

(No Model.)

O. W. COOKE.  
CANCELING PUNCH.

No. 584,925.

Patented June 22, 1897.

Fig. 1.

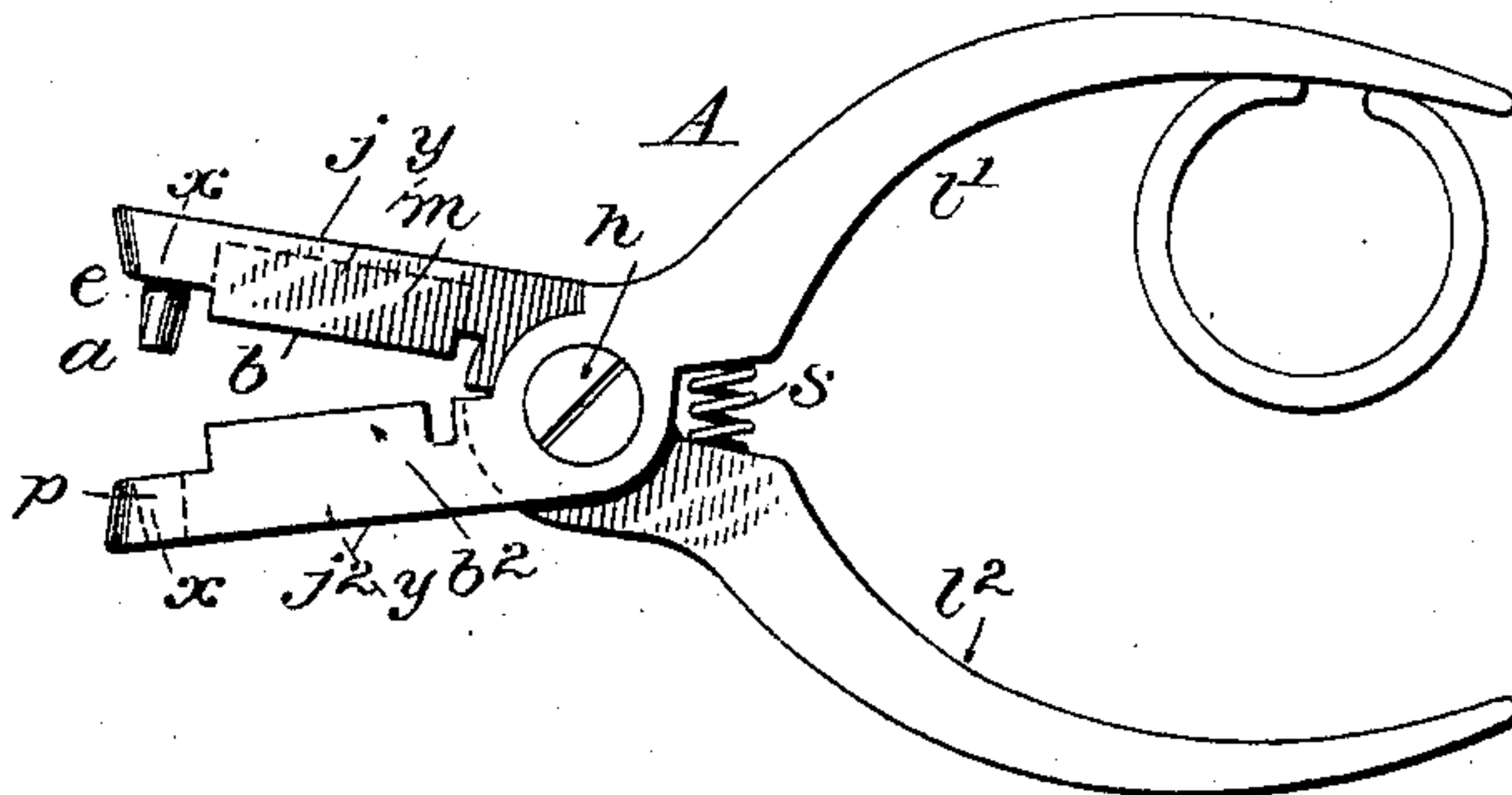


Fig. 2.

