

(No Model.)

J. C. SHOUP.
CONDUCTOR'S FARE RECORDER.

No. 286,493.

Patented Oct. 9, 1883.

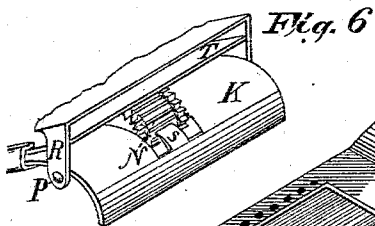


Fig. 6

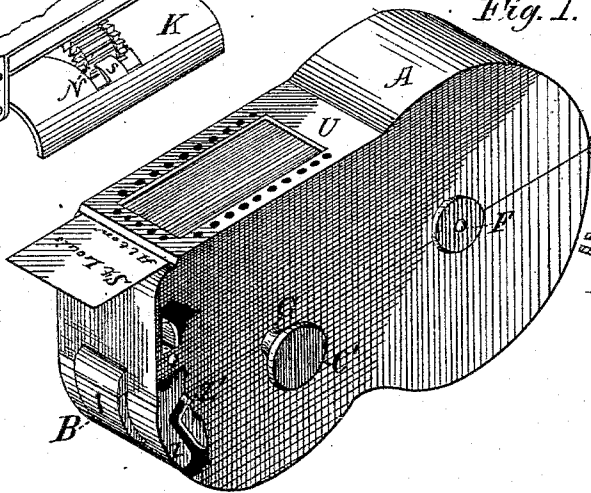


Fig. 1

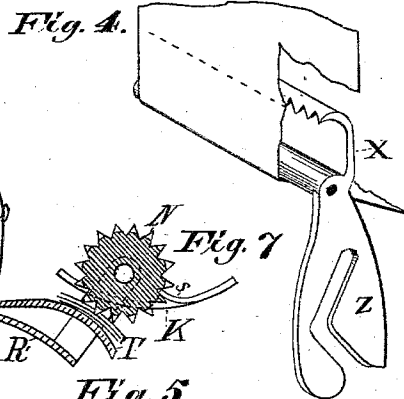


Fig. 4

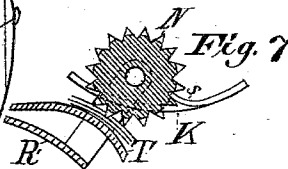


Fig. 7

Fig. 5

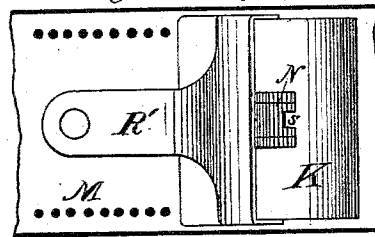


Fig. 3

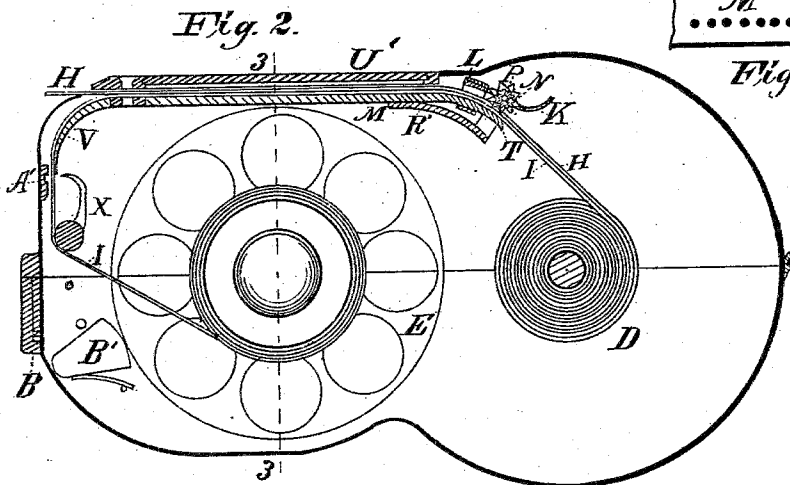


Fig. 2

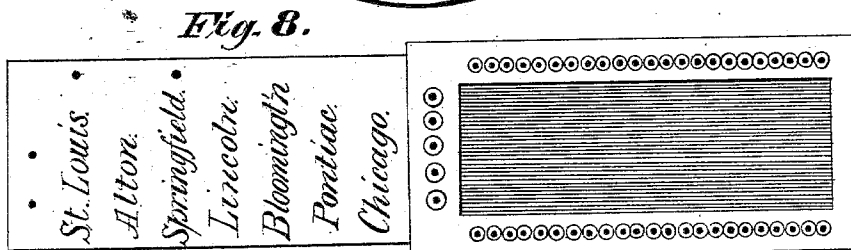
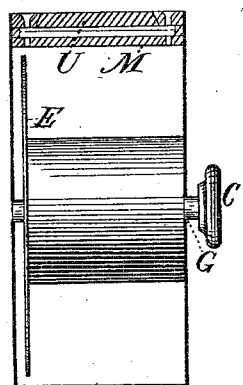


Fig. 8

Fig. 9

WITNESSES

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UNITED STATES PATENT OFFICE.

