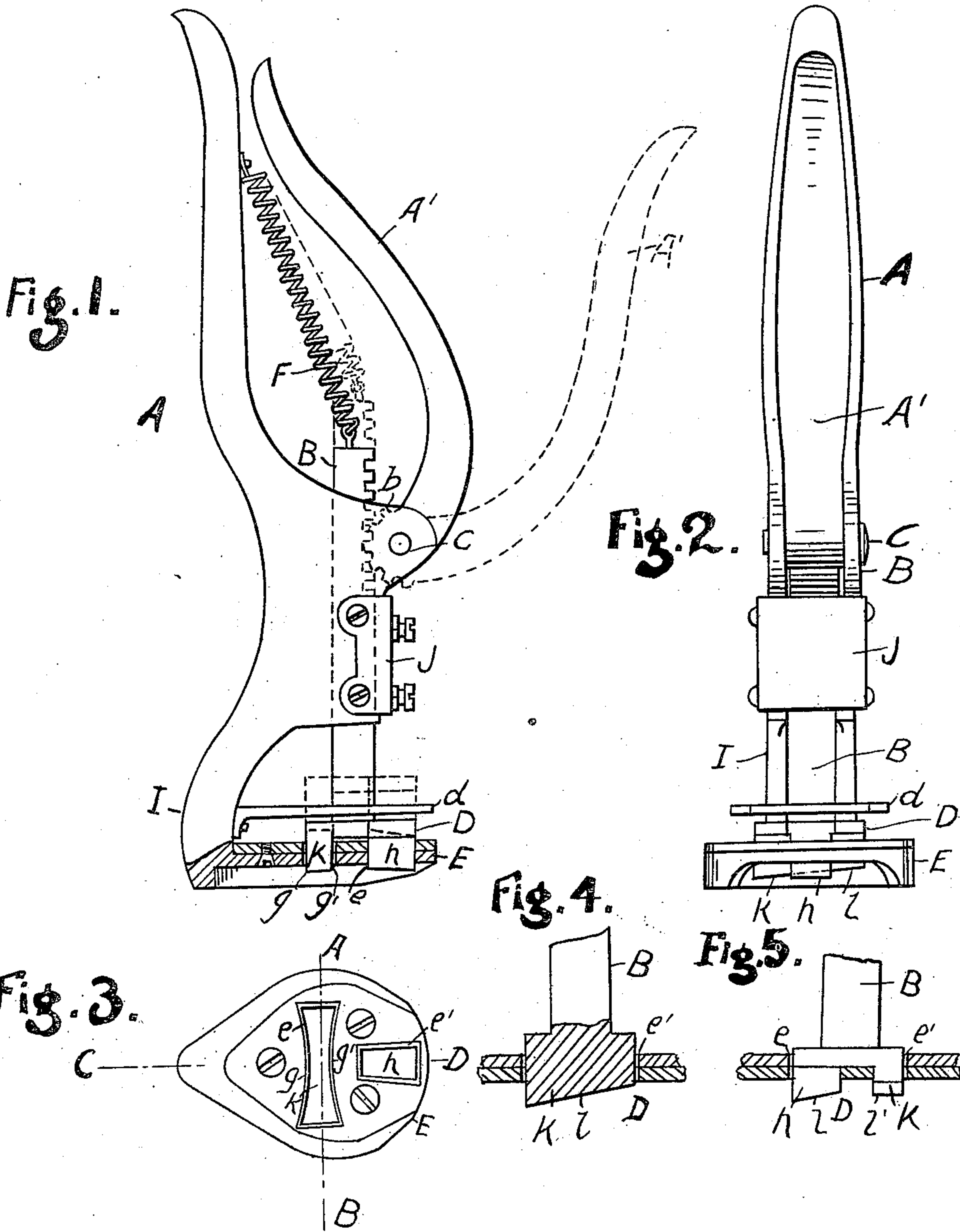


C. H. HIGGINS.  
PUNCH.  
APPLICATION FILED FEB. 2, 1910.

990,553.

Patented Apr. 25, 1911.



WITNESSES  
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Attorney

# UNITED STATES PATENT OFFICE.

CHARLES H. HIGGINS, OF OTTAWA, ONTARIO, CANADA.

## PUNCH.

990,553.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed February 2, 1910. Serial No. 541,629.