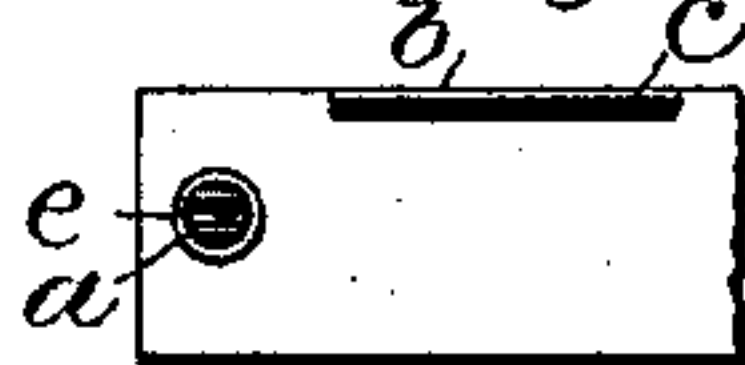


Fig. 3.

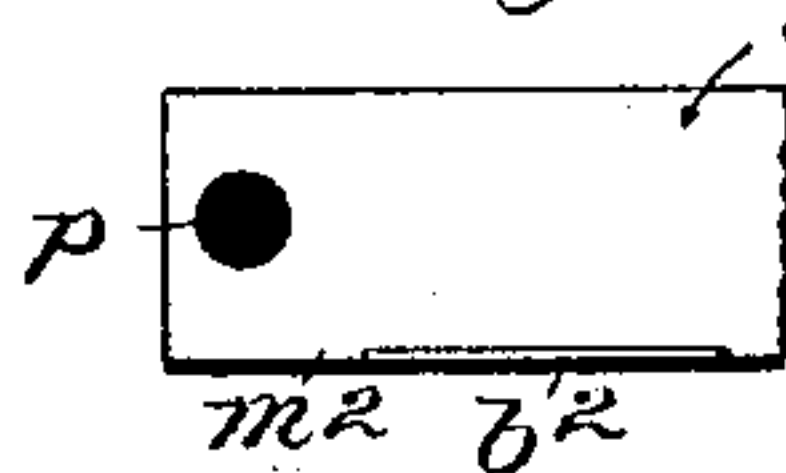


Fig. 4.

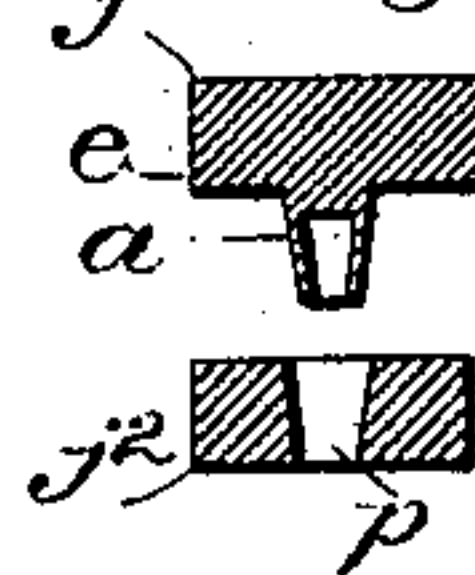


Fig. 5.

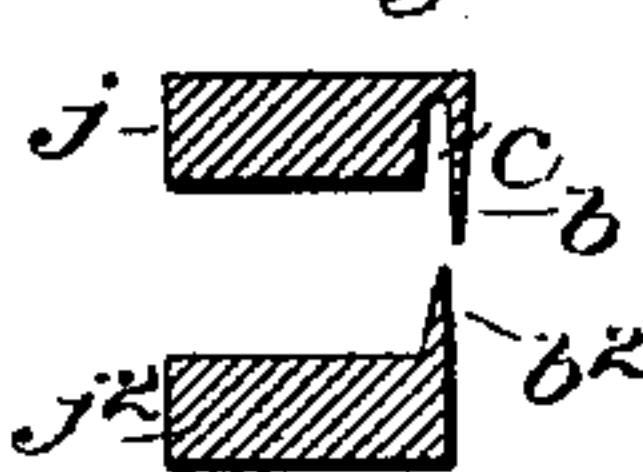


Fig. 6.