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CONDUCTOR'S FARE-RECORDER.

SPECIFICATION forming part of Letters Patent No. 286,493, dated October 9, 1883.

Application filed February 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. SHOUP, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Conductors' Fare-Registers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements in fare-registers to serve as a check to conductors on railroad-trains when receiving fares from passengers; and it has for its objects to provide an improved method of registering the fares in such manner as to serve as a check upon the conductor to prevent him from fraudulently appropriating money, tickets, or coupons, to prevent him from manipulating the apparatus to register a transaction after he has fraudulently or otherwise failed to register a fare, and to secure an accurate and unfailing record of the fares taken, as more fully hereinafter specified, and also to provide an improved apparatus for carrying this invention into effect. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved register; Fig. 2, a longitudinal vertical sectional view of the same; Fig. 3, a transverse vertical sectional view taken on the line 3 3 of Fig. 2; Fig. 4, a detached perspective view of a device for indicating upon the registering-strip the opening of the casing of the apparatus, so as to prevent fraudulent use of the same. Fig. 5 represents a detached portion of the device, showing the check mechanism for preventing the ticket and registering strips from working back; Fig. 6, a detached perspective view of a portion of such check mechanism; Fig. 7, a detached sectional view of a portion of said mechanism; and Fig. 8, a top view of a portion of the apparatus, showing a projecting ticket in position to be torn off from the ticket-slip.

The letter A indicates a metallic box or casing of convenient shape constructed in two parts hinged together at one end, as indicated in Figs. 1 and 2 of the drawings. At the forward end, or that opposite the hinge ends of

the casing, one of the parts is provided with a lock, B, or other fastening devices.

Within the casing are located two spools or reels, D and E, which are mounted upon transverse shafts having their journal-bearings in boxes F G in the adjoining parts of the casing, as shown in Fig. 1 of the drawings. The spool or reel D carries the ticket and registering-strips H I, which are wound upon the same in juxtaposition with each other, and from the said spool or reel the strips pass between the curved guide K, which is secured to a guide-frame, L, mounted at the rear end of a plate, M, forming part of the upper part of the box or casing A and the curved part T of the plate M. The said guide K is slotted, as indicated in Fig. 6, and through said slot sets a corrugated wheel, N, at either end of which are sharp projections. This wheel N is mounted upon a shaft, P, journaled in arms R, secured to the ends of the transverse extension of a longitudinal spring, R', secured to the lower side of the plate M near its rear end.

The guide K is provided with spring-stop S, which bears against the notched wheel N, and prevents backward movement thereof. The wheel N, with its sharp points at the ends, serves to cause the strips to feed regularly together, and prevents either from being slipped or fed backward.

Above the plate M, on the top of the device, is secured a metallic frame, U, bearing a space between the frame and plate, through which the ticket and register strip pass, the ticket-strip being adapted to be projected out of the passage at the forward end, while the register-strip passes down over a curved metallic guide, V, attached to the forward end of the plate M, and past the edge of a metallic plate, X, to the spool or reel E. Beneath or within the frame U is a glass face, U'. The said plate X at its lower edge is rounded, as indicated, and through said rounded portion passes a suitable shaft, by which it is secured within the casing in the position shown in Fig. 2 of the drawings. The said plate has its upper edge bent forward and serrated, and is provided at one end with a cam-lever, Z, which is operated by a pin, Z', at one side of the lower part of the casing, to force the serrated edge of the plate against the register-strip

whenever the case is opened, and puncture said strip across, and thus serve as a safeguard against fraudulent opening of the casing.

The letter A' indicates a bearing against which the paper is forced by the puncturing device, in order to make the perforations.

The frame U and the plate M are perforated, as indicated in Figs. 1, 3, and 5, the perforations in the frame U and plate M being directly opposite each other, for the purpose hereinafter explained.

The letter B indicates a pawl, which bears against the edge of the spool E and prevents it from turning in the wrong direction.

