

C. Ottinger,

Register.

No. 106610.

Patented Aug. 23, 1870.

Fig. 1.

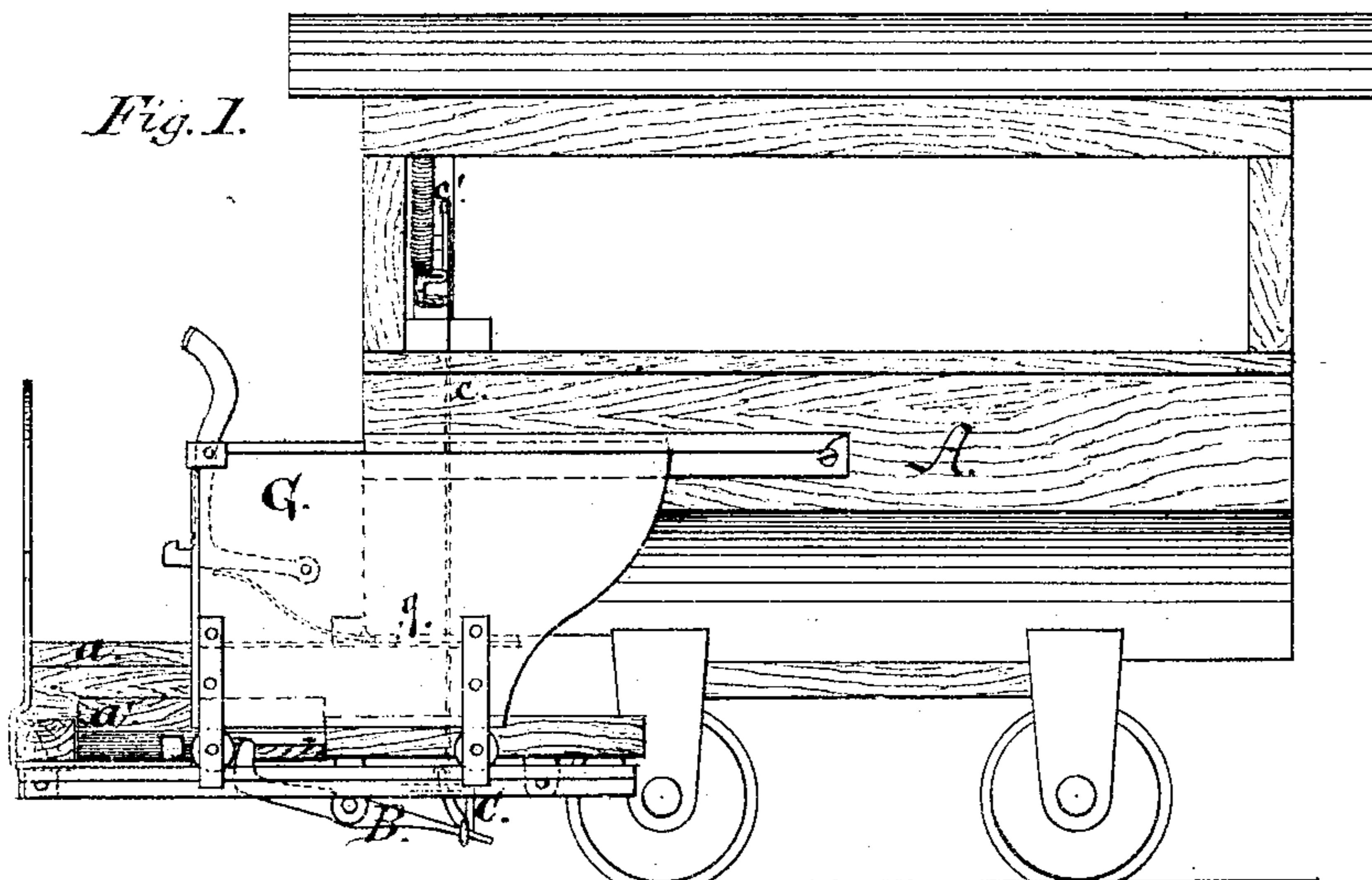
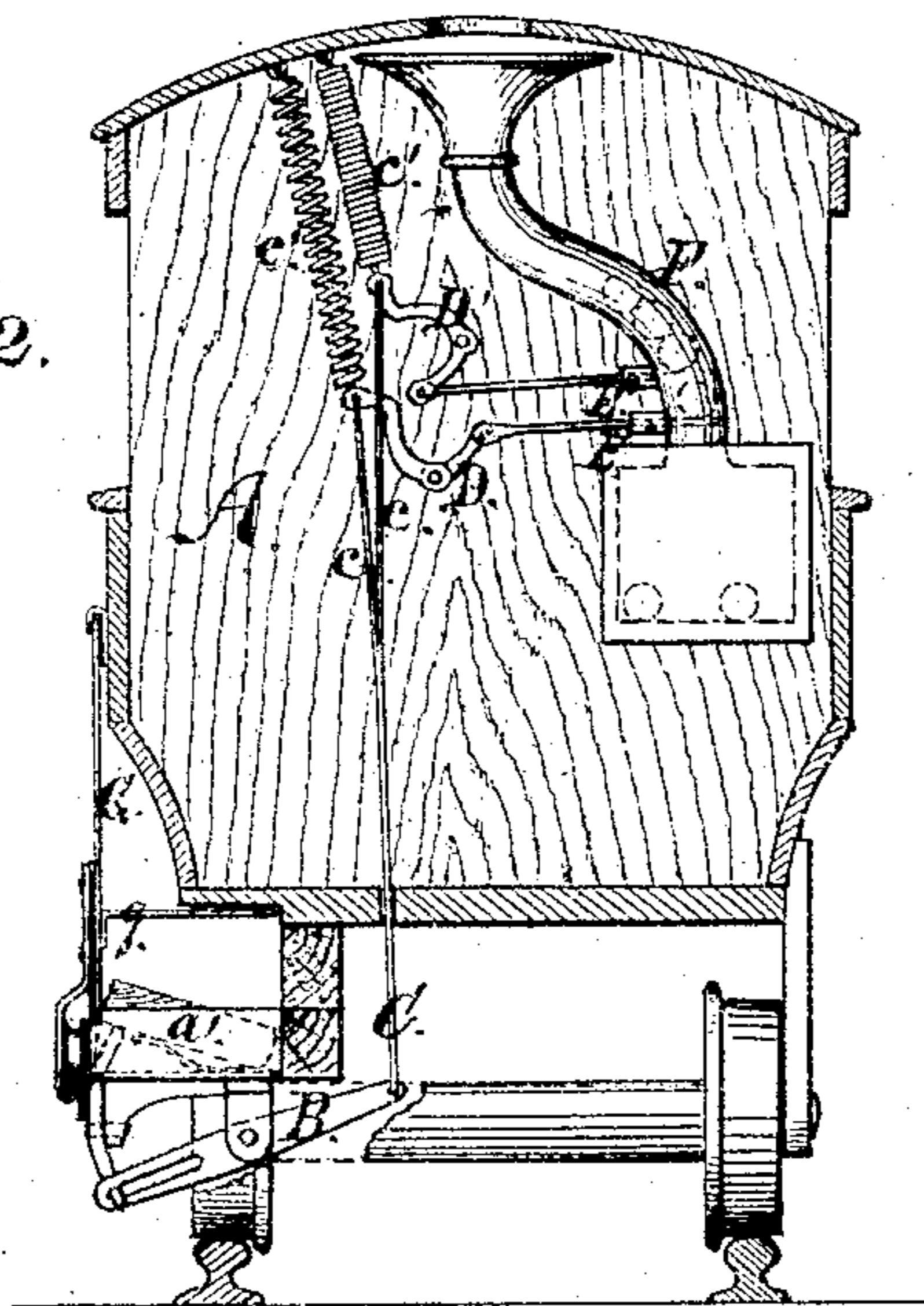


