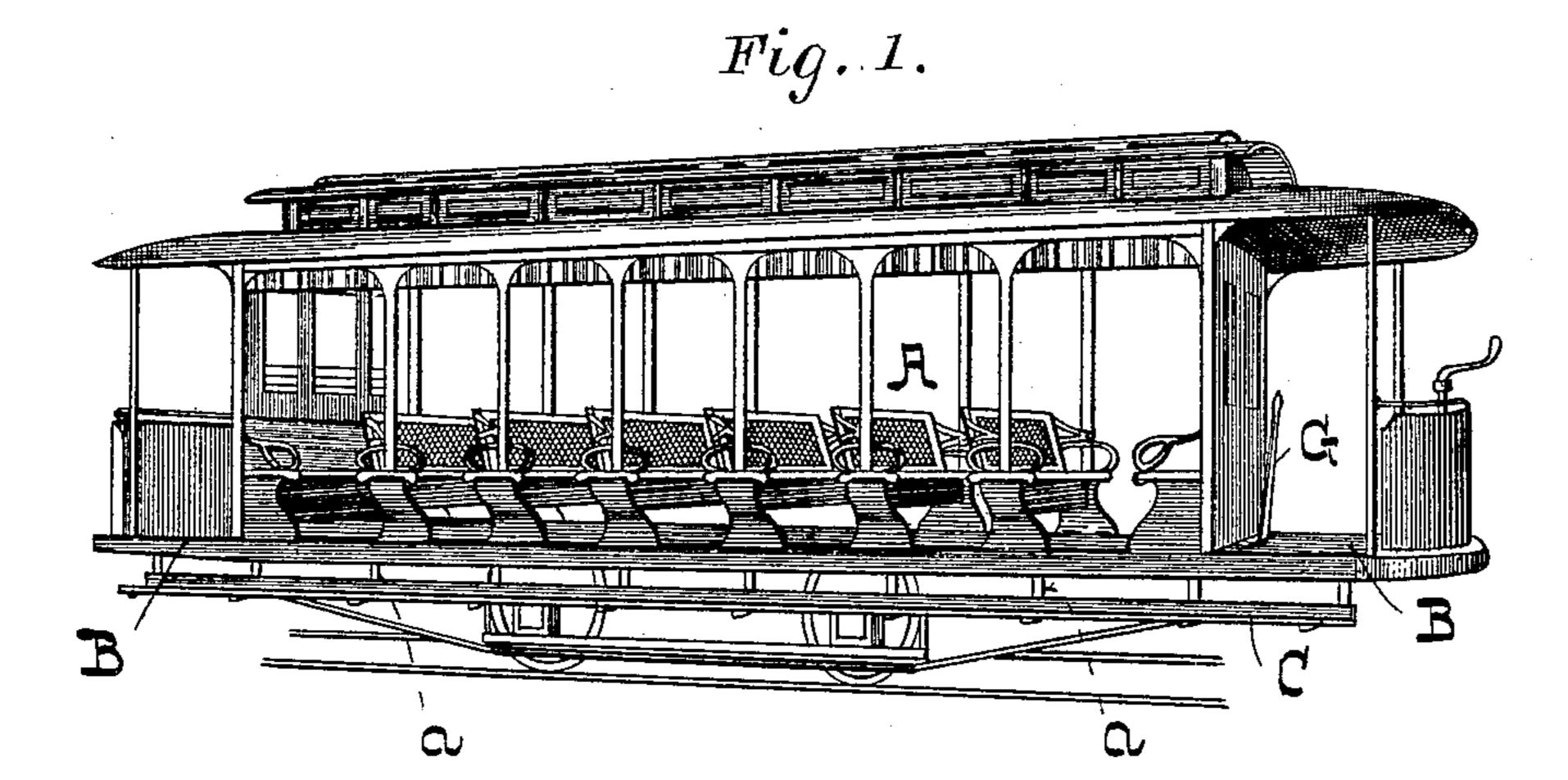
#### R. EMORY.

