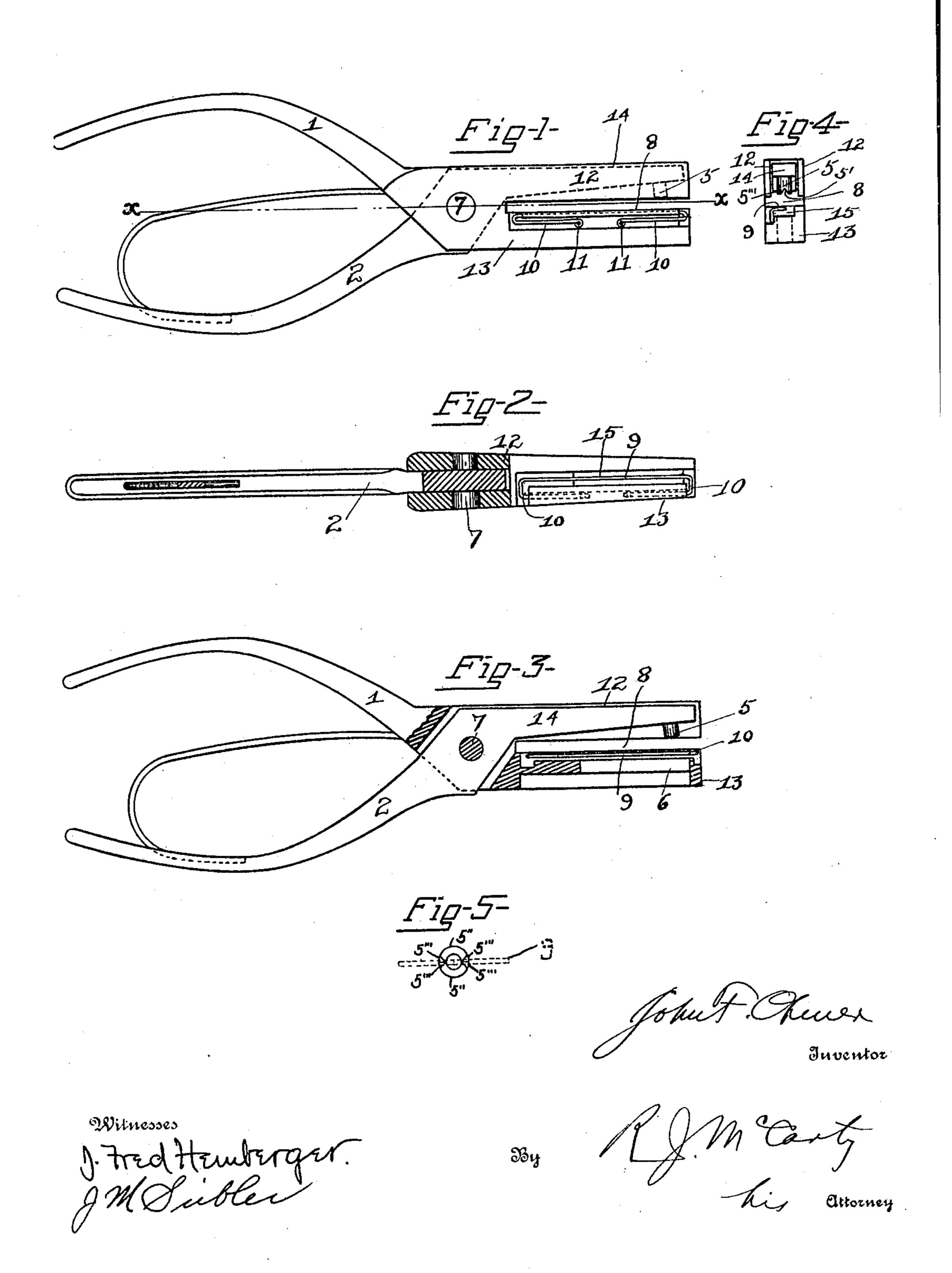
J. F. OHMER. TICKET PUNCH OR PERFORATOR. APPLICATION FILED AUG. 25, 1905.



ITED STATES PATENT OFFICE.

JOHN F. OHMER, OF DAYTON, OHIO, ASSIGNOR TO OHMER FARE REGISTER COMPANY, OF ROCHESTER, NEW YORK, A CORPO-RATION OF NEW YORK.

TICKET PUNCH OR PERFORATOR.

No. 819,917.

Specification of Letters Patent.

Patented May 3, 1906.

Application filed August 25, 1905. Serial No. 275,720.

To all whom it may concern:

Be it known that I, John F. Ohmer, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of 5 Ohio, have invented certain new and useful. Improvements in Ticket Punches or Perforators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the to art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to new and useful improvements in hand punches or perforators, such as are used in punching railway-tickets and other tickets for a variety of purposes.

The object of my invention is to provide a 20 punch or perforator of the above type which dispenses with the use of the usual die and which is simple in construction and comparatively inexpensive as compared with the common forms of ticket-punches.

Preceding a detailed description of the invention reference is made to the accompany-

ing drawings, of which—

Figure 1 is a side elevation of a ticket punch or perforator constructed in accord-30 ance with my invention. Fig. 2 is a sectional view on the line x x of Fig. 1. Fig. 3 is an elevation with a portion appearing in section. Fig. 4 is an end elevation of the punch. Fig. 5 is a detached view of the 35 lower end of the punch and the resilient bar or coöperating member in a relative position.

In a detail description of the invention similar reference characters indicate corre-

sponding parts.

