

*A. D. Hoffman,*

*Conductors Punch.*

*No. 100,036.*

*Patented Feb. 22. 1870.*

Fig. 1.

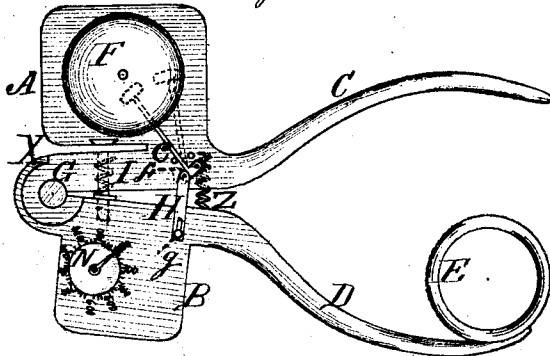


Fig. 2.

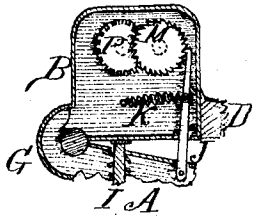


Fig. 3.

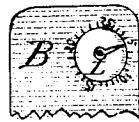


Fig. 4.

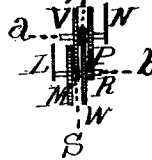
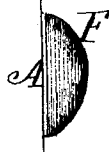


Fig. 5.



Witnesses.

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# UNITED STATES PATENT OFFICE.

AUSTIN D. HOFFMAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND CHARLES H. MORSE, OF SAME PLACE.

## IMPROVEMENT IN REGISTERING-PUNCH FOR RAILROAD CONDUCTORS.

Specification forming part of Letters Patent No. **100,036**, dated February 22, 1870.

*To all whom it may concern:*

Be it known that I, A. D. HOFFMAN, of Chicago, in the county of Cook and State of Illinois, have invented an Improved Conductor's Punch; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings and letters marked thereon, making a part of this specification, in which—

Figure 1 is an elevation of my improved punch; Fig. 2, an internal view of the box-jaw, it being inverted and showing the opposite side to that shown at Fig. 1; Fig. 3, a broken view of the face-plate and dial removed from box-jaw at Fig. 2; Fig. 4, an elevation of the gearing inside of the box-jaw, removed to give a clear view of its construction; Fig. 5, a side elevation of the bell.

The present invention relates to an improved punch, which is designed to be used by conductors of cars, but more especially of street-cars; and its novelty consists in the arrangement whereby, when a punch is made to cut through a ticket or card, a bell will be rung, and the number of holes punched indicated, as the whole is hereinafter fully described.

A B represent the jaws of the punch, and C D the handles extending out therefrom, said jaws being jointed together at G in the usual manner of jointing similar tools. To the jaw A is hung a bell, F, and to its inner part near the joint G is fixed a punch, I, which is used to make holes through tickets, cards, &c., in the usual manner, except that the ticket in this case is put into a slot, X, in jaw A instead of between the jaws A B. The jaws are held the proper distance apart to allow a ticket to be put over the punch by means of a coil spring, Z, Fig. 1, inserted in one jaw, and made to bear against the other. The jaw B is provided with a rim and two face-plates, by means of which the following-described mechanism is placed in convenient position to indicate the number of holes punched, and also to ring a bell at the punching of each hole, as

shown at Fig. 4. *a b* represent journals, which have suitable bearings in the box-jaw B, and which support the following ratchet-gearing. A wheel, E, is fitted to journal *b*, and it is turned one notch every time the jaws A B are opened by means of a pawl, J, Fig. 2, which is fastened to the jaw A, and held to its work by means of a spring, K, Fig. 2. A pinion, S, Fig. 4, is also fastened to the journal *b*, and made to turn a wheel, V, which runs loosely on journal *a*, and carries with it a pinion, T, which drives a wheel, W, fitted loosely on the journal *b*. A pinion, R, is attached to the wheel W and drives a wheel, P, which is attached to journal *a*.

By means of this construction and arrangement, the wheel M drives the journal *b*, to which is fixed a hand or pointer, L, for indicating the number of holes punched up to twenty-five on its dial, Fig. 3, and the journal *a* is made to carry a hand, N, which indicates on its dial (at Fig. 2) the number of holes punched up to one thousand. A T-shaped shank, *f*, Fig. 1, supports a bell-hammer, *c*, and, as one end of the shank is pivoted to the jaw A, and the other to a sliding bar, H, the latter will, when the jaws are shut together, bring the hammer *c* against the bell F, the opposite end of said bar being slotted out, and operating on a pin, *g*, put into jaw B, allows the hammer *c* always to ring the bell when the hole is punched.

I claim and desire to secure by Letters Patent—

1. A card or paper punch, which is so arranged, by means of the jaws A B, handles C D, and gearing V T P M R S W, that the number of holes punched in a card or ticket may be registered by the hands N L on their dials, as set forth.

2. The combination of the jaws A B, bell F, handles C D, gearing V T P M R S W, hammer *c*, bar H, spring Z, and punch I, as and for the purpose set forth.

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Witnesses:

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