

C. E. PARKS.
TICKET PUNCH.

No. 190,157.

Patented May 1, 1877.

Fig. 1.

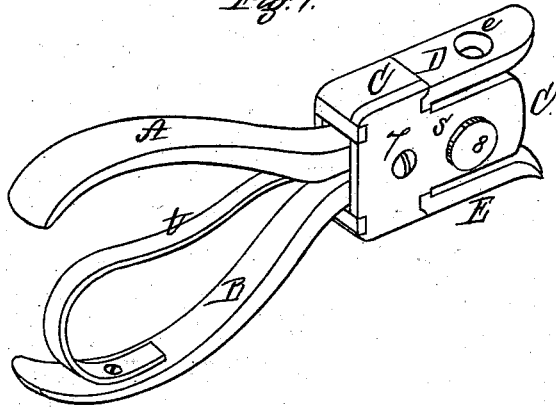


Fig. 2.

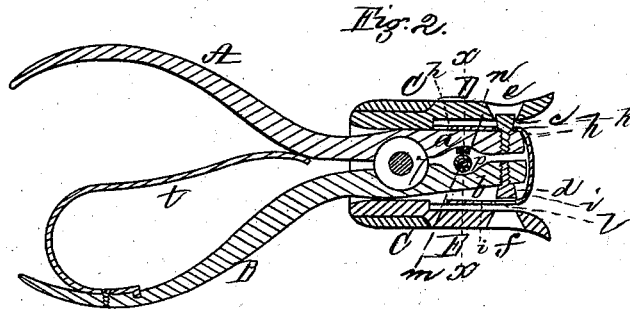


Fig. 3.

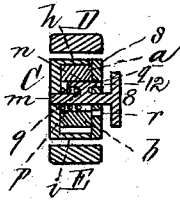


Fig. 4.

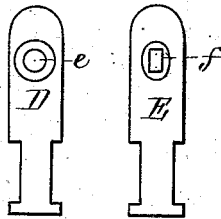
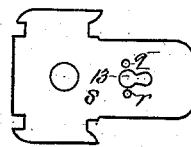


Fig. 5.



Witnesses,
W. J. Cambridge
J. C. Cambridge.

Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES E. PARKS, OF NORTH SOMERVILLE, MASSACHUSETTS.

IMPROVEMENT IN TICKET-PUNCHES.

Specification forming part of Letters Patent No. **190,157**, dated May 1, 1877; application filed February 23, 1877.

To all whom it may concern:

Be it known that I, CHARLES E. PARKS, of North Somerville, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Ticket-Punches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a ticket-punch constructed in accordance with my invention. Fig. 2 is a longitudinal section through the center of the same. Fig. 3 is a transverse section on the line *xx* of Fig. 1. Figs. 4, 5, and 6 are details.

It is customary on many railroads for the conductor to carry two separate and independent punches, having cutting-dies of different forms, one for the outward and the other for the inward trip, in order that the direction in which the ticket was used may be indicated thereon.

To avoid the inconvenience and expense of employing two distinct punches is the object of my invention, which consists in two punches formed from a series of jaws having male and female dies, and mechanism adapted to operate in such manner as to render one punch inoperative without changing its position, while the other is in use, all as hereinafter fully described.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A B are two levers, pivoted together by a screw, 7, within a plate or casing, C. The jaws *a b*, at the outer ends of the levers A B, are provided with male cutting-dies *c d*, which fit into female dies *e f*, formed in stationary jaws D E, at the sides of the plate or casing C, these jaws D E being attached to or formed in the same piece therewith, the jaws *a D*, with their male and female dies *c e*, forming one punch, and the jaws *b E*, with their male and female dies *d f*, forming another punch, the two punches having dies of different form, in order that one punch may be used on the outward, and the other on the inward, trip. The portions *h i* of the casing, which inclose the ends of the jaws *a b*, are

provided with apertures *k l*, each portion serving as a clearer for freeing the punched ticket from the male die after the latter has cut a piece out therefrom, the shape of the aperture in the clearer corresponding to that of its male and female dies. Passing through the casing, and between the jaws *a b*, is a pin, *m*, provided on the outside of the casing with a head, 8, and on the inside of the casing with a projection, *n*, of the form seen in Figs. 3 and 6, and surrounding this pin, between the shoulder 9, formed by this projection, and the inside of the casing, is a short spiral spring, P, which keeps the end 12 of the projection *n* within one of a pair of holes, *q r*, in the covering-plate *s*, formed diametrically opposite each other, on either side of the hole 13, through which the pin *m* passes.

When the projection *n* is in the position seen in Figs. 2 and 3, it bears against the inside of the jaw *a* and prevents its movement, keeping its male die *c* within the female die *e*, thus rendering this punch inoperative, and preventing the insertion of a ticket therein, the other punch being in working order.

When it is desired to use the other punch the pin *m* is pressed down against the resistance of the spring P, sufficiently to release the end 12 of the projection *n* from the hole *q*, when the pin may be turned around so as to bring its projection *n* against the inside of the jaw *b*, whereby the male die *d* is kept within the female die *f*, and the jaw *b* locked in this position, thus rendering this punch inoperative, and simultaneously releasing the jaw *a* of the other punch, which is then ready for use. When the projection *n* is brought around into position to lock the jaw *b*, the end 12 of the projection is brought into line with the hole *r* in the covering-plate, into which it is forced by the action of the spring P, whereby the pin is prevented from turning, as desired. The inner side of each jaw *a b* is cut away to allow the pin and its projection to be turned when required. A suitable spring, *t*, is employed for keeping the handles of the levers apart.

By thus combining two separate and distinct punches in a single instrument, as above described, the trouble of carrying two different instruments, as heretofore, is avoided, as well as the expense incident thereto. Fur-

thermore, my improved punch is of simple construction, and not liable to get out of order.

I claim—

The combination, with the two punches consisting of the jaws *a b D E*, provided with male and female dies, of mechanism adapted to operate substantially as described, whereby one punch may be rendered inoperative with-

out changing its position while the other is in use, as and for the purpose specified.

Witness my hand this 19th day of February,
A. D. 1877.

CHAS. E. PARKS.

Witnesses:

N. W. STEARNS,

P. E. TESCHEMACHER.