

(No Model.)

J. H. WILLIAMS.

COMBINED SAFETY GUARD AND GATE FOR OPEN STREET CARS.

No. 580,026.

Patented Apr. 6, 1897.

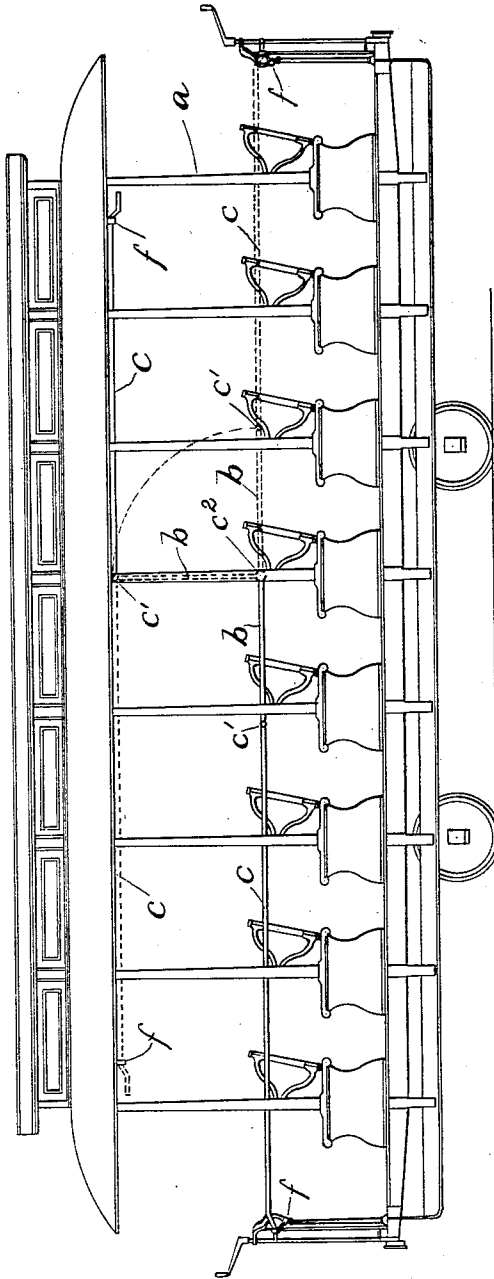


Fig. 1-

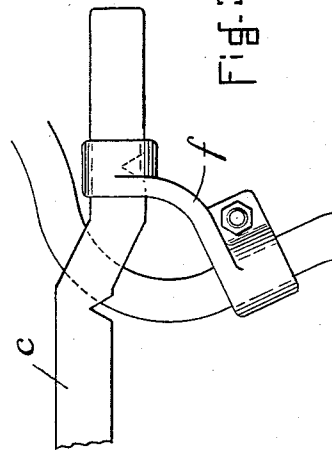


Fig. 3-

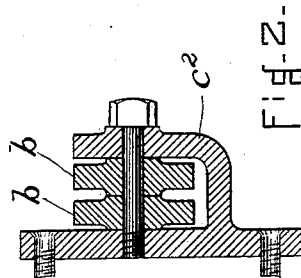


Fig. 2-

Witnesses

Edmund A. Bates
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Inventor

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UNITED STATES PATENT OFFICE.

JOHN H. WILLIAMS, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS
TO JAMES DOLAN AND FRANK H. RICE, OF SAME PLACE.

COMBINED SAFETY GUARD AND GATE FOR OPEN STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 580,026, dated April 6, 1897.

Application filed January 22, 1897. Serial No. 620,182. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WILLIAMS, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in a Combined Safety Guard and Gate for Open Street-Cars, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to construct a combined safety guard and gate for open street-cars adapted to close the entrances at the sides of the car to both the seats and platform.

