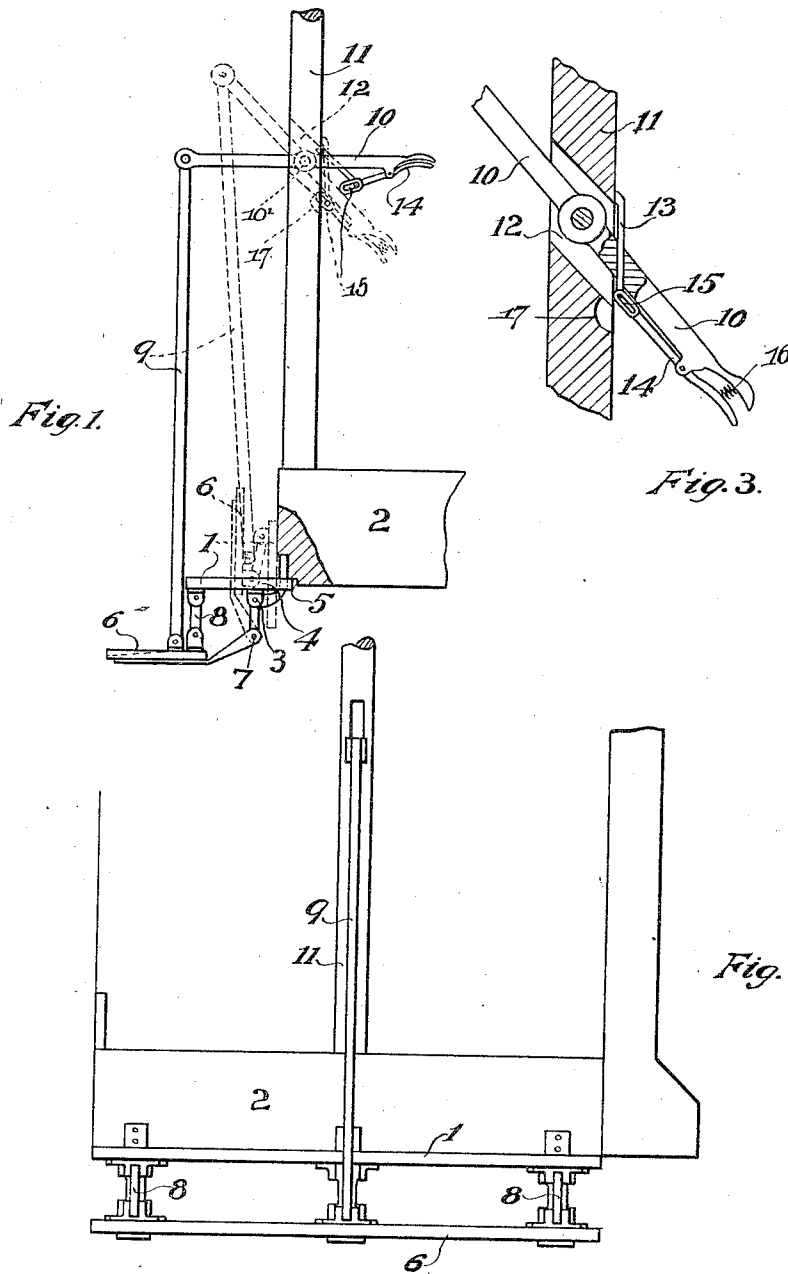


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CAR STEPS.

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1,051,400.

Patented Jan. 28, 1913.



Witnesses.

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UNITED STATES PATENT OFFICE.

HARRY GOLDMAN, OF CHICAGO, ILLINOIS.

CAR-STEPS.

1,051,400.

Specification of Letters Patent.

Patented Jan. 28, 1913.

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To all whom it may concern:

Be it known that I, HARRY GOLDMAN, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Car-Steps, of which the following is a specification.

