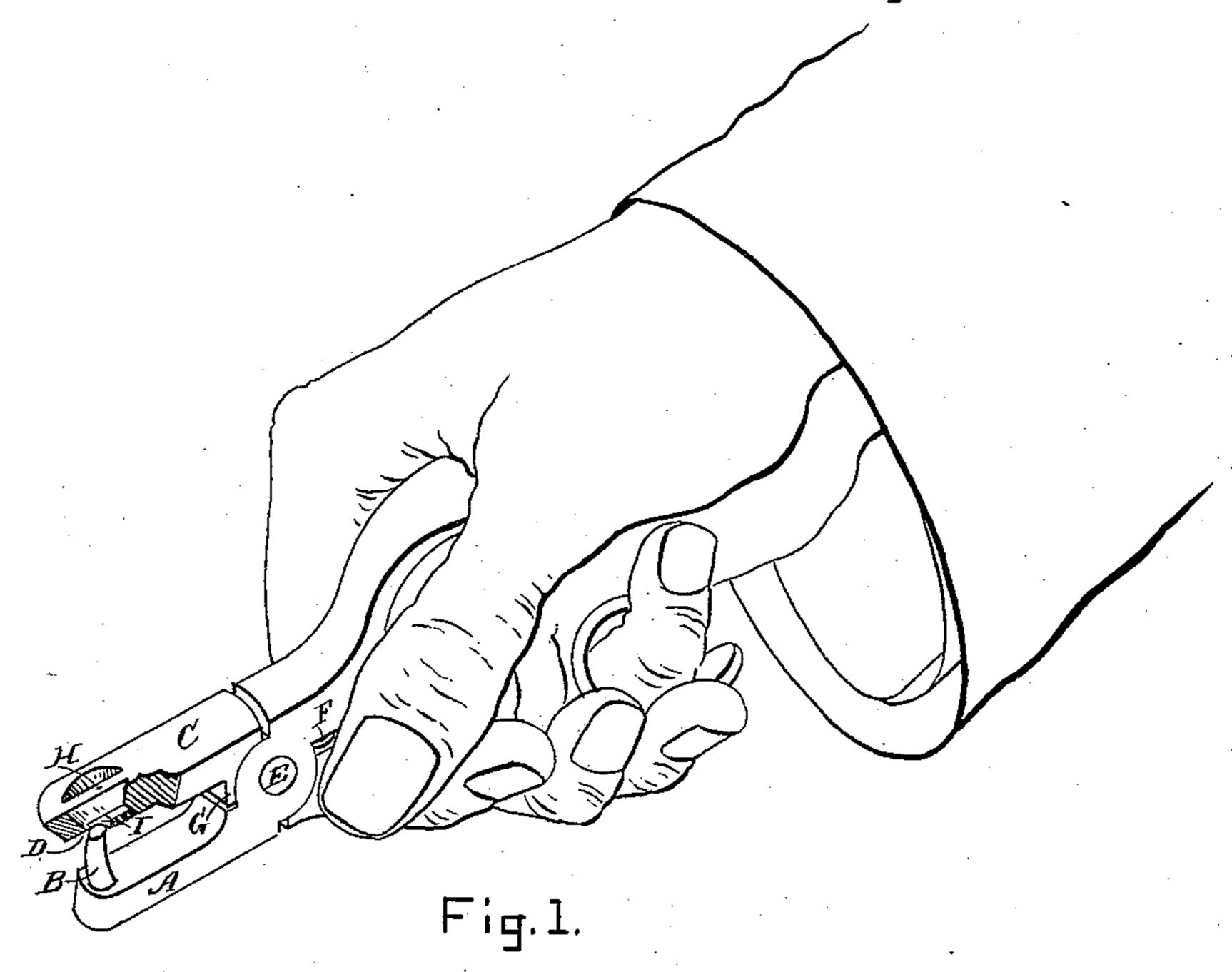
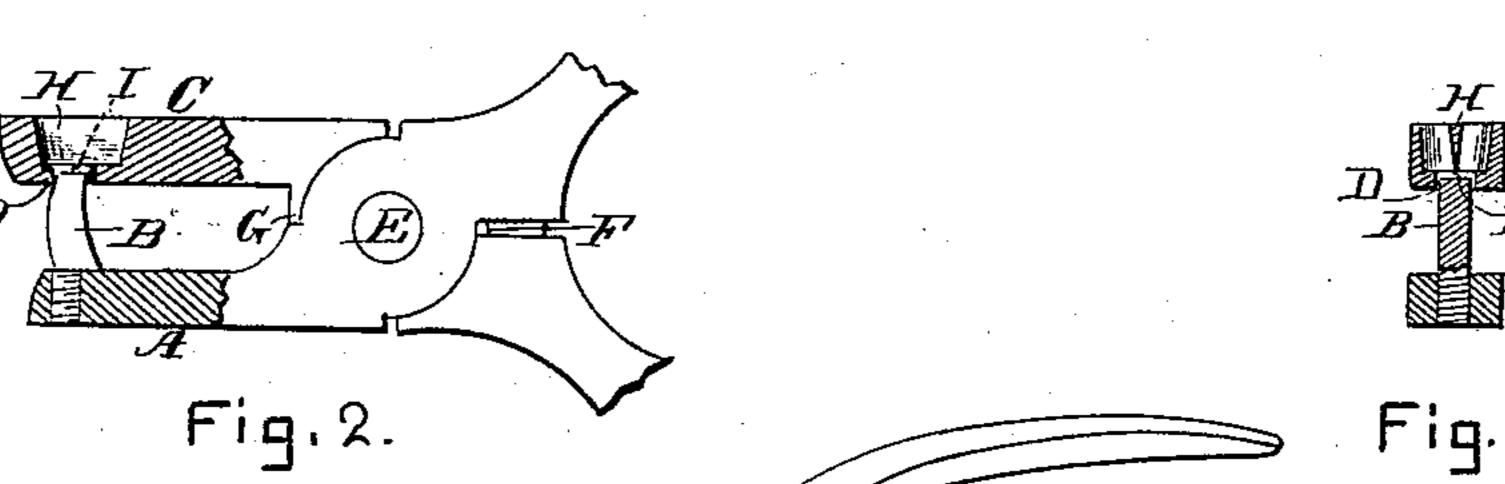
J. F. HANSCOM.