*To all whom it may concern:*

Be it known that I, CHARLES H. HIGGINS, of 73 Fairmount avenue, in the city of Ottawa, county of Carleton, and Province of Ontario, Canada, have invented certain new and useful Improvements in Punches; and I do hereby declare that the following is a full, clear, and exact description of the same.

10 This invention relates to punches for marking the ears of animals and consists in the construction and combination of parts hereinafter more particularly set forth and claimed.

15 In the accompanying drawings I have illustrated my invention as applied to an ear punch of the class described and claimed in my application of November 19th, 1909, Serial Number 528,959.

20 Referring to the accompanying drawings:—Figure 1, is a side elevation of the ear punch, constructed in accordance with the invention, showing the operating handle closed. The parts broken away showing the construction, and the dotted lines the operating handle swung open. Fig. 2, is a front elevation of the ear punch. Fig. 3, is a bottom view of the cutting die. Fig. 4, is a section on line A—B of Fig. 3. Fig. 5, is a section on line C—D of Fig. 3 showing the cutting die in side elevation.

Like letters of reference indicate corresponding parts in each figure.

25 Referring to the drawings, A is a stationary handle provided at its lower end with the integral goose-neck shaped projection base or head having openings therein adapted to receive the cutting die.

30 A' is the operating lever or handle provided at its lower end with the integral segmental gear *b*, and pivoted at C between the integral projecting ears of the stationary handle A.

45 B is a sliding rack in the stationary handle A, held in place by the plate J.

50 D is the cutting die, at the lower end and forming an integral part of the sliding rack B, adapted to pass through the guiding plate *d* secured to the inside of the goose-necked portion of the stationary handle A.

F is an assisting spring suitably secured at one end to the inside of the stationary handle A, and at the other end to the top of the sliding ratchet B, and adapted to act in

coöperation with the handle A' to operate the said sliding rack B. 55

E is the base plate fixedly secured on the inside of the head I, having openings *e—e'* therein corresponding with the cutting punches of the die D, and with similar openings in the head I. 60

The cutting die D, is of two integral separate parts, or punches, *h* and *h'*, arranged at right angles, and adapted, preferably, to cut a mark in the shape of the capital letter T. The cutting surface of the part *h'*, having the convex edges *g—g'*, and the cutting surface of the part *h*, being tapered upwardly from the bottom. The said cutting surfaces *h* and *h'*, are also formed with the slants *l—l'*. This formation of the cutting punches and surfaces thereof insures the making of a clean cut, which when healed becomes a distinct and prominent reproduction of the letter T. 75

From the foregoing it will be readily seen, that when the operating handle A, is swung into an open position it will, in coöperation with the sliding rack B, and the assisting spring F, raise the die D, through the gage plate *d*, leaving a space between said guide plate and the base plate E, for the reception of the ear to be marked. Then to complete the operation, the operating handle A' is swung from said open position to a closed position, causing the die D, to descend through the plate *d*, bringing the cutting surfaces of its right angled integral parts *h* and *h'*, into immediate contact and through the ear, cutting therefrom the mark required. 80 85 90

I do not bind myself to the above form of construction, changes in proportion and details of which, may be resorted to without departing from the principle, or sacrificing any of the advantages of the invention. 95

What I claim for my invention is:—

1. In combination with a fixed handle having a rigid perforated base or head, a spring retracted rack, movable lengthwise of said handle, a guide for said rack, a lever pivoted to said handle and provided with a segmental gear engaging said rack to operate the latter, a perforated guide plate attached to said fixed handle a little above said base allowing the thing to be punched to be inserted between them, the perforations in said guide plate and base corre- 100 105



sponding in position and a cutting die carried by said rack corresponding in shape to said perforations and being adapted to pass therethrough for the purpose set forth.

- 5 2. In combination with a fixed handle having a perforated base or head, a spring retracted rack carrying a cutting die, means for moving said rack, and a perforated  
10 said fixed handle a little from said base and

nearer the cutting die, the perforations in said base and guide plate corresponding in position substantially as set forth.

Signed at the city of Ottawa, Ontario, Canada, this 29th day of January, 1910.

CHAS. H. HIGGINS.

Witnesses:

W. T. CUFFE-QUIN,

J. F. BUELS.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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