

No. 656,183.

Patented Aug. 21, 1900.

C. M. FAIRBANKS.  
GATE FOR OPEN CARS.  
(Application filed Apr. 18, 1900.)

(No Model.)

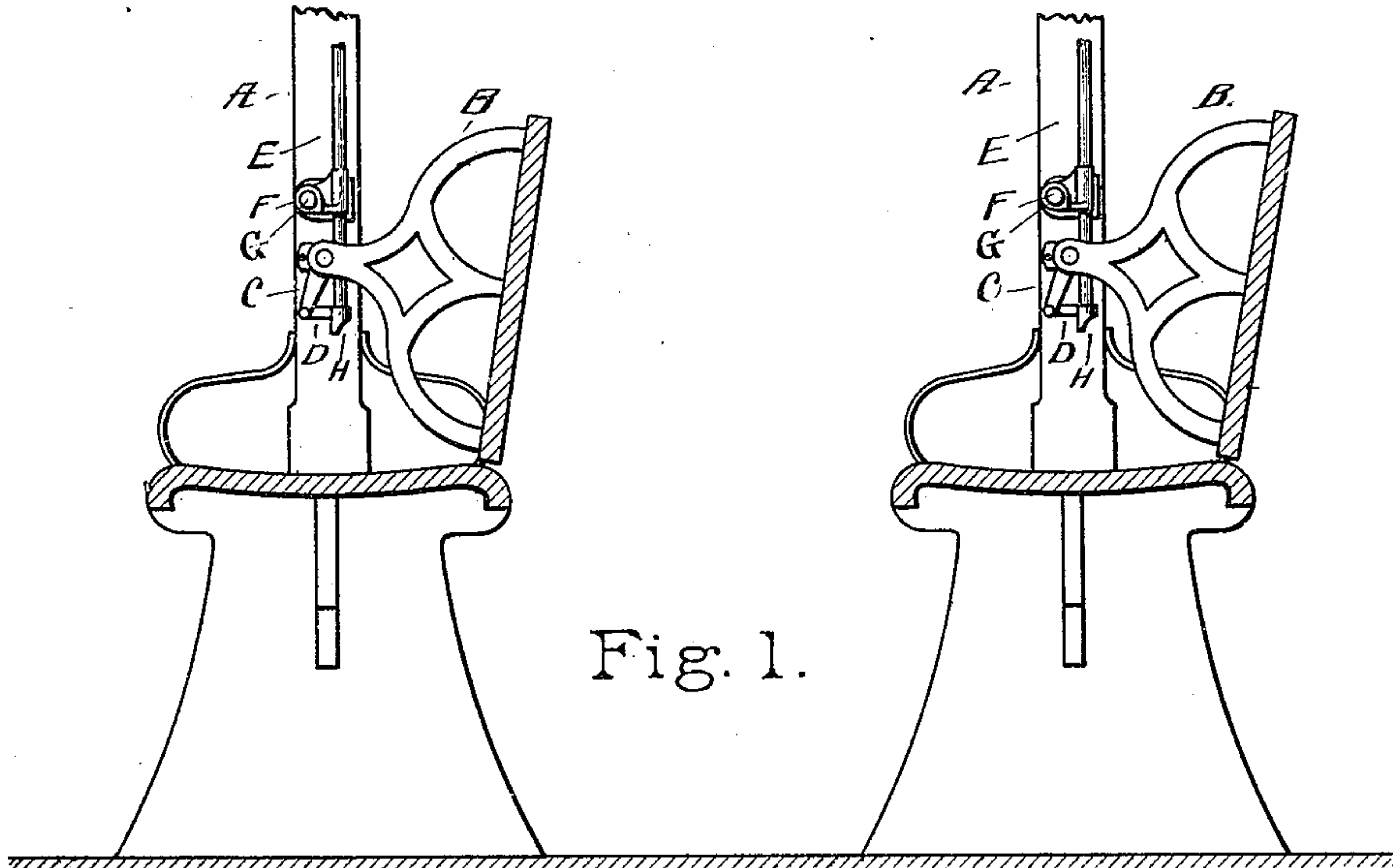


Fig. 1.