The ticket-slip consists of a continuous series of tickets or conductors' checks, having represented upon their faces the main and intermediate stations on the route to be traveled with a given conductor, and with the register-strip is wound upon the reel or spool D, and then carried through the passage, the register-strip being carried to the reel or spool E, as before mentioned. The case is then closed and fastened, and the apparatus is placed in charge of the conductor. When the conductor receives a fare, either in money, a local ticket, a coupon-ticket, or a pass, he notes the place at which the passenger starts, and punches through the slips at the perforation at one side, opposite the name of such place, and also opposite the name of the place of destination. He also punches at the forward end of the machine, through one of the apertures in the row running transversely across the machine, according to the character of the fare received. For instance, if the fare is received in money he punches through the aperture at the right-hand side of the apparatus; if a local ticket, through the next succeeding aperture to the left; if a coupon-ticket, through the next, and if a pass through the next. If the fare is a half-fare in either case, the conductor punches through the last aperture, or the one on the left. It will be seen that the apertures at the end of the plate are out of line with those at the side, so that the punctures in the strips denoting the character of the fares will never become confused with those denoting the stations at which the ride begins and ends, and that they serve as a datum-point on the blank strip from which to determine the initial station from which a given fare or ticket is taken up. Having thus punched the ticket and the register slip, the two slips are advanced by turning the reel or spool by means of the milled knob C' on the outer end of its shaft until the ticket has been fully projected, where it is torn off and delivered to the passenger. As the ticket strip and register-strip are punctured precisely alike, and as the register-strip is wound upon the reel or spool inside the casing and out of control of the conductor, it will be seen that an accurate record of every ticket or fare received and the initial and terminal stations thereof will be preserved within the casing, rendering it impossible for the conductor to

fraudulently dispose of tickets taken up by him without detection. The amount of the fare, it will be perceived, is indicated by the punching, as the distance and section traveled over is noted by the position of the marginal punchings with relation to those made through the end of the plate and by the space between such marginal punctures.

The perforations at one side of the instrument are for the purpose of punching when the trains are run in one direction, and those on the opposite side when they are run in the opposite direction. Should the casing be opened by the conductor for fraudulent purposes, the serrated plate would puncture it, as before mentioned, and thereby indicate that the instrument had been tampered with.

It will be perceived that by my improved method of puncturing the register-strip may be perfectly plain, thus overcoming the objection heretofore existing where duplicate printed strips have been employed, arising from their tendency, invariably, to travel inaccurately together, and thus creating confusion in the registered record.

The spools E and D are so located in their relative positions with each other that as the strips unwind from the dispensing-spool D and the record-strip I winds up on spool E a part of the space vacated by said strips is re-occupied by the record-strip I, thus enabling me to operate a greater length of strip in a given space than if said spools were not so arranged.

It will be seen that by the use of my improvements the conductor is enabled to keep a true and correct record or journal, showing the character of each fare and the initial and terminal stations between which each passenger traveled; and, further, that thus the proper officers of the road are enabled at any time to inspect the conductor's issues and verify their correctness.

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

1. The method herein described of registering the fares and tickets collected on a railway-train, the same consisting in puncturing simultaneously juxtaposed printed ticket-strip and blank register-strip, in the manner described, so as to indicate the character of the fares or tickets collected and the initial and terminal stations between which each and every passenger travels, thus making an accurate record on the registry-strip of the conductor's transactions.

2. The combination of the dispensing-spool, the wheel N, provided with sharp projections, the guide consisting of the perforated frame and plate, a storing-reel, and means applied directly to the storing-reel for operating the machine to move forward in unison a plurality of strips of paper, as set forth.

3. The combination, in a fare-register, of the frame U and the plate M, having lateral and longitudinal rows of perforations, as de-

scribed, between which the ticket and register strips pass, whereby said strips may be punctured, as described, so as to register the character of the fare or ticket received and the
5 initial and terminal stations between which the passengers travel, substantially as hereinbefore set forth.

10 4. The combination, in a fare-register, of devices for carrying and operating register and ticket strips, serrated plate, cam-lever, and lever-operating mechanism, substantially as specified.

15 5. In a register, the combination of the perforated plate and frame arranged and perforated substantially as described, so that two parallel strips—one with appropriate matter printed thereon and the other blank—may be punctured simultaneously, so as to indicate on

the former to the holder the character of the fare or ticket taken and the initial and terminal stations between which the fare or ticket
20 is collected, and on the latter, through the relative positions of the punctures, to register the transactions of the conductor, as hereinbefore set forth.

25 6. The combination, with the dispensing-spool and means for moving a plurality of strips forward, of the regulating and check wheel N, substantially as described.

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

JAMES C. SHOUP.

Witnesses:

WARREN C. STONE,
WM. A. ROSENBAUM.