2 Sheets—Sheet 1.

S. HASTINGS.

Platform Passenger-Register.

No. 201,009. Patented March 5, 1878.

Fig. 1.

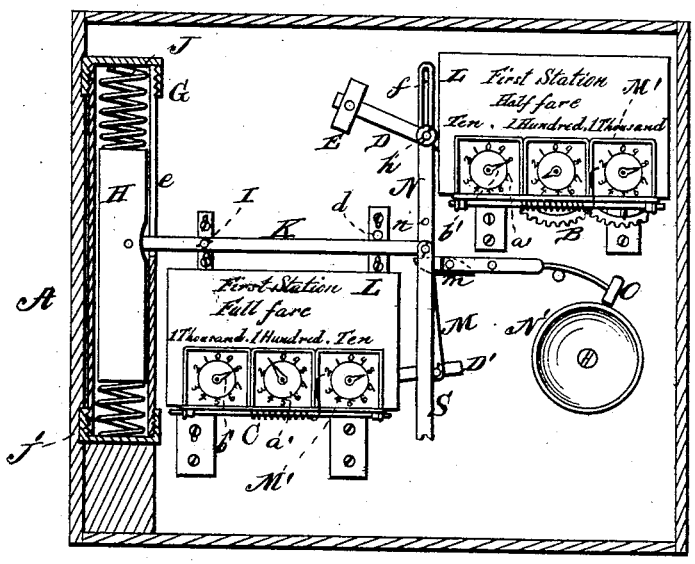
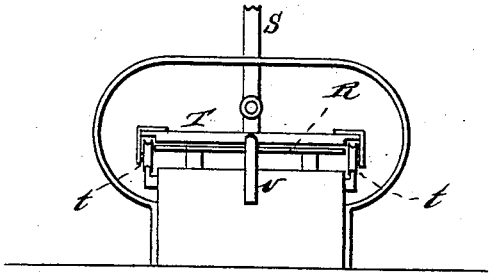


Fig. 2.



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S. HASTINGS. 2 Sheets—Sheet 2.

Platform Passenger-Register.

No. 201,009. Patented March 5, 1878.

Fig. 2.

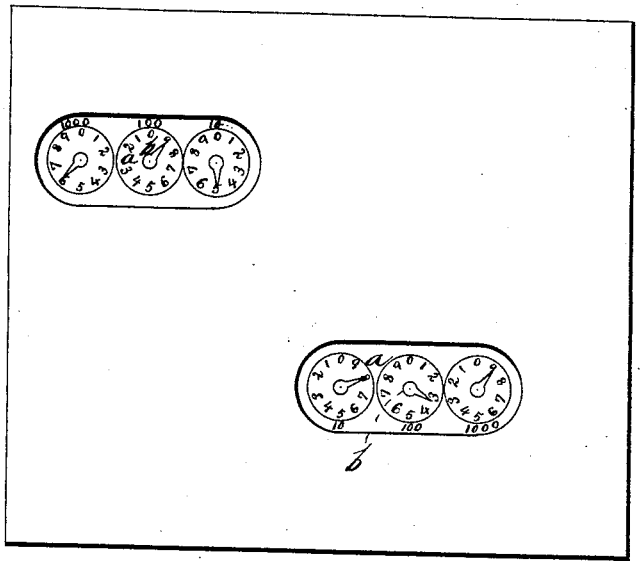


Fig. 3.

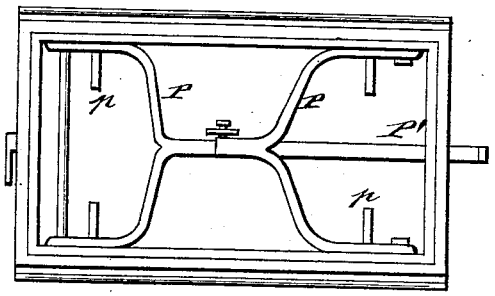


Fig. 4.