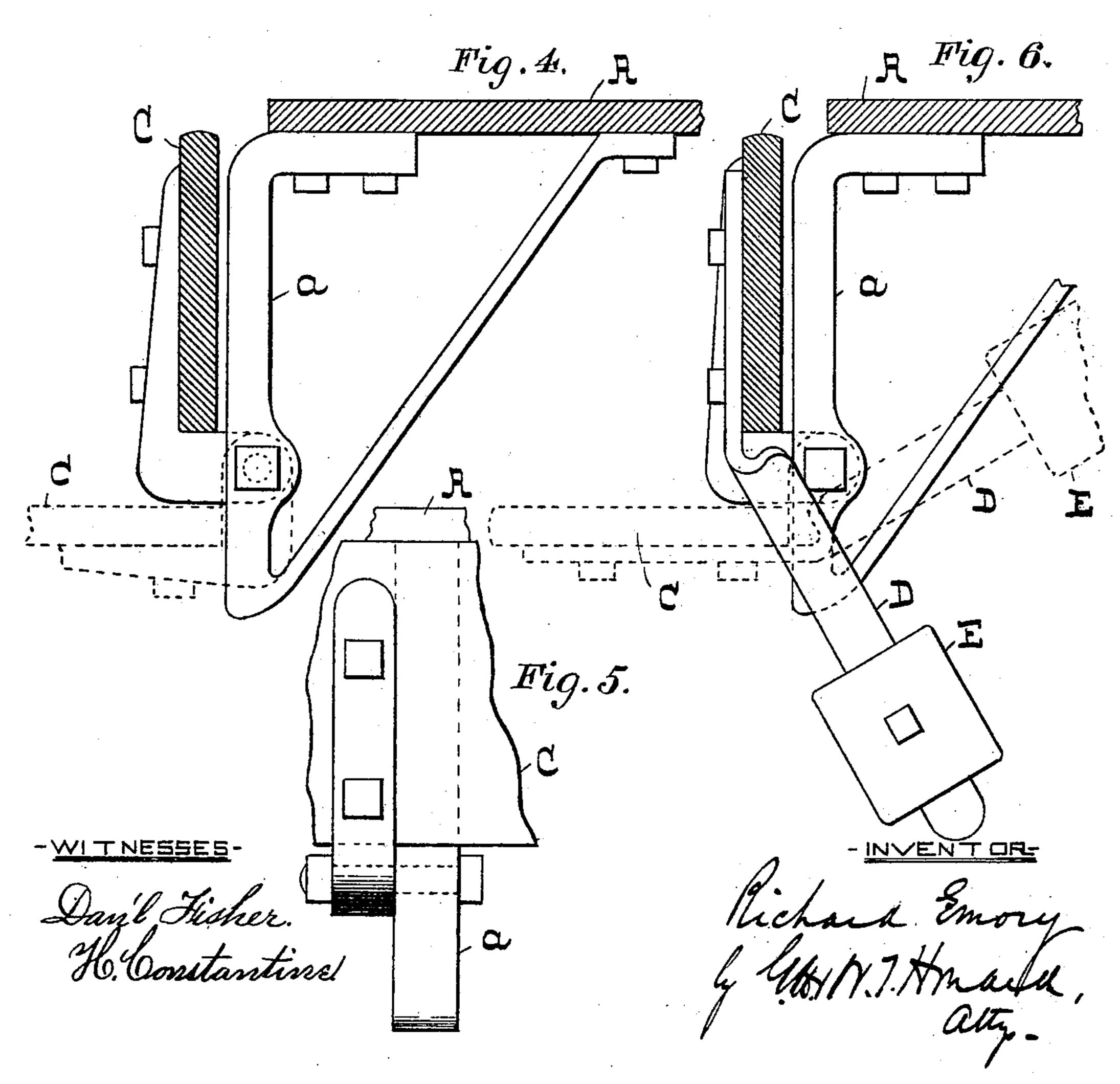
## MEANS FOR OPERATING FOOTBOARDS OR STEPS OF OPEN OR SIDE ENTERING STREET CARS.

(Application filed Jan. 28, 1899.)

(No Model.)

2 Sheets—Sheet 1.





Patented June 13, 1899.

