M. SPRINGWOTER.

Improvement in Passenger-Registers.

No. 114,060. Patented April 25, 1871.

Fig. 1.

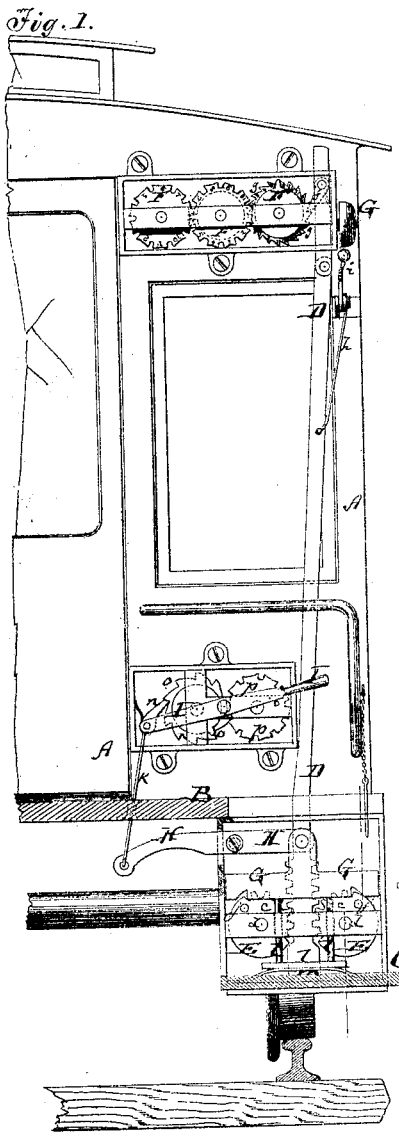


Fig. 2.

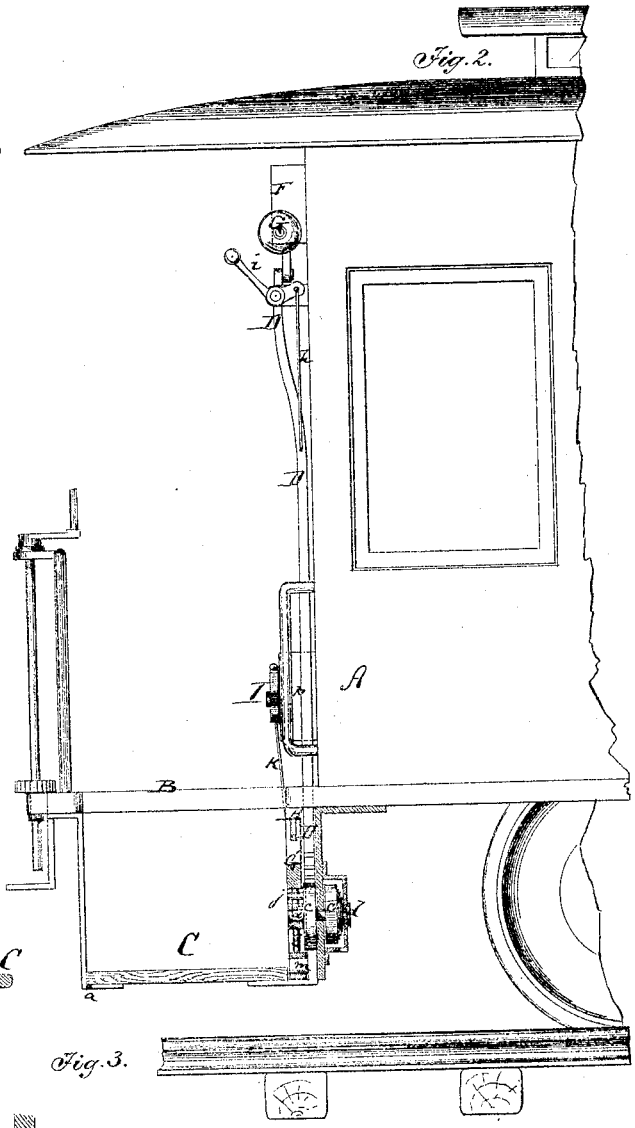
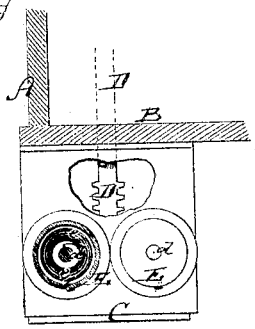


Fig. 3.



