

No. 643,201.

Patented Feb. 13, 1900.

C. J. REILLY.  
SIDE GUARD FOR CARS.

(Application filed Apr. 29, 1899.)

(No Model.)

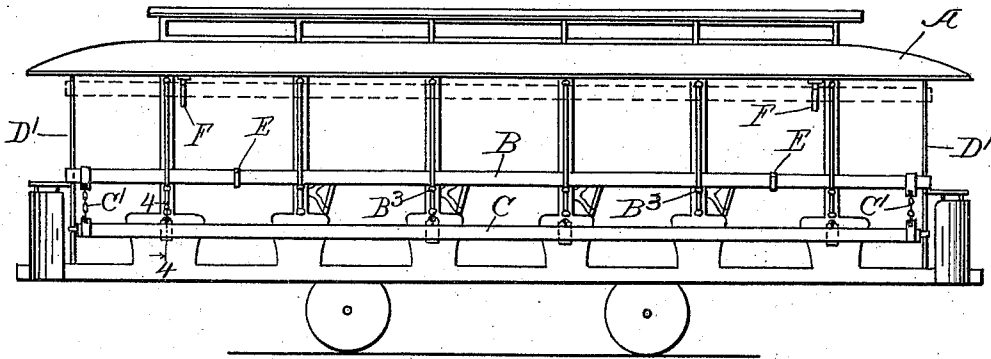


Fig. 1.

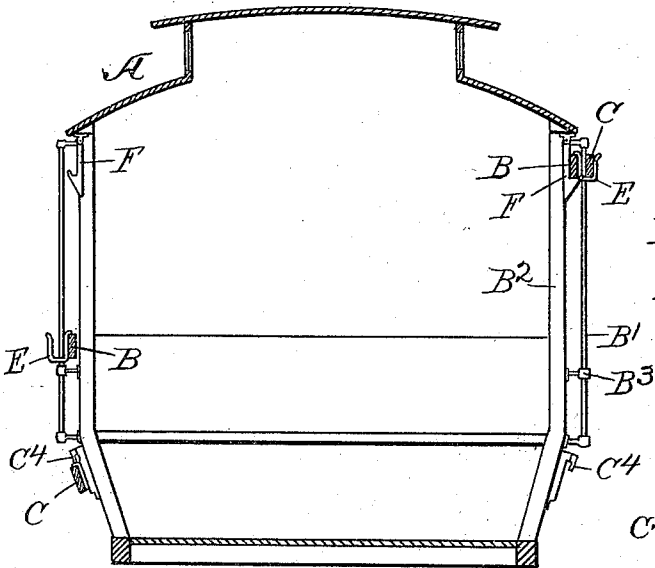


Fig. 2.

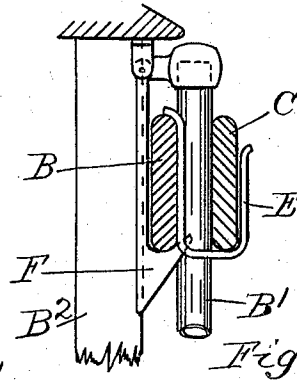


Fig. 3.

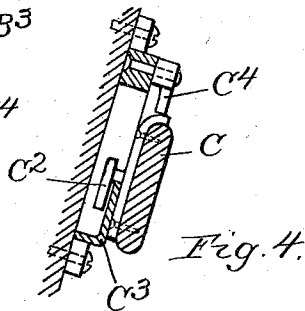


Fig. 4.

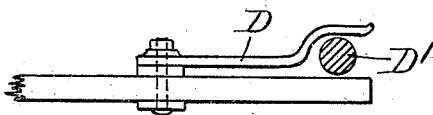


Fig. 5.

Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLES J. REILLY, OF CHICAGO, ILLINOIS.

## SIDE GUARD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 643,201, dated February 13, 1900.

Application filed April 29, 1899. Serial No. 714,932. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES J. REILLY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Side Guards for Cars, of which the following is a specification.

My invention relates to side guards for vehicles, such as street-cars, and has for its object to provide a new and improved side guard for this purpose.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side view showing a street-car provided with a side guard embodying my invention. Fig. 2 is a cross-section through the car shown in Fig. 1. Fig. 3 is an enlarged sectional view showing the side guard when moved to its inoperative position. Fig. 4 is a section on line 4 4, Fig. 1, with parts omitted. Fig. 5 is an enlarged detail showing the manner of connecting the side guard with the end guides.

Like letters refer to like parts throughout the several figures.

It is often necessary—for example, when open street-cars are used in connection with a double track—to provide means for preventing the passengers from entering or leaving the side of the car nearest the opposite track, so as to prevent injury to the passengers by the cars on said track. This means should be so constructed as to permit it to be easily and quickly moved to an inoperative position, for it generally happens that when the car is going in one direction the guard should be on one side, while when the car is going in the other direction the guard should be on the opposite side.