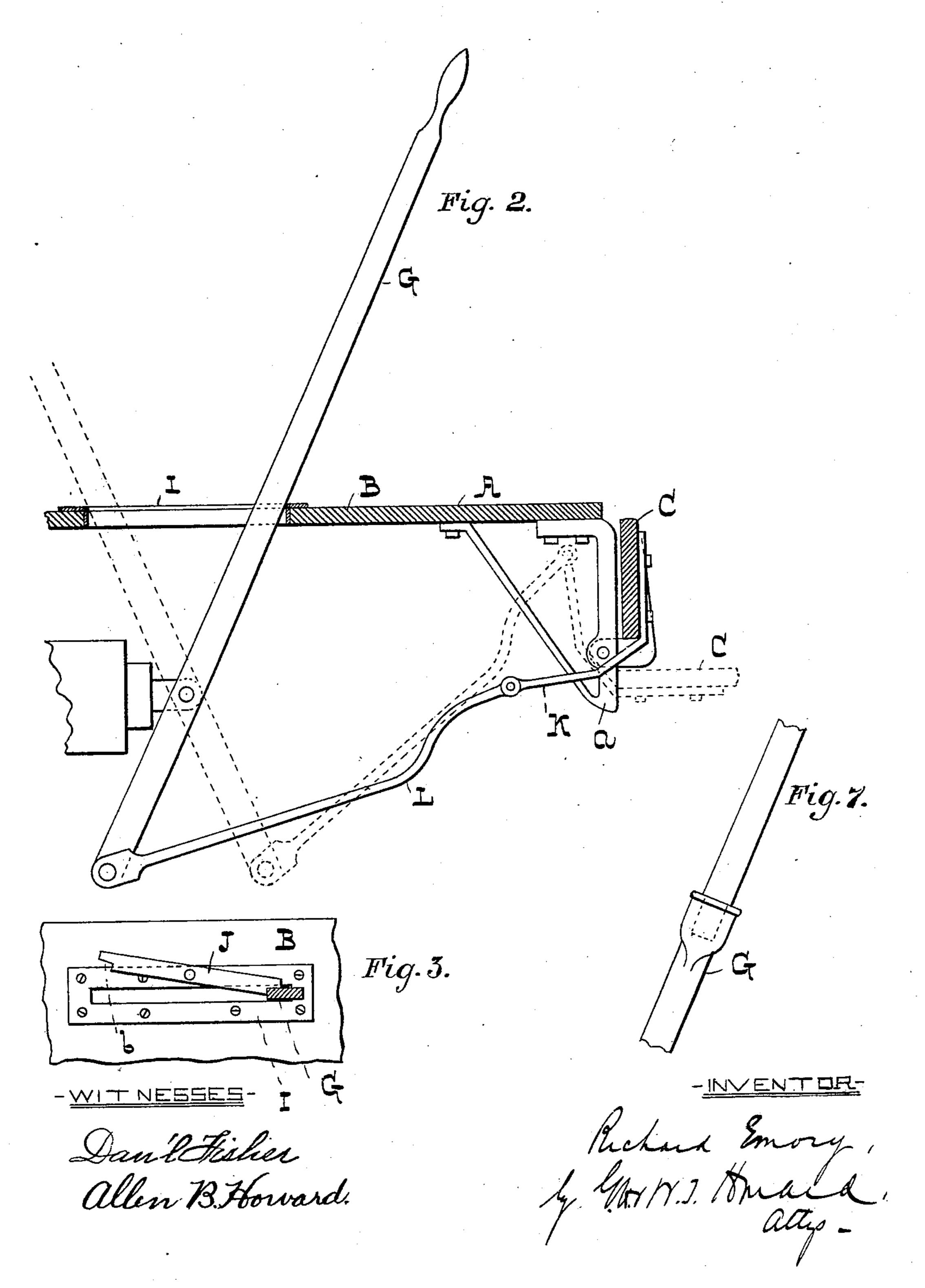
#### R. EMORY.

# MEANS FOR OPERATING FOOTBOARDS OR STEPS OF OPEN OR SIDE ENTERING STREET CARS.

(Application filed Jan. 28, 1899.)

(No Model.)

2 Sheets—Sheet 2.



### United States Patent Office.

RICHARD EMORY, OF BALTIMORE, MARYLAND.