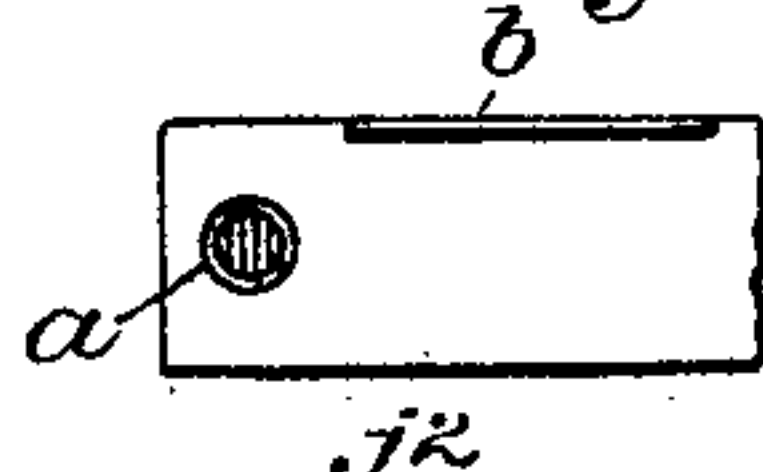


Fig. 7.

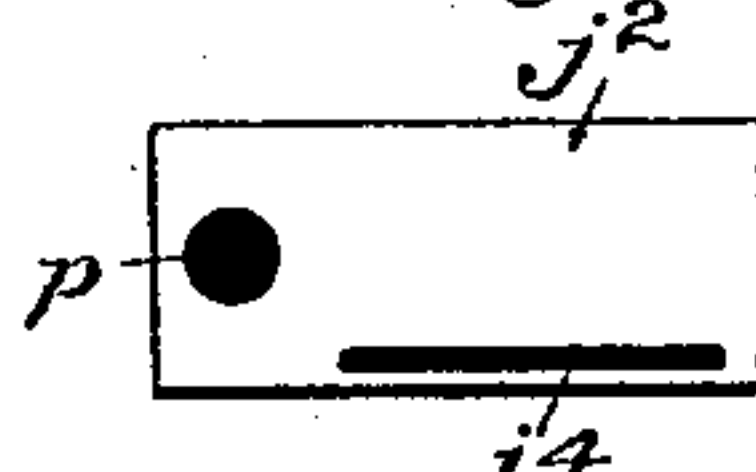


Fig. 8.

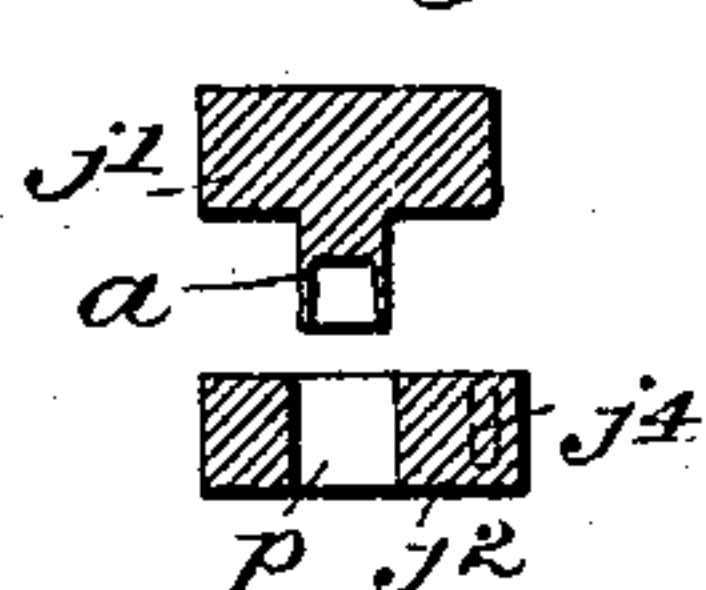


Fig. 9.

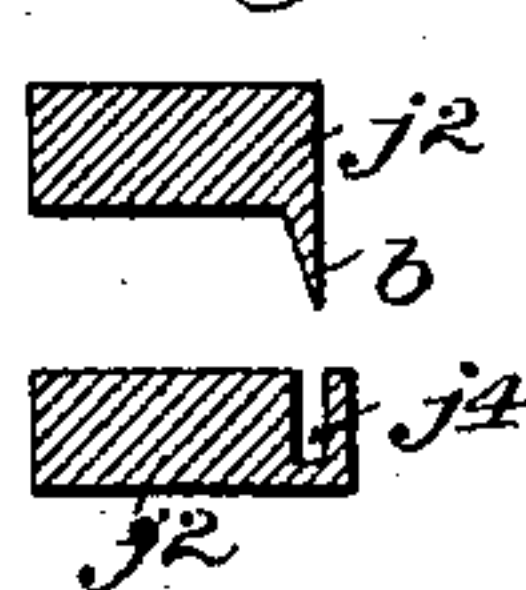


Fig. 10.



