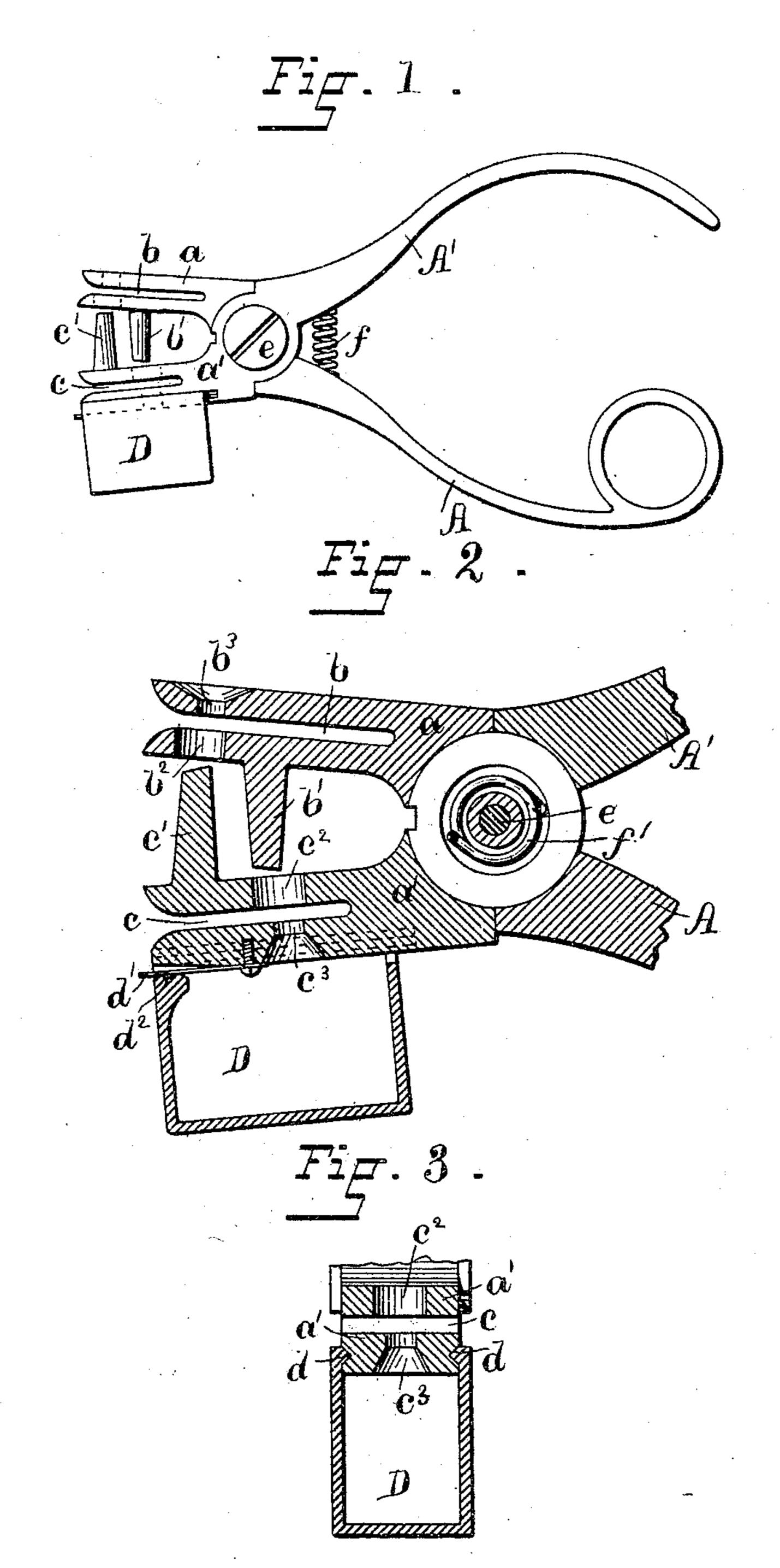
(No Model.)

W. C. HARDEN

TICKET PUNCH.

No. 321,718.

Patented July 7, 1885.



WITNESSES. Chas. H. Luther for Sm. L. Condon.

INVENTIFI. Walter be. Harden Hoseph A. Miller Heo Steps

United States Patent Office.

WALTER C. HARDEN, OF VALLEY FALLS, RHODE ISLAND.

TICKET-PUNCH.

SPECIFICATION forming part of Letters Patent No. 321,718, dated July 7, 1885.

Application filed March 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, WALTER C. HARDEN, of Valley Falls, in the county of Providence and State of Rhode Island, have invented a new 5 and useful Improvement in Ticket-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.