In accordance with this invention I provide at each side of the car two safety-guards, each extending substantially one-half the length of the car and crossing the entrances to the seats and each having a gate or extension adapted to cross the entrance to the platform, and said combined guards and gates are adapted to be separately operated from the ends of the car. Each combined safety guard and gate consists of two bars jointed together, one of said bars being quite short and the other bar quite long, and the short bar of each combined safety guard and gate is pivoted to a support or supports substantially midway the length of the car, and consequently each combined safety guard and gate extends from said pivotal point or points toward the ends of the car. The jointed bars which form the combined safety guards and gates are each adapted to occupy two different positions—viz., a horizontal position when in use and a right-angular position when out of use, the bars when in horizontal position being in alinement and crossing the entrances to the seats and platform, and when in right-angular position the short bars will occupy vertical positions in parallelism with the posts or uprights, and the long bars will occupy horizontal positions at the top of the car. Hooks are provided on the dasher and at the top of the car, which receive and hold the jointed bars in their different positions.

Figure 1 shows in side elevation an open street-car provided with combined safety guards and gates embodying this invention, one of said combined safety guards and gates being shown in position for use and the other

in out-of-use position, such different positions being shown for the sake of illustration; Fig. 2, a detail showing the bracket or support to which the combined safety guards and gates are pivoted; Fig. 3, a detail showing a hook on the dasher which receives the outer end of said combined safety guard and gate.

a represents an ordinary open street-car, which may be of any well-known or suitable construction.

Upon each side of the car two combined safety guards and gates will be provided, connected to the car at points substantially midway its length and extending in opposite ways toward the ends, said safety guards and gates being located inside of the usual posts or uprights.

Each combined safety guard and gate consists of a short bar *b* and a long bar *c*, jointed together at *c'*, and the bar *b* is pivoted to one of the middle posts or uprights, as to a bracket *c²*, secured to the post or upright, so that each combined safety guard and gate extends from its pivotal point substantially midway the length of the car toward the end of the car.

The short bar *b* of each combined safety guard and gate is made of a length substantially equal to the distance between the bracket *c²* and the top of the car, and the long bar *c* of each combined safety guard and gate is made of a length to reach the dasher at the end of the car when the bars *b c* are straightened out or caused to occupy a horizontal position, being at such time in alinement.

Each jointed bar *b c* has two positions, one with the bars thereof occupying a horizontal position or in alinement, as shown, the bars at such time crossing and thereby closing the entrances to the seats and platform, and the other with the bars thereof occupying a right-angular position, the short bar *b* occupying a vertical position substantially parallel with the post or upright to which the bracket *c²* is secured and the long bar *c* occupying a horizontal position at the top of the car, as shown, the combined safety guard and gate being at such time out of use. Thus it will be seen that each jointed bar occupies a horizontal position when in use and a right-angular po-

sition when out of use. When said jointed bars *b c* are in horizontal position, as, for instance, when in use, they will rest upon the usual side arms at the ends of the seats and

5 will be thereby supported.

The bars *b c* may be made of flat strips of iron or other material of any suitable form.

It will be seen that when the jointed bars *b c* are straightened out or caused to occupy
10 horizontal positions not only the entrances to the seats but also the entrances to the platforms of the car will be closed, and hence said jointed bars *b c* serve as combined safety guards and gates.

15 The extremities of the long bars *c* are preferably formed as handles, by means of which the combined safety guards and gates may be operated.

Hooks *f* will be provided on the dasher and
20 also at the top of the car which receive the outer ends of the combined safety guards and gates when in their different positions, and the bars *c* will be provided with notches to engage said hooks and be thereby locked in
25 place.

I claim—

1. The combined safety guards and gates for open street-cars herein described, consisting of two pairs of jointed bars pivoted at
30 points substantially midway the length of the

car and extending in opposite ways toward the ends of the car, each jointed bar consisting of the short bar *b* and long bar *c*, jointed together and adapted to occupy a horizontal position when in use and a right-angular position when out of use, and hooks which support the outer ends of said jointed bars in their different positions, substantially as described.

2. The safety-guard herein described, consisting of the short bar *b*, pivoted to a support inside of the usual posts or uprights and adapted to occupy a horizontal position when in use and a vertical position when out of use, the long bar *c* jointed to said short bar and adapted to occupy a horizontal position, in
45 alinement with said short bar, when in use, and a horizontal position at the top of the car when out of use, said jointed bars *b, c*, when in alinement resting upon the arms at the
50 ends of the seats, and hooks engaged by said long bar *c* for holding it in its different positions, substantially as described.

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

JOHN H. WILLIAMS.

Witnesses:

B. J. NOYES,

HARRY O. ROBINSON.