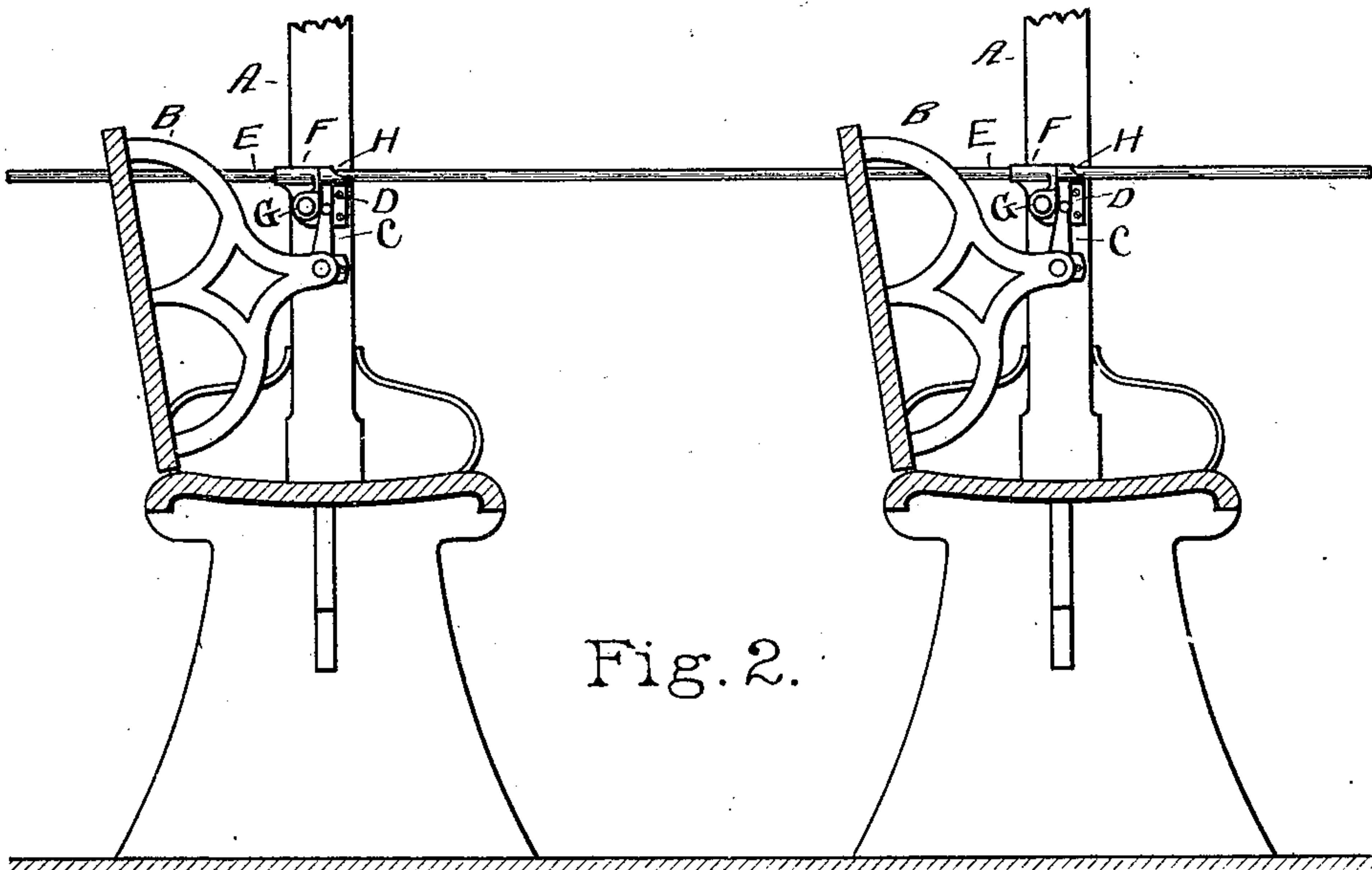


Fig. 2.

Witnesses.  
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# UNITED STATES PATENT OFFICE.

CRAWFORD M. FAIRBANKS, OF CENTRAL FALLS, RHODE ISLAND.

## GATE FOR OPEN CARS.

SPECIFICATION forming part of Letters Patent No. 656,183, dated August 21, 1900.

Application filed April 18, 1900. Serial No. 13,311. (No model.)