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# UNITED STATES PATENT OFFICE.

OLIVER W. COOKE, OF NEW YORK, N. Y.

## CANCELING-PUNCH.

SPECIFICATION forming part of Letters Patent No. 584,925, dated June 22, 1897.

Application filed November 29, 1895. Serial No. 570,367. (No model.)

*To all whom it may concern:*

Be it known that I, OLIVER W. COOKE, a citizen of the United States, and a resident of the city of New York, in the county of New York, in the State of New York, have invented a new and useful Canceling-Punch, of which the following is a correct description.

The invention has relation to that class of punches which are actuated by closing and opening the fingers of the hand; and it relates particularly to devices of this class which are used by gate-attendants in railway-stations and by conductors upon railway-trains for mutilating the fare tickets or coupons of passengers or for applying to such tickets or coupons a known designating-mark whereby the history of such ticket or each coupon or section of such ticket is duly registered in or upon the body thereof.

It is well known to persons whose duty it is to make up accounts relating to passage-tickets when all the sections or coupons thereof have been "taken up" and returned to the issuing-office that much inconvenience and annoyance frequently result from the separation of such sections or coupons upon such irregular and ill-defined lines that the numerals or the dates thereof cannot readily be so clearly made out as to establish with certainty the identity of the part and its relation to its fellows as originally assembled.

The particular object of this invention, therefore, is to render a ticket-canceling punch more useful and effective by providing upon its jaws a simple and inexpensive cutting or shearing appliance whereby the ticket-collector may in an instant make a clean, straight, and well-defined severance and detachment of the section or coupon which it is his duty to take up, the remaining portion of the ticket being grasped by and firmly held between the two opposite flat surfaces of such jaws; and it is in the provision, upon a canceling-punch the opposite jaws of which have flat closely-meeting faces, of suitable and convenient cutting or shearing edges or surfaces, so that by a single closing movement of the jaws a portion of the ticket may be cut off and the remainder thereof be closely engaged between the flat jaw-faces, that the invention essentially consists.

The invention consists further, however,

in the novel construction which is herein-after particularly described and specifically claimed.

In the accompanying drawings, which constitute a part of this specification, Figure 1 represents a side elevation of the canceling-punch. Fig. 2 is a detail bottom plan view of the upper jaw of the implement under the construction represented in Fig. 1. Fig. 3 is a detail top plan view of the lower jaw according to the same construction. Fig. 4 is a transverse section as in the line *xx* of Fig. 1, but showing the jaws somewhat nearer together than in that figure. Fig. 5 represents a transverse section as in the line *yy* of Fig. 1. Fig. 6 represents a detail bottom plan of upper jaw as modified according to the construction seen in Figs. 7, 8, and 9. Fig. 7 is a top plan of the lower jaw as modified. Fig. 8 is a transverse section of the implement as modified, the line being as at *xx* in Fig. 1. Fig. 9 is a transverse section, as at *yy* of Fig. 1, of the modified form represented in Figs. 6, 7, and 8. Fig. 10 is a further modification in which an open slot is substituted for the cavity seen in Figs. 7, 8, and 9, the section being as in the line *yy* of Fig. 1.

It will be understood that the outer extremity *e* of the implement A—that is, that portion upon which the cutting-punch *a* and its vertical passage *p* are provided—is or may be of ordinary construction, and also that the operating levers or handles *l* and *l*<sup>2</sup> and the spring or springs *s*, employed for causing them to be spread apart upon their hinge or pivot pin *h* when they have been forced toward each other, may be of any approved construction.

Along the left margin *m* of that portion of the upper jaw *j* which is between the punching or canceling extremity *e* and the hinge or pivot pin *h* is extended a downwardly-projecting cutting edge or blade *b*. This jaw *j* is of a width which is slightly greater than the width of the jaw *j*<sup>2</sup>, and the inner face of the blade *b* is in a vertical plane, while the outer face is inclined or beveled from its upper extremity inwardly and downwardly to form the cutting edge, as seen in the vertical section, Fig. 5. Within the body of this jaw at the base of the blade *b* is provided a narrow transversely-wedge-shaped groove or cav-



ity  $c$ . Upon the corresponding margin  $m^2$  of the jaw  $j^2$  is the upwardly-projecting cutting edge or blade  $b^2$ , which, unlike the blade  $b$ , is made vertical upon its outer face, while upon its inner face it is beveled or inclined upwardly and outwardly from its lower to its upper extremity.