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MORITZ SPRINGWOTER, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN PASSENGER-REGISTERS.

Specification forming part of Letters Patent No. **114,060**, dated April 25, 1871.

To all whom it may concern:

Be it known that I, MORITZ SPRINGWOTER, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Passenger-Register for Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

Figure 1 represents a face view, partly in section, of my improved passenger-register. Fig. 2 is a side view, partly in section, of the same. Fig. 3 is a detail back view of the spring-drums for readjusting the treadles.

Similar letters of reference indicate corresponding parts.

This invention relates to a new passenger-register, which is applicable to railroad-cars, omnibuses, and all other wheeled or other vehicles, whereby the number of persons entering the same will be correctly recorded by means of a treadle upon which they have to step.

My invention consists in certain improvements upon street-car registering mechanism, which will be first described hereinafter, and then clearly pointed out in the claims.

A in the drawing represents a portion of the body of a railroad-car or other vehicle. B is the platform or floor, over which all passengers entering such car or vehicle have to pass; and C is the step, by means of which the platform can only be reached, every passenger entering the vehicle being required to step upon the same. The step C is, at its outer end, hinged to the supporting-frame, as shown at *a* in Fig. 2, while its free inner end is connected with a vertical sliding rod or bar, D, which is placed against the frame of the vehicle. The bar D has its lower end toothed on both edges, as shown in Fig. 1, and meshes into the teeth of two pinions or toothed segments, *c c*. These pinions or segments are mounted upon arbors *d d*, which carry drums E E, within which coiled springs *e e* (see Fig. 3) are contained. The springs within the drums E are so connected and applied that they will so turn the pinions *d* as to hold the treadle or step C in its highest—*i. e.*, horizontal—position. When said treadle is weighted it will swing down and draw down the bar D, which, by means of its teeth, will turn the pinions and wind up the springs *e*, to enable the same, when the weight is removed, to re-elevate the treadle. The bar D carries a pawl, *f*, at its upper end, said pawl engaging the teeth of a ratchet-wheel, *g*, which is geared together with a recording apparatus, F, of suitable construction, every movement of the treadle causing a partial rotation of the wheel *g*, and a corresponding record of such motion by or on one or more dials of the recording-instrument.

I prefer to so space the teeth of the ratchet-wheel that a slight depression of the treadle by a light weight will cause but half the movement of the wheel *g* which is caused by a full depression. Children will thus be properly recorded as half-passengers.

By a rod or cord, *h*, the bar D is connected with the clapper *i* of a bell, G, in such manner that every depression of the treadle will cause the clapper to strike the bell.

Each pinion *c* carries at its face a projecting pin, *j*. The two pins *j* on the two pinions are swung apart or toward each other by the treadle.

G is a plate, suspended from a pivoted lever, H, above the pins *j*, and notched above each pin. The lever H is, by a link or rod, *k*, connected with a hand-lever, I.

Whenever, by means of the lever I, the plate G is carried down to bring its notches over and around the pins *j*, the pinions will, by such locking of the pins, be prevented from turning, and will, consequently, also prevent the bar D, and thereby also the treadle C, from moving. The recording mechanism can thus be thrown out of gear, whenever desired, by means of the lever I.

The plate G may carry a suspended frame, *l*, which is, by a spring, *m*, held up to cause the said plate to clear the pins *j* whenever it is not expressly desired to lock the same in the manner stated.

The lever I carries a pawl, *n*, which engages the teeth of a ratchet-wheel, *o*, that is geared together with a series of recording wheels or mechanism, *p*. Every movement of the lever I for throwing the treadle out of action is thus recorded by the mechanism *p*.

By means of the rod D and its pawl every depression of the treadle by a person stepping on the same is recorded on the apparatus. Every record is also accompanied by a stroke of the bell G, so that the attention of other passengers will be called to the correct method of recording.

When by an accident of any kind the egress of passengers and their subsequent return becomes necessary, the lever is moved to lock the treadle; but such movement of the lever is recorded on the mechanism *p*, so that conductors can be called to account for every single such action.

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

1. The movable notched plate G, combined, as described, with the pins *j j* on the face of the pinions to lock the treadle, as set forth.

2. The lever I, combined, as described, with the locking and lock-recording mechanisms for their simultaneous operation, as set forth.

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