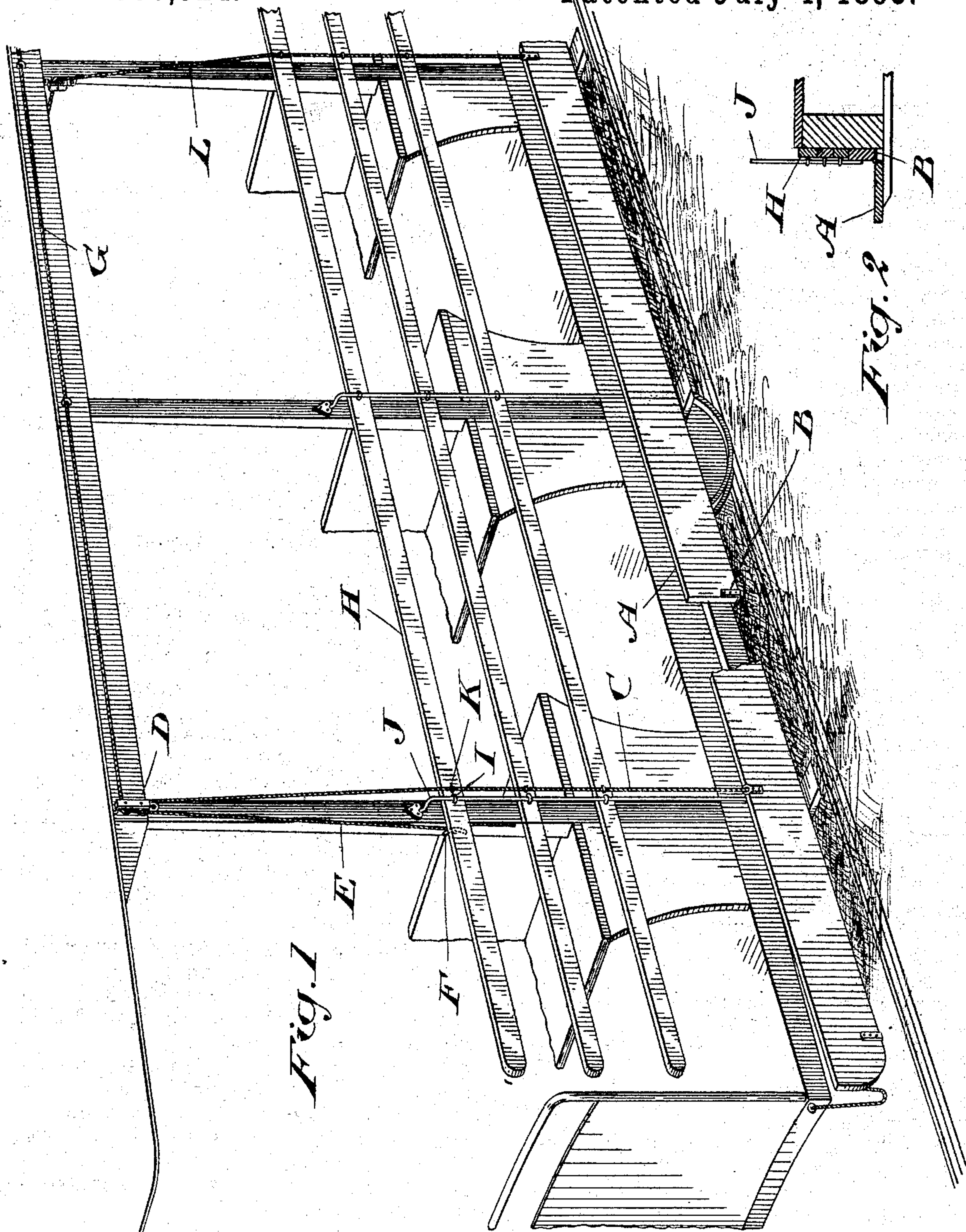


(No Model.)

J. MARSHALL.  
STREET CAR.

No. 500,924.

Patented July 4, 1893.



*Witnesses*

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# UNITED STATES PATENT OFFICE.

JAMES MARSHALL, OF TORONTO, CANADA.

## STREET-CAR.

SPECIFICATION forming part of Letters Patent No. 500,924, dated July 4, 1893.

Application filed February 3, 1893. Serial No. 460,871. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES MARSHALL, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented a certain new and useful Improvement in Street-Cars, of which the following is a specification.

The object of the invention is to effectually prevent passengers from ascending or descending upon the wrong side of the street car, and it consists in the peculiar construction, arrangement and combinations of parts hereinafter more particularly described and then definitely claimed.

In the accompanying drawings—Figure 1, is a perspective side view of an open street car provided with my improvement, the step being tilted and bars located to close the side of the car in view. Fig. 2, is a detail showing the step extended ready for use.

Since the introduction of street cars operated by electricity, the danger the passengers incur by stepping off or onto a car upon the side next to the adjoining track has been fully realized owing to the many serious accidents which have happened, and it is to effectually prevent such accidents that my invention has been produced.

In the drawings I have shown a street car having its sides open and a foot board or step extending longitudinally outside of its floor, but it will of course be understood that my invention is equally applicable to a closed car with platform and steps at each end.

A, is the foot board or step secured to the car by means of the hinges B.

C, is a cord attached to the outside edge of the board A, near one end of the said board. This cord C, is carried around a pulley D, and forms part of or is attached to a cord E, designed to be connected to a cleat F, attached to the car, as indicated.

G, is a cord extending around the car near its roof and after passing over a pulley similar to the pulley D, but located at the opposite end of the car, passes down and is connected to the outside edge of the foot board A, near its end not shown in the drawings. This cord G, also forms part of or is attached to the cord E.

The rails H, extend along the outside of the car and are held by eyes I, fixed to each rail H, and loosely fitting the vertical rods J, connected to the outside of the car, as indicated. Each rail is also connected to the cord C, and G, by means of staples K, or otherwise. When the cords are loose, the foot board A, lies horizontal, as shown in Fig. 2, and the rails H, lie together below the floor of the car so as to permit free ingress and egress.

When it is desired to close the side of the car so that no passengers can get on or off the side protected, the cord E, is drawn upon so as to tilt up the foot board A, and raise the rails H, in the position indicated in Fig. 1. When thus located it is impossible to get on or off the side of the car so protected.

The cord L, is supposed to be located in the center of the car and connects the foot board A, and rails H, on one side with the foot board and rails on the opposite side of the car so that when these parts are raised on one side of the car, the corresponding parts are permitted to fall on the opposite side. I do not confine myself to the location of this cord nor do I insist upon its employment. Springs may be provided for forcing the foot board A, in a horizontal position when not acted upon by the cords, and any suitable kind of hinges or supports may be provided for the said foot board.

What I claim is—

1. A street car having a hinged step or foot-board, and one or more movable rails, in combination with a cord, connecting the rails with the step, and means for fastening said cord, substantially as described.

2. A street car having a hinged step or foot-board, a series of vertical rods J, one or more rails sliding on said rods, in combination with a cord connecting said rails with said step, whereby said rails and step are moved simultaneously, and a cleat F for holding said cord, substantially as described.

Toronto, January 23, 1893.

JAMES MARSHALL.

In presence of—

J. EDW. MAYBEE,  
F. R. CAMERON.