Under the modified form of construction represented in Figs. 6, 7, 8, and 9 the jaw  $j^2$  is unprovided with a cutting-blade, but an equivalent is found in the greater breadth of the jaw and in the provision in the broadened portion of the minute opening or narrow slot  $j^4$ , which extends along that portion of the jaw which is coincident with the blade  $b$  upon such upper jaw and which is of such dimensions as to adapt it to exactly receive such blade and thus to effect with certainty a severance or bisection of the ticket.

The length of the cutting-blades or knife-edges may vary according to the requirements of the service or work in which they are to be employed. Ordinarily the breadth of the slips upon which the series of ticket-coupons is printed is about three inches, and if the severing edges are of this extent a single movement or clip of the jaws will cut entirely across the slip and make a straight and smooth separation of the terminal coupon therefrom.

It will be noted that as the jaws are closed in the act of bringing the cutting-surfaces together to sever the coupon from the lower end of its slip the coupon thus severed will at the same instant be engaged between the coincident flat main surfaces of the two jaws and will be held by them, while the main portion of the slip, embracing the ticket-head and the remainder, if any, of the series of coupons, is returned to the ticket-holder, whereupon the left hand of the ticket-taker will be free to grasp the detached coupon as the fingers of the right hand are relaxed from the levers and the coupon is freed from the grasp of the jaws.

It will be apparent that the severing devices seen in the modification represented in Figs. 6 to 9 might be reversed in their relative positions without exceeding the scope of this invention.

As will readily be inferred from the foregoing, the use of a transversely central cutter at the end of a jaw acting in conjunction with a central slot or with a bifurcation in an opposite jaw would be ineffective for the accomplishment of the objects which I have described. So, also, would a marginally-attached cutting-blade which acts in connection with the blunt shoulder or corner of an opposite jaw, since it is obvious that in cutting so soft, so thin, and so flexible a material as paper practically sharp shearing edges are necessary to produce the indispensable shearing action. So, also, would pliers which are furnished with cutting edges which are arranged in exactly the same plane and which

are purposely so mounted as to effect only a partial severance of the article or thing which it is desired to divide. So, also, would any punching or cutting appliance in which, regardless of its other peculiarities, the opposite faces thereof are not flat, or which for any other reason may not be brought into close contact, so as to embrace and retain the main portion of the ticket or slip while a portion is being severed and removed.

I am aware of Patent No. 304,089, dated August 26, 1884, to S. W. Entekin, and of Patent No. 311,121, dated January 20, 1885, to B. M. Hair, each of which has a single lateral exterior depending cutter and each of which has transverse grooves which are adapted to receive circular lines or "belts" of leather. I do not claim and have no desire to employ such construction. I believe, however, that I am the first to provide in a punch opposite flat surfaces which are adapted to engage the flat surface of a passage-ticket; the first to provide in a punch opposite knives or blades which are intended to sever a ticket, coupon, or other written or printed sheet of paper; the first to provide in a punch opposite knives or blades which are either adapted or intended to sever a passage-ticket or other paper sheet, and the first to conceive the idea of a two-jawed ticket-canceling appliance which is adapted to simultaneously cut off one portion of the ticket and securely grasp the flat outspread remaining portion.

The invention having been thus described, what is claimed is—

1. A ticket-canceling punch the opposite jaws of which are adapted to be brought in contact, face to face, to embrace the body of the ticket; and which are provided along their left margin with coincident shearing blades or edges which are adapted to engage the body of the ticket, to partially pass each other as the jaws are brought together, and to sever the ticket from the parts contiguous thereto; substantially as shown and described.

2. A ticket-canceling punch the opposing jaws of which are in their main portion flat, and which are adapted to be brought into contact, face to face, to engage between them the body of the ticket; one of the jaws of which has upon its meeting face a marginal projecting cutting and shearing blade; and the opposite jaw of which is provided in its meeting face with a depression or opening, to receive the projecting cutting and shearing blade of the other jaw; substantially as and for the purposes specified.

In testimony whereof I have hereunto affixed my signature this 19th day of October, 1895.

OLIVER W. COOKE.

Witnesses:

WILBUR S. COOKE,  
JOHN P. MCCABE.