1 designates the supporting member of the device or punch with extended side walls 12 and a lower extended portion 13, between which parts a slot 8 is provided, in which the ticket or other paper is inserted in a position 45 to be punched or perforated. The lower extension 13 is provided with an opening or orifice 6, through which the punched portions of the ticket drop. The portion or member 2 of the device is pivoted within the support-50 ing member at 7 and has an extended portion 14, which normally lies between the side walls 12 of the supporting member. This extended portion 14 has fixed to it the punch | of less width than the diameter of the punch

5, said punch having as an essential of its construction a notch or recess 5', which ex- 55 tends centrally across the engaging end thereof. The said extension 13 of the supporting member has its upper surface recessed, as at 15, and within this recessed portion a resilient bar or member 9 is placed, 60 said resilient member having its ends 10 turned and extended toward each other and rigidly fastened at 11 to a suitable part of said extension. It will be seen from Figs. 3 and 4 that the yielding portion of said resili- 65 ent member 9 lies parallel with said recess 15 and in a position in line with the notch 5' in the engaging end of the punch 5, the length of said notch 5' being parallel with said bar or resilient member. When a ticket is placed 70 within the recess 8, it rests upon this resilient bar or member 9 and on the extension 13. As the punch 5 is pressed downwardly against said ticket the sides 5" of said punch which are parallel with the bar or member 9, 75 are first to cut the ticket, and as said punch is further pressed toward the resilient bar or member the cut is completed, it being understood that the downward pressure of the punch 5 closes the members of the implement 80 and causes a downward yielding of the resilient bar or member 9, during which the complete severance of the punched portion of the ticket takes place. During this complete closing of the members of the punch the ends 85 5" of the notch in the engaging end of the punch completes the cutting operation. The resilient bar or member 9, as before stated, yields sufficiently to permit of the operation.

While I have minutely described the con- 90 struction of the resilient bar or member 9 and the manner of its attachment, I do not wish to limit myself to this specific construction or this specific manner of attachment, as it is obvious the construction of this important 95 member may be modified or varied, and also the manner of mounting or attaching such modified or varied member would of necessity vary from the manner of attachment herein shown and described. The object of 100 my invention is, broadly, to do away with the usual female die usually employed in ticket-punches. I therefore wish to claim, broadly, a resilient member suitably mounted below a punch, said resilient member being 105 and the punch having a recessed or notched portion in its engaging end.

Having described my invention, I claim—

1. In a ticket punch or perforator, a punch, and a resilient member below said punch and in line therewith and adapted to coöperate with the punch in perforating a ticket.

2. In a ticket punch or perforator, a punch having a recess in its engaging end, and a yielding member below said punch and in line with the recess in said engaging end, said resilient member coöperating with the punch in perforating.

3. In a ticket punch or perforator, a punch having a recess extending centrally across its engaging end, and a resilient member mounted below said engaging end and in line with the recessed portion, said resilient member being of less width than the diameter of the engaging end of the punch.

4. In a perforator or ticket punch, a punch having a V-shaped notch in its engaging end extending centrally across said engaging end, and a yielding bar mounted below said punch

5. In a ticket punch or perforator, a punch mounted upon an extended portion of the inplement, said punch having its engaging end recessed, a resilient bar mounted upon the lower extension of the supporting member of the implement, said resilient bar being in line with the recessed portion of the punch, and said bar being below the ticket-slot in the implement.

6. In a ticket punch or perforator, a punch having its engaging end provided with a notch extending centrally across said engaging end, and a yielding bar mounted below said recess and parallel therewith, said bar being adapted to enter said recess in the

punching operations.
7. In a ticket perforator or punch, a member ber supporting a resilient bar, and a member supporting a punch, said punch having its ensaging end recessed centrally, and said resili-

45 gaging end recessed centrally, and said resilient bar being in line with said recessed portion and coöperating with the engaging end of the punch.

8. In a ticket punch or perforator, a sup50 porting member having the portion lying below the ticket-slot recessed, a resilient member lying within said recessed portion, a punch
mounted upon the other member of the implement, said punch having its engaging end
55 provided with a central recess extending entirely across said engaging end, and said re-

cess being in alinement with the resilient member.

9. In a ticket punch or perforator, a member thereof having its surface provided with a 60 longitudinal recess from which extends an orifice through which the punched portions of the tickets drop, a resilient member mounted within said recessed portion, a punch mounted upon the other member of the im-65 plement, the engaging end of said punch being notched, and said notch being in line with the resilient member and coöperating therewith in the punching operations.

10. In a ticket punch or perforator, a mem- 70 ber having side walls 12, and a lower portion 13, between which portions a ticket-slot is provided, a resilient member mounted in the lower portion of said member below the ticket-slot, and a punch mounted on the 75 other member of the implement, said punch having a V-shaped notch extending centrally across the engaging end thereof, and said notch and engaging end coöperating with the resilient member in the punching operations. 80

11. In a ticket punch or perforator, a supporting member having upper and lower extensions between which is provided a ticket-slot, a resilient bar mounted on the lower extension of said supporting member, a 85 member pivoted to said supporting member, a punch on said pivotal member, said punch having a notch in the engaging end thereof adapted to engage the resilient member in the operations of punching tickets, said 90 resilient member coöperating with said punch in such operations.

12. In a ticket punch or perforator, a supporting member having upper and lower extensions providing an intervening ticket-slot, 95 an elongated resilient bar or member mounted on the lower extension of said supporting member, a punch mounted upon the other member of the implement, said punch having a V-shaped notch extending centrally across the engaging end thereof, the opposite sides of the engaging end of said punch being adapted to perforate the ticket in advance of the cutting operations of the punch at the ends of the V-shaped recess or notch.

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

JOHN F. OHMER.

Witnesses:

C. M. THEOBALD, CARL T. BERNER.