-arms C C', having the extensions c^4 c^5, to operate the punch and die levers, respectively,

the pivots c c', and the spring A^2, substantially as described.

2. The punching implement herein described, the same comprising the punch-lever A, having the head a^2 and punch a^3 integral therewith, the die-lever B, having the die-block b^2 integral therewith, provided with a flat surface, and a die-recess, b^3, extending from said surface through the block, the side plates, a' b', the lever-pivots a b, the operating-arms C C', having the extensions c^4 c^5, to operate the punch and die levers, respectively, the pivots c c', the spring A^2, and the adjustable gage or gages D, substantially as described.

3. In a hand punching implement, the punch-lever A, having the head a^2 and punch a^3 integral therewith, and arm a^4, in combination with the die-lever B, having the die-block b^2 integral therewith, provided with a flat surface, a die-recess, b^3, extending from said surface through the block, and the arm b^4, substantially as described.

STEPHEN T. NAKASHJIAN.

In presence of—
F. F. RAYMOND, 2d,
J. M. DOLAN.