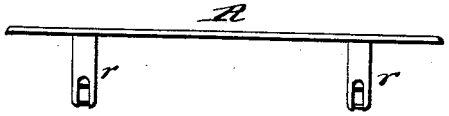
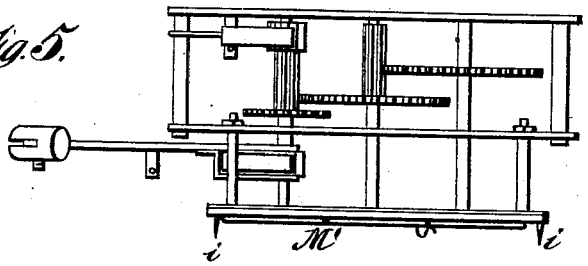


Fig. 6.

Fig. 5.



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UNITED STATES PATENT OFFICE.

SAMUEL HASTINGS, OF PLEASANT VALLEY, NEW YORK.

IMPROVEMENT IN PLATFORM PASSENGER-REGISTERS.

Specification forming part of Letters Patent No. **201,009**, dated March 5, 1878; application filed January 5, 1878.

To all whom it may concern:

Be it known that I, SAMUEL HASTINGS, of Pleasant Valley, in the county of Dutchess and State of New York, have invented a new and valuable Improvement in Passenger-Check and Numerical Recorder; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my passenger-check and numerical recorder. Fig. 2 is a front view. Fig. 3 is a plan view of scale-beam. Fig. 4 is a view of the platform. Fig. 5 is a detached view showing mechanism, and Fig. 6 is a detail view thereof. Fig. 7 is a view of the bridge which covers the platform.

The nature of my invention consists in the construction and arrangement of a register for registering the number of half and full fares of passengers entering a car, or of persons going into a theater, lecture-room, concert-saloon, &c., the said register being operated by the person stepping upon a platform, substantially as will be hereinafter more fully set forth, and pointed out in the claims.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents a box or case of any suitable dimensions, of iron or wood, which is to be attached in any convenient manner at the end of a car, or at the entrance of a theater, hall, &c. Within this box are arranged two separate and independent registering mechanisms, B and C, each of which has upon the front of the box a series of dials, *a a*, with index-hands *b b* for the same, to indicate tens, hundreds, thousands, &c., up to a million or more, if desired.

The registering mechanism B is intended to register half-fares, and the mechanism C full fares.

The mechanism B is actuated by means of a lever, D, with spring-pawl taking into a ratchet-wheel upon the first shaft of the said mechanism, which lever is held in elevated position by means hereinafter described, while, when such supporting means are removed, a weight, E, attached to or suspended from the outer end of said lever, will bring the lever down until it strikes a stop, *d*, this downward movement of the lever registering 1 upon the first dial.

In like manner the registering mechanism C is actuated by the depression of a similar lever, D′; but this latter lever has no weight connected to it.

At one end of the box A is arranged a tubular upright casing, G, in which is placed a cylindrical weight, H, with spiral or other springs J J′, respectively above and below the weight.

K represents a lever pivoted on a stud, I, and having one end passing through an elongated vertical slot, *e*, in the side of the casing G, and entering a beveled slot or mortise in the weight H.

The other end of the lever K is, by a pivoted bar, M, connected with the outer end of the lever D′, and it has also a bar, N, pivoted to it. This latter bar N extends upward, and has a longitudinal slot, *f*, which passes over a stud, *h*, projecting from the side of the lever D. The mechanism for actuating the lever K will be hereinafter described.

The above parts are so arranged that when the outer end of the lever K is in its normal position it will rest against the under side of the stop *d*, and when in this position the lever D will be held elevated by the stud *h* resting in the bottom of the slot *f* in the connecting-bar N.

Now, when the outer end of the lever K is pulled down, the support of the lever D recedes until said lever D, by means of its weight E, is brought down to the stop *d*, when one fare has been registered upon the first dial of the mechanism B. If the lever K is still farther pulled down, the lever D′ will cause one fare to be registered on the first dial of the mechanism C. This movement of the lever K raises the weight H more or less, according to the extent of the movement, compressing the top spring J, and as soon as the pressure is removed from the lever K the weight H at once descends, and returns the parts to their original position, the bottom spring J′ in the case G acting as a bumper to receive the weight and prevent any unnecessary jar of the mechanism.