My invention relates to improvements in steps especially adapted for use on street cars and has for its object the provision of steps of this character which may be readily folded into inoperative position and which will be strong and durable in use and simple and economical to construct.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which,

Figure 1 is an elevation partially in section showing steps and means for operating the same, embodying my invention, and mounted in operative positions on the side of a car platform, Fig. 2, an elevation taken at right angles to Fig. 1, and Fig. 3, a detail view of the handle portion of a lever employed for folding the steps into inoperative positions.

The preferred form of construction as illustrated in the drawing comprises an upper step 1 pivotally mounted at the side of a car platform 2 at a suitable distance below the upper surface thereof. Step 1 is pivoted at point 3 so as to provide an inward projection 4 which takes into and against the top of a recess 5 in the side of the car platform, when said step is in operative position. A lower step 6 is pivotally mounted at 7 at a suitable distance below step 1 and projecting outwardly beyond said step so as to cooperate therewith to provide convenient and easy access to platform 2. Step 6 is connected with step 1 by means of links 8 pivoted to each so as to cause simultaneous operation of both steps. A link 9 is pivoted at its lower end, at a point near the rear edge of step 6, and at its upper end it is pivoted to the outer end of an operating lever 10 which in turn is pivoted to the usual upright 11 on the car platform. The upright 11 is slotted, as at 12, and the lever 10 pivoted at 10' in such recess. The lever 10 is provided with a diagonally ex-

tending perforation in which is slidably mounted a catch 13. The catch 13 is provided with a pin on its lower end which is slidably mounted in the slot 15 in the manually operative lever 14 and such lever 14 is pivoted to the lever 10. A recess 17 is formed in the side of the upright 11 to permit of free swinging of the lever 14, as clearly illustrated in Figs. 1 and 3.

When steps 1 and 4 are in operative position one end of catch 13 extends into the perforation 12 in the upright 11 and upon moving said steps to their inoperative or folded positions, the catch 13 is slid longitudinally in the diagonal perforation in the lever 10 by means of the manually operative lever 14 to allow the end of said catch to pass out of said perforation 12 upon the swinging of lever 10 on its pivotal point 10'. When said steps 1 and 4 have reached their inoperative or folded positions and lever 10 is in substantially the position shown in Fig. 3, the operator releases lever 14 and the spring 16 causes said lever 14 to move catch 13 again longitudinally until its upper end engages the side of the upright 11 above slot 12 to lock said steps in their folded position and lever 10 from moving on its pivotal point 10' as will be readily understood.

In use, when a passenger desires to board the car the conductor presses the handle of lever 14 against the handle of lever 10 to withdraw the catch 13 from its engagement with the side of the upright 11 and raises the handle end of lever 10 to permit steps 1 and 6 to assume their operative positions, in which the inner edge 4 of step 1 engages under the top of recess 5 to securely hold and support the steps and the weight of passengers using the same. When the passenger or passengers have boarded the car, the conductor throws the steps into inoperative or folded positions by moving the handle portion of lever 14 toward the handle portion of lever 10 to withdraw the catch 13 from the slot 12 and depressing the handle end of lever 10 to fold the steps, then freeing the lever 14 to allow the spring 16 to force the upper end of catch 13 to engagement with the side of the upright 11 to lock the steps in inoperative position. Thus an easy safe passage is provided for the passengers on the platform and the steps may be readily folded into inoperative positions so as to be out of the way when the car is

running. The construction will be found to be strong and durable in use and can be readily attached to any ordinary street car.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. The combination with a car platform upright having a perforation therethrough; of a lever pivoted in the perforation of said upright; a catch mounted in said lever to slide diagonally therein and engage the side

of said upright; and a second lever on said first lever to manually operate said catch, substantially as described.

2. The combination with a car platform; steps pivoted to said platform; a connecting rod operatively connected with said steps; of an upright on said platform having a perforation therethrough; a lever pivoted in the perforation in said upright and connected with said connecting rod; a catch mounted to slide in said lever and engage the side of said upright; and a second lever pivoted on said first lever to manually operate said catch, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY GOLDMAN.

Witnesses:

HELEN F. LILLIS,
JOSHUA R. H. POTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."