My invention relates to punches for conductors of railway-trains; and the object of my invention is to produce a punch the use of which will relieve the conductor of the necessity of remembering the number of tickets of 15 a certain class punched by him, and which may also be used as an ordinary canceling-punch.

Conductors of railway-trains are usually provided with a single punch, which wastes all of the clippings, and they have not only to 20 cancel the single-trip tickets which they take up, but also punch out the dates in commutation-tickets, which they return to the passenger. In the latter class of tickets the clippings made by the punch drop upon the car-floor 25 and are lost, so that the conductor is compelled to rely solely upon his memory in turning in his report of the number of commutation passengers carried on his train. It will be readily seen that it is almost impossible for the con-30 ductor to accurately remember the number of commutation tickets punched by him. By virtue of my invention this defect in the system is avoided, and at the same time without cumbering the conductor with a number of punches.

My invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with ref-40 erence to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved punch. Fig. 2 is a sectional view of the jaws of the same. Fig. 3 is a cross-section of the

45 perforating-jaw and its receptacle. In the said drawings, A A' designate the arms or handles of the punch, which are hinged together at e, and which are formed, respectively, with the jaws a a' extending beyond the 50 pivot. The jaws of the punch are held open

Fig. 1, or at f' in Fig. 2, or by any other suitable or preferred form of spring. The jaw aof arm A is split or bifurcated longitudinally, as at b, and is also formed with two holes, $b^2 b^3$, 55 placed in alignment, so as to receive the spur c' upon the opposite jaw. The jaw a' of arm A' is also split or bifurcated longitudinally, as at c, and is formed with two holes, c^2 c^3 , to receive the spur b' upon jaw a.

D designates a box or receptacle, which is attached removably upon the outer side of jaw a', in such position that the holes $c^2 c^3$ shall communicate with its interior.

As shown in the drawings, the sides of the 65 jaw are formed with longitudinal grooves or recesses, in which projections d upon the inner upper edges of the box enter, and said box is held by a spring-catch, d', secured to the under side of the jaw, and having a lug, d2, en- 70 gaging in a notch in the box.

From the above description it will be seen that when a single-trip ticket is to be canceled it is inserted into the slit b of jaw a, and is perforated by the spur c' of jaw a', the clipping 75 being allowed to fall upon the floor; but when a commutation ticket is to be punched it is inserted into the slit c of jaw a', and is perforated by the spur b' of jaw a, the clipping falling into box D. Thus after a trip has been 80 made the conductor has only to count the clippings in box D to ascertain the number of commutation tickets which he has punched, so that there is no necessity for him to carry the number in his mind as he punches.

The device is simple, durable, and convenient to handle, and greatly lessens the conductor's labor.

I am aware that heretofore ticket-punches have been devised which have two punches, 90 the clippings of one of which are cast away, while those from the other punch are caused to drop into a receptacle. Hence I do not claim such construction, broadly; but while my improved punch operates under this gen- 95 eral principle, it differs materially from previous forms, in that the two jaws of my punch serve each but one of the purposes, both of which have heretofore been required of one jaw. In other words, while heretofore both 100 of the punches have been mounted upon one by a spring, either such as is shown at \bar{f} in l of the jaws, and the dies and receptable have

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been mounted upon the other jaw, I mount one die and the receptacle upon one jaw and the corresponding punch upon the opposite jaw, and upon this same jaw I form a die for a punch which I mount upon the jaw which carries the receptacle. Thus I not only greatly simplify the punch in construction and appearance, but I also greatly facilitate its manipulation and reduce its cost.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a ticket-punch, the combination, with a jaw carrying a spur and formed with a slit having an aperture, of a second jaw hinged to the first and carrying a second spur, and a receptacle for clippings and formed with a slit having an aperture, the spur of the first jaw working through the aperture of the second jaw and feeding its clippings into the recep-

tacle, and the spur of the second jaw working 20 into the aperture of the first jaw, substantially as and for the purposes described.

2. The combination, with the arm A, having the bifurcated jaw a, with its spur b', of the arm A', having the bifurcated jaw a', with 25 its spur c', and receptacle D, substantially as set forth.

3. The combination of the arm A, having the jaw a, with slit b, spur b', and holes $b^2 b^3$, the arm A', with its jaw a', slit c, spur c', holes 30 $c^2 c^3$, the box D, having the lugs d, and spring-catch d', the said arms being pivoted together and provided with a spring to hold them apart, substantially as specified.

WALTER C. HARDEN.

Witnesses:

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J. A. MILLER, Jr., M. F. BLIGH.