Each of the registering mechanisms is, in addition to the main dials *a* and indexes *b*, provided with auxiliary index-hands *b'*, operating within sunken dials *a'*, and over these dials are placed a number of cards, L L, having corresponding dials cut out from the same, the object being to use one of these for each station. For instance, the mechanism B registers half-fares, and the mechanism C registers full fares.

As soon as the train starts from the first station the front card L on each registering mechanism is to be marked according to the dials *a'* and hands *b'*. At the second station the next card is so marked, and so on to the end of the route, the main dials *a*, with indexes *b*, making a continuous registration.

As it is understood that every full fare is registered as well upon the half-fare register, it is simply a matter of subtraction to find out the exact number of half and full fares received at each station, and the main dials and indexes verify the count.

The cards L are placed upon pins *i i*, as shown, and held in place by a spring-clamp, M', of any suitable construction, which clamp can be easily pulled out or opened to remove one or more of the cards, and insert new ones when required.

The stud I and the stop *d* are both made adjustable, so as to be arranged in the desired manner for the required working of the apparatus.

In connection with the half-fare-registering mechanism B, I use a bell or gong, N', to be sounded by means of a hammer, O, each time 1 is registered by said mechanism. The hammer O is pivoted upon a suitable stud, and has a hinged pawl, *m*, in its inner end, arranged in such a manner that by the downward movement of the bar N a pin, *n*, projecting therefrom, will operate the hammer to sound the bell, while during the upward movement of said bar the pin *n* will turn the pawl *m* on its pivot, so as to pass by the same.

The various index-hands of the two registering mechanisms are to be made adjustable, so that at the end of the route they can be easily set in position to commence a new count.

The registering apparatus thus described is to be operated by the weight of the person entering the car; and to this end I arrange scale-beams P P within the frame of the platform, said beams having pins *p p*, upon which the platform R rests by means of slotted projections *r r*, extending downward and straddling the pins *p p*. These slotted projections *r* should be provided at the bottom with suitable keys to prevent them jumping off from the pins *p*.

One of the scale-beams P is provided with an arm, P', connected by links or connecting-bars S S with the main operating-lever K, as shown.

It is customary on railroads to allow children under a certain age to ride free, and from such age up to another certain age half-fare only is charged. After determining the average weight of children for the two periods, the weight should be arranged to overbalance the platform and the weight of any child that should ride free, so that no registration will be made for them. Then, when a child that is to pay half-fare steps upon the platform, said platform should only descend far enough to operate the half-fare-registering mechanism, while, when a grown person steps on the platform, it will descend far enough to register upon both the mechanisms.

The platform R is to be provided around its edges with suitable flanges to surround the upper edge of the platform-frame, and thus prevent any side movement of the platform.

T represents a bridge, provided with wheels *t t*, running upon tracks on the sides of the platform-frame, to be moved over the platform after the train has started, to allow the employés or train-hands to pass from car to car without operating the registering mechanism. This bridge is easily moved by the foot, and has a stop, *v*, to prevent its being moved entirely off from the car.

This device is equally applicable for registering persons entering theaters, lecture and concert rooms, or other places where an admission fee is charged.

In case it becomes desirable to arrange the yielding platform in the center of the car-platform, so as to provide for passengers entering on both sides of the car, I arrange the connecting-arm so as to bring it on one side of the passage.

The mechanism may be operated by chains, belts, and pulleys, if desirable.

I claim—

1. The combination of the slotted case G, weight H, springs J J', and lever K, said lever being connected to the registering mechanisms B and C, and to a series of levers supporting a platform, so that the weight of a person stepping on such platform will operate the devices, substantially as herein set forth.

2. The registering-cards L, applied to the auxiliary dials, and held by means of pins *i* and spring-clamps M, for the purpose set forth.

3. The bridge T, mounted upon wheels *t*, in combination with the platform R and its frame, for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SAMUEL HASTINGS.

Witnesses:
JOHN T. BLACKMAR,
JAMES J. SHEEHY.