MEANS FOR OPERATING FOOT-BOARDS OR STEPS OF OPEN OR SIDE-ENTERING STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 626,892, dated June 13, 1899.

Application filed January 28, 1899. Serial No. 703,671. (No model.)

To all whom it may concern:

Be it known that I, RICHARD EMORY, of the city of Baltimore, in the State of Maryland, have invented certain Improvements in Means for Operating the Foot-Boards or Steps of Open or Side-Entering Street-Cars, of which

the following is a specification.

To fully understand the nature of the present invention, it must be remembered that the foot-boards of open or summer street-cars are hinged to the body, so that the foot-board which is next to the unused track may be lifted and held against the body to prevent its being struck and injured by passing vehitles. The turned-up foot-board is secured by a hook suspended from the car-body by hand, the conductor or motorman leaving the platform for the purpose.

It sometimes occurs in crowded thoroughfares that the used foot-board is in danger of being injured by collision with a passing vehicle, and in such case it is impossible to lift the foot-board held as described while the car is in motion, even if the conductor or motorman could leave the car for the purpose.

The object of the present invention is therefore to enable the conductor or motorman to have control of the foot-boards, so as to operate either or both of them without leaving

30 the car.

With this in view the invention consists in counterbalancing the foot-boards, so that little power is required to move them, and in providing each foot-board with means where35 by it may be raised and lowered from the platform of the car.

In the further description of the said invention which follows reference is made to the accompanying drawings, forming a part

40 thereof, and in which—

Figure 1 is a perspective view of an open street-car provided with present invention. Figs. 2 and 3 are enlarged details of the mechanism for moving the foot-boards. Figs. 4, 5, and 6 are still enlarged details of the foot-board and the devices whereby it is hinged to the car-body and counterbalanced. Fig. 7 illustrates a modification in the construction of the hand-lever for operating the foot-50 boards.

Referring now to the drawings, A is the

body of an open street-car, and B B are the front and rear plarforms.

C C are the foot-boards, hinged, as shown in Figs. 2, 4, 5, and 6, to the brackets a, which 55 project in a downward direction from the under side of the floor of the car. Each footboard is provided with an arm D, having a weight E, which is adjustable in position thereon to counterbalance the foot-board.

On each platform B of the car is a handlever G, pivoted under the same to some part of the car-body. The lever passes through a slotted plate I in the floor of the platform, of such length as to admit of the lever having 65 the proper range of movement. The lever is held in either extreme position by means of a pivoted dog J, operated by the foot. This dog is pivoted centrally of its length and provided with a notch b at each end, adapted 70 to receive the hand-lever and hold it. (See Fig. 3.)

The lower and short arm of the hand-lever G is connected to a bar K, bolted to the footboard, by a link L, as shown in Fig. 2.

To raise or lower the foot-board, it is only necessary to throw out the dog holding the hand-lever and move the lever over to the other end of the slot, when it will be held until again released.

The apparatus as above described may be cheapened without reducing its effectiveness by terminating the hand-levers below the carplatform and providing their ends with a socket c, adapted to receive a removable handle which may be transferred from one end of the car to the other. With this arrangement, however, only one foot-board could be operated at one time, and where it is necessary to have both foot-boards controllable, as 90 in crowded streets, it is, perhaps, the better plan to have a hand-lever for each foot-board.

It will be understood that the hand-levers on the ends or platforms of the car are in reversed positions. Consequently the conductor and motorman, no matter in which direction the car is moving, will always have a lever convenient to the same hand.

I claim as my invention—

In combination with the platform of a street- ico car, having a transverse slot therein, a hinged counterbalanced foot-board provided with

an operating-bar which extends therefrom, a hand-lever which passes through the slot in the platform and is fulcrumed at a point underneath it, a connecting-rod to unite the lower end of the hand-lever with the end of the operating-bar of the foot-board, and a horizontally-moving dog pivoted to the platform near to the slot therein, either end of which is adapted to be swung around and

over the said slot so as to engage with the 10 hand-lever and hold it in either of its extreme positions, substantially as, and for the purpose specified.

RICHARD EMORY.

Witnesses:

JOHN L. HEBB,

WM. T. HOWARD.