*To all whom it may concern:*

Be it known that I, CRAWFORD M. FAIRBANKS, of Central Falls, in the county of Providence and State of Rhode Island, have  
5 invented a new and useful Gate for Open Cars; and I do hereby declare that the following specification, taken in connection with the drawings, making a part of the same, is a full, clear, and exact description thereof.

10 Figure 1 is a view of my improved gate open. Fig. 2 is a view of the same closed.

The object of my invention is to provide a gate for open cars which shall insure the safety of passengers traveling upon double-  
15 track roads; and it consists in the arrangement, construction, and operation of the devices, as hereinafter described.

In the practical application and operation of my invention each seat is provided with  
20 two gates, one at each end, both of which are operated at the same time by the turning of the seat, the one opening and the other closing.

In the drawings, A is the standard of the car, and B the seat-arm. To the seat-arm B  
25 a lever C is connected.

D is a bell-crank rigid to a bar E. The bar E slides through a guide F, which is hung to and swivels upon a pin G, the latter being fastened to the car-standard A.

30 Commencing with the gates open and the parts in the position shown in Fig. 1, the seat is turned over, making a little more than one-half a revolution, and occupies the position shown in Fig. 2. As the seat begins to make  
35 its partial revolution before mentioned, motion is imparted to the lever C, which through the bell-crank D raises the lower end of the bar or gate E until with the completion of the seat movement the bar E reaches a horizontal  
40 position, as shown in Fig. 2. The guide F, during the movement of the seat and the operation of the devices above described, being swiveled to the pin G, automatically adjusts itself to the changing position of the bar or  
45 gate E, while at the same time it otherwise controls such bar E and secures it to the standard A.

When it is desired to open the gate, a partial revolution of the seat is effected in the  
50 opposite direction, which will again bring the

bar or gate E and its operating devices into the position shown in Fig. 1, as will be readily understood.

The bars or gates E and the devices for operating the same are so adjusted and arranged  
55 upon the opposite sides of the car that the movement of the seat, as described, closes the gates on one side, while it opens those on the other.

It will also be observed that as the closing  
60 movement of the gate is completed the forward end thereof enters a cup or socket H upon the rear end of the bar or gate of the next seat. In this manner the free end of the bar or gate is supported and the gate as a whole is effec-  
65 tually locked, so that the seat cannot be turned over by the passenger. In order to turn over the seats, it is necessary to begin with the forward end seat, which may at all times be under the convenient control and  
70 supervision of the motorman.

When the car arrives at its destination and is about to commence its return trip in the opposite direction and to change to the right-  
75 hand track, the seats are turned over by the conductor, beginning with the front seat, until the whole have been changed. This operation opens the gates upon the free side of the road and closes the gates upon the track side. When the seats face the motorman,  
80 the gates will be in their proper position, as will now be readily understood.

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

1. A gate for cars, comprising a sliding piv-  
85 oted bar, a pivoted fulcrum for guiding said bar in its reciprocations, and means for connecting said bar with the reversible seat-back of a car, whereby the bar will be raised or  
90 lowered according to the position of the reversible back of the seat.

2. In a gate for open cars, the combination of a car-standard and a reversible seat-back, of a gate-bar and pivoted socket inclosing  
95 said bar for guiding it in its movement, an arm secured to the end of the said bar, and an actuating-lever carried by the reversible seat-back and pivotally connected with the  
100 arm on the bar, whereby the gate-bar will be raised or lowered by the movement of the re-



versible seat-back, the socket permitting of a longitudinal as well as a pivotal movement of the said bar, substantially as described.

3. In an open-sided car having seats with  
5 reversible backs, the combination of a series of gate-bars, pivoted sockets for movably holding the said bars in position, arms upon the ends of the said bars, levers secured to the reversible seat-backs and pivotally con-  
10 nected with the arms on the gate-bars, sockets also secured to the ends of the gate-bars, the construction being such that when the seats are operated to lower the bars their free ends will rest in the sockets upon the ends of  
15 the adjoining bars, thereby locking the bars and the seats in position.

4. In an open-sided car having seats with

reversible backs, the combination of a series of gate-bars, pivoted sleeves or sockets for loosely holding the bars in position, means 20 connecting the ends of the bars with the reversible seat-backs, whereby the bars may be moved longitudinally and pivotally for raising or lowering them, and locking means interposed between the ends of the bars, the 25 construction being such that intermediate seats cannot be turned over until the one in front of the same has been turned, substantially as described.

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Witnesses:

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