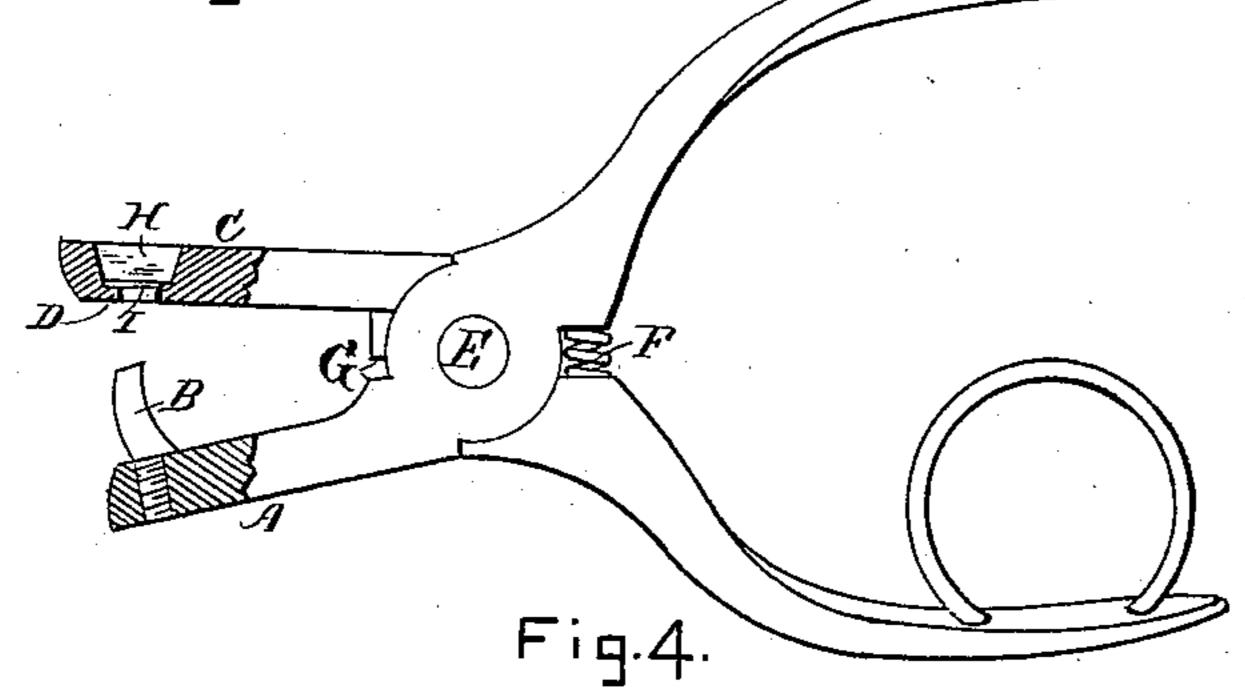
TICKET PUNCH.