Fig. 2.



Witnesses:
G. J. Hayes.
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United States Patent Office.

CHARLES OTTINGER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 106,610, dated August 23, 1870.

IMPROVEMENT IN AUTOMATIC PASSENGER-REGISTER FOR VEHICLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES OTTINGER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Registering-Device for Passenger-Cars; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to that class of passenger-registers which is provided with a hinged spring step, by means of which the register is operated through suitable connecting-devices, and consists mainly in certain details of construction, which will be fully described hereinafter.

In the drawing—

Figure 1 represents a side elevation of a car having my improved gate attached, and

Figure 2, an end view of the same.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and method of operation.

A represents a car-body, which is provided with the usual platform *a*.

a' represents the step, which is located in its usual position, but is hinged, at its rear edge, to the platform, and is provided also with a spring beneath it, which presses its front edge upward, slightly beyond its ordinary level.

B represents a lever, which is pivoted to any suitable fulcrum rigidly attached to the car-body, the front arm of which is bent, as shown, and caused to rest beneath the step, preferably against a bearing-plate.

Its rear arm rests in a slot in the lever C, as shown.

This lever C is also suitably pivoted to a proper fulcrum rigidly attached to the car-body, and has attached to its long arm the connecting-rods or wires which operate the register.

c c represent these rods or wires, which are attached, at their upper ends, to one of the ends of the bell-cranks D D', as shown.

To the other ends of the bell-cranks are attached the slides E E', which move in suitable openings in the tube F.

e e represent springs, by means of which the return movement of the bell-cranks is effected.

The tube F opens below into a close door, provided with a door having a suitable lock or other fastening, and above into a reservoir, as shown.

Balls of any suitable material and size are used in connection with this register, care being taken, however, that the distance in the tube between the slides corresponds to the diameter of the balls.

G represents a gate, which is made, preferably, to slide upon ways, and is provided with any suitable catch-device, to secure it in position when closed.

g represents a supplemental platform, which is rigidly attached to the gate, at right angles thereto, and which, when the gate is closed, serves to cover the spring step. It is, preferably, located on a line with the main part of the platform, as shown.

Suitable ways should be provided for its free end to slide upon, and a suitable recess to receive it should be made in or beneath the body of the car.

The operation is as follows:

When the gate is closed no passenger can, of course, enter or leave the car. The supplemental platform attached to the gate now covers the spring step, so that the accidental operation of the registering-devices is rendered impossible.

When a passenger desires to enter, the gate is thrown open, when, of course, the spring step becomes exposed, by the sliding back of the supplemental platform with the gate.

As the person enters, his weight depresses the spring step, and by it also the front end of the lever B. The rear end of this lever raises the short arm of the lever C, the long arm of which being depressed draws down the connecting-rods *c c*, and thus operates the bell-cranks.

These bell-cranks are so arranged that the pulling down of the rods causes the slide E to withdraw from the tube F, while the slide E' is forced into the tube.

The result of this operation is that the ball which was resting on the slide E is permitted to fall into the box below, while the balls above are held from falling by the slide E', which has been forced into the tube.

As soon, however, as the weight of the person entering is removed from the step, the springs *e e* necessarily draw the bell-cranks back again to their original position, and the slides, of course, are likewise operated. The slide E is forced again into the tube, and the slide E' is withdrawn, by which means the balls are permitted to fall the distance of a single ball, the lower one resting, of course, upon the slide E, ready for the entrance of another passenger.

As the person leaves the car a similar result takes place. It therefore follows that, for every person that rides upon the car, the register drops two balls, one when he enters and one when he leaves.

It is designed to use this register in connection with a car having one end closed, in which case but two registers will be needed, one for each step.

The location of the registers is immaterial. They will be preferably located upon the rear end of the car, on each side.

The advantages obtained by this construction are great simplicity with accuracy.

The covering of the step, when not in actual use, prevents the register from being accidentally operated to the detriment of the conductor.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The gate G, for closing the entrance to the plat-

form, and having the supplemental platform *g* adapted to cover the treadle-step *a'*, as described, for the purpose set forth.

This specification signed and witnessed this day of , 18

CHARLES OTTINGER.

Witnesses:

PETER HAY,
E. C. HAY.