Referring now to the drawings, I have shown an ordinary open street-car A, provided with a side guard embodying my invention. In carrying out my invention I provide an upper rail B and a lower rail C. The upper rail B is preferably located between the grab-rails B' and the roof-supports B<sup>2</sup>, said rail normally resting upon the stops B<sup>3</sup> when in its operative position. The lower rail C is attached to the upper rail B by suitable connecting devices C', said connecting devices being preferably flexible. The lower rail C is provided with the engaging devices C<sup>2</sup>, which normally en-

gage the supports C<sup>3</sup>, attached to the body of the car. A series of these supports may be used. Associated with each end support C<sup>3</sup> is a dog C<sup>4</sup>, which normally engages the rail, so as to prevent the rail from being disengaged from the supports C<sup>3</sup>. At the end of each rail I prefer to provide a movable arm D, (see Fig. 5,) said arm being pivotally connected with the rail and adapted when in position to project past the end grab-rail D', so as to hold the ends of the rails in position, but still permit said rails to slide up and down. The upper rail B is provided with the hooks E, adapted to receive the lower rail, as shown in Fig. 3. At the top of the car I provide the movable supports F, which support the side rails in their inoperative position.

When only a single rail is used as a side guard, it must either be placed too low or too high to properly perform the function for which it is intended, for when placed too low it permits the passengers to step over it and also permits them to be thrown out of the car in case of sudden turns and the like, while if the rail is placed too high the passengers can pass under it, and such a rail will not prevent them from falling off from the car or being thrown out when the car is passing around curves and the like. When the side guard herein shown is in use, it is in the position shown in Fig. 1, the lower rail being in position upon the supports C<sup>3</sup> and the upper rail resting upon the stops B<sup>3</sup>.

When the car has reached the end of its run and is ready to begin its return trip, the conductor and operator of the car each grasp one end of the lower rail, at the same time moving the dogs C<sup>4</sup> to one side, so as to permit the rail to be disconnected from the supports C<sup>3</sup>. Said lower rail is then attached to the upper rail by placing it in the hooks E. The upper rail is then grasped and slid upwardly. In its upward movement it engages the beveled ends of the movable supports F and moves them to one side. After the rail has passed the beveled ends of the supports the supports move backwardly by the force of gravity, so that the ends are beneath the rail. If the rail is now lowered, it will be engaged by these ends and both rails thus held in an inoperative position. The guard on the other side of the car may then be moved

to its operative position by releasing the rails from the movable supports F and moving them downwardly until the upper rail engages the stops B<sup>3</sup>. The lower rail is then disengaged and attached to the supports C<sup>3</sup>. It will thus be seen that by this construction I am enabled to provide a side guard which may be easily and quickly moved from an operative to an inoperative position and vice versa, so as to permit either side of the car to be guarded.

I have shown and described in detail a particular construction embodying my invention; but it is of course evident that this construction may be varied, and I therefore do not wish to be limited to the construction shown.

I claim—

1. A side guard for cars, comprising two rails movably attached to the car at a distance from each other by independent connecting devices, said rails adapted to be moved to an inoperative position, and supporting devices on the car and on the upper rail respectively for supporting them in their inoperative position.

2. A side guard for cars, comprising two rails movably attached to the car, means of attaching one rail when disengaged from the car to the other rail so as to be supported thereby, and a supporting device at the top of the car adapted to support said rails in an inoperative position.

3. A side guard for cars, comprising an upper and a lower rail, the upper rail supported between the grab-rails and the roof-supports of the car, the lower rail provided with engaging devices independent of the upper rail,

a series of supports on the body of the car engaged by said independent engaging devices, so as to support the lower rail in an operative position independent of the upper rail.

4. A side guard for cars, comprising an upper and a lower rail, the upper rail supported between the grab-rails and the roof-supports of the car, the lower rail provided with engaging devices, a series of supports on the body of the car engaged by said engaging devices, so as to support the lower rail in an operative position, a movable part associated with one or more of said engaging devices and adapted to prevent the rail from being disengaged from its supports.

5. A side guard for cars, comprising two rails movably attached to the car so as to prevent passengers from entering or leaving at that side, a series of hooks on one rail adapted to support the other rail when the rails are to be moved to an inoperative position, and movable supports at the top of the car adapted to engage the rails and hold them in an inoperative position.

6. A side guard for cars, comprising two rails adapted to be movably attached to the car in an operative position, one or more engaging devices connected with one rail and adapted to engage the other rail and hold the two rails side by side when in their inoperative position, and a supporting device at the top of the car adapted to support both of said rails in an inoperative position.

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Witnesses:

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