

UNITED STATES PATENT OFFICE.

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AUTOMATIC CAR-REGISTER.

SPECIFICATION forming part of Letters Patent No. 760,284, dated May 17, 1904.

Application filed September 25, 1903. Serial No. 174,575. (No model.)

To all whom it may concern:

Be it known that we, CHAUNCEY L. S. WALKER and EZRA C. WALKER, citizens of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented and produced a new and original Improvement in Automatic Car-Registers; and we 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, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

The objects of this invention are to effect a registration of the passengers of a trolley-car or the like by the mere act of boarding or leaving the car, to thus secure an automatic and mechanical registration which cannot be neglected or evaded, to thus provide a means of testing the capability and honesty of the conductor, and to obtain other advantages and results, some of which may be hereinafter referred to in connection with the description of the working parts.

The invention consists in the improved automatic register for street-cars, &c., and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 shows in side elevation the end of a car equipped with our improved register. Fig. 2 is a cross-section of the same on line *x*, Fig. 1; and Fig. 3 is a plan of the car platform and steps, as on line *y*, Fig. 1.

In said drawings, 1 indicates a street-car of any ordinary and well-known type, adapted to be boarded at opposite sides near the end, as is common, by means of an open platform 2 and single steps at each side leading thereto.

In carrying out our invention the tread 3 of each step constitutes the forward or outer arm of a lever fulcrumed, as at 4, to the riser 5 of the step, depending from the platform 2

of the car, the rear or inner arms 6 6 of said levers projecting horizontally beneath the platform and preferably being beveled or recessed at their adjacent side edges, as at 7, to overlap or extend past each other. Beneath said inner overlapping arms 6 6 extends a bracket or support 8, bent upward at its opposite ends and fastened to the platform or other fixed portion of the car, as at 9, and which support serves to limit downward movement of the said arms 6 and holds the outer arms or steps 3 in normal horizontal position. Above each inner arm 6, between it and the platform 2, is a spring of any suitable construction to normally hold the arm down against its support 8, although we prefer to use and have shown in the drawings a coiled spring 10, having its straight ends 11 11 secured one to the arm 6 and the other to the support 8. When, therefore, a passenger steps upon the step 3, the same tilts sufficiently to raise the inner arm 6 against the power of the spring 10, but yet not enough to disturb the passenger or even attract his notice. The movement thus secured may then be transmitted to the register (indicated in outline at 18 in Fig. 1) in any suitable manner; but we have shown for purposes of illustration a light rod 12, extending vertically upward at the end wall or partition 13 of the car and having beneath the floor a portion 14, extending across both arms 6 6 above the same. The extremity of the portion 14 is preferably turned downward, as at 15, to project loosely into a socket in one of the arms 6, whereby displacement of the portion 14 with respect to the arms 6 is prevented. Thus as the arms 6 6 are elevated by a passenger stepping on the step 3 the rod 12 is raised, and when the step resumes its normal position the rod again drops. Side pieces 16 at the opposite ends of each step and preferably formed by the outwardly-bent ends of a piece 17, fastened to the riser 5, serve to direct passengers positively onto the steps.

Obviously various modifications and changes in the detail construction of our improved register may be made without departing from the spirit and scope of the invention as set

forth in the claims, and we do not wish to be understood as limiting ourselves by the positive descriptive terms employed except as the state of the art may require.

5 Having thus described the invention, what we claim as new is—

1. The combination with a car having a depending riser, of a straight lever-like member fulcrumed on the lower edge of said riser
10 and having one end projecting to receive the foot and the other end extending beneath the car, a fixed support or stop beneath said inner arm, a spring normally holding the arm against said support, and draft means for
15 transmitting the movements of said inwardly-extending end of the member to a register.

2. In a car or similar vehicle, the combina-

tion with the body and opposite depending risers thereon, of straight horizontal levers fulcrumed on the lower edges of said risers
20 and having their outer ends oppositely projecting from the car-body to form steps and their inner ends adjacent to each other, and a single draft means adapted to be engaged by
25 either of said inner ends to transmit movement to a register.

In testimony that we claim the foregoing we have hereunto set our hands this 24th day of September, 1903,

CHAUNCEY L. S. WALKER.

EZRA C. WALKER.

Witnesses:

CHARLES H. PELL,

RUSSELL M. EVERETT.