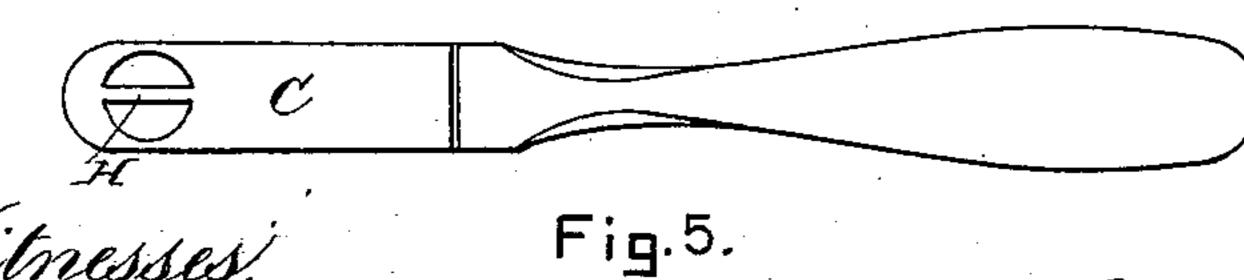
No. 326,429.

Patented Sept. 15, 1885.









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United States Patent Office.

JOHN F. HANSCOM, OF BOSTON, MASSACHUSETTS.

TICKET-PUNCH.

SPECIFICATION forming part of Letters Patent No. 326,429, dated September 15, 1885.

Application filed July 13, 1885. (No model.)

To all whom it may concern:

Be it known that I, John F. Hanscom, a citizen of the United States, residing at Boston, (Somerville,) in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Ticket-Punches; and I do hereby declare that the same are fully described in the following specification, and illustrated in the accompanying drawings.

The object of this improvement is to provide ticket punches with means for automatically cutting into two or more parts the pieces successively punched from the ticket, so as to prevent the fraudulent restoration of such pieces to their former place in the ticket.

My invention consists in a punch having in rear of and across the female die a continuous cutting-blade, with its sharp edge turned 20 toward the punch or male die, but located back of the extreme point reached by it in canceling a ticket, so that the punch will not strike the cutting-edge, and that an open space will exist to hold the clippings until severed. 25 This peculiarity insures that the blade shall not be dulled by the punch, that the two dies shall first cut out from the ticket a smooth flat piece, and that such pieces, intact, are held within the cavity of the female die until, 30 by the pressure upon them of pieces subsequently cut out, the former pieces are forced against the cutting-blade and severed by it. It follows that the piece punched from a given ticket does not drop until the conductor has 35 passed on to another part of the car, and that it is then in two or more fragments.

My improvement is applicable to punches of any ordinary form without change in the construction of the male die, and the action of my device is subsequent to that of the dies on the same ticket.

Punches have heretofore, in some cases, been provided with a chamber or receptacle to receive and retain the pieces punched out from the tickets, which pieces, on opening the chamber, may be emptied out and disposed of. I am also aware that punches have been devised to first mutilate a ticket by making a ragged edged hole therein by means of a mutilating-point, and then punching out the piece so mutilated. I make no use of any such mutilating-point, nor do I employ such method of mutilation.

In the drawings, Figure 1 is a perspective view, showing my improved punch as in use, 55 one jaw being represented partly in section. Fig. 2 is an enlarged longitudinal section through the dies in their closed position, and Fig. 3 a transverse section thereof. Fig. 4 is an elevation of the punch, and Fig. 5 a 50 top plan.

A and Care the two jaws, united by a pivot, E, and held normally open or spread, as in Fig. 4, by a spring, F. B is the male die or punch mounted on the jaw A, and D is the 65 female die, of similar form, mounted on the jaw C. Adjacent to the pivot the jaws have shoulders G to limit their movement in closing.

H is a sharp-edged cutting-blade fixed cross-70 wise of the female die some distance in rear of the plane in which the two dies meet, leaving a shallow chamber, I, between the tip of the male die and the edge of the blade to prevent injury to the blade and to allow a slight 75 accumulation of clippings in the chamber. The pieces first punched out by the dies are held intact in the chamber until, by the pressure of those subsequently punched, the former pieces are forced against the blade and 80 severed, so as to drop out in two or more smooth flat pieces.

I do not claim, broadly, the mutilation of the part of the ticket punched or to be punched out, nor the temporary retention of the pieces 85 punched, but simply the described method of and means for punching out smooth flat pieces, retaining the same temporarily, and by subsequent operation of the device severing said pieces for the purpose stated.

I claim as my invention—
In a ticket-punch, the jaw A, carrying the male die B, and the jaw C, carrying the female die D, in combination with the blade H, having a continuous cutting-edge extending 95 across the female die, and with the shallow chamber I between said blade and the most advanced position of the male die, substantially as and for the purpose set forth.

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

JOHN F. HANSCOM.

Witnesses:
A. H. Spencer,
Jos. H. Hartley.