

W. N. MORRISON.
Safety-Guard for Street Cars.

No. 213,295

Patented Mar. 18, 1879.

Fig. 2.

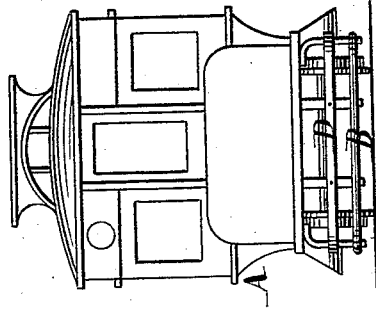
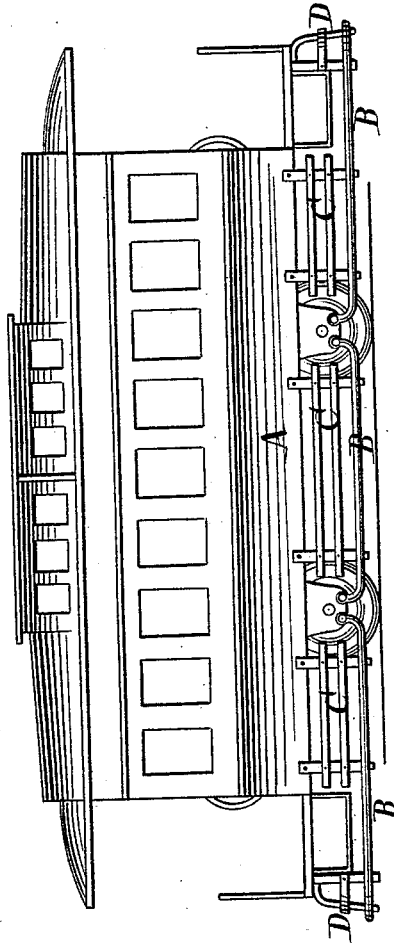


Fig. 1.



Witnesses.

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IMPROVEMENT IN SAFETY-GUARDS FOR STREET-CARS.

Specification forming part of Letters Patent No. **213,295**, dated March 18, 1879; application filed February 21, 1878.

To all whom it may concern:

Be it known that I, WILLIAM N. MORRISON, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Guards for Street or Horse Cars; and that the following, taken in connection with the accompanying drawings, is a full, clear, and accurate description of the same.

The object of my invention is to form a guard around the bottom or lower part of a horse or street car, so as to prevent persons from falling under the wheels and being killed or injured.

In the drawings, Figure 1 represents a side view of a street or horse car with my improvement attached to it. Fig. 2 represents an end view of a horse or street car with the improvement attached.

A represents the lower portion of the body of a street or horse car. Attached to one of the pedestals of the car by any suitable means is a hollow metallic pipe or tube, B, which passes around and under one of the platforms of the car, and is secured to the pedestal on the other side of the car. Another similar hollow tube or pipe, B, is similarly secured to another of the pedestals of the car, and passes around and under the other platform of the car to the pedestal on the other side of the car, and is there secured. Other similar hollow metallic tubes or pipes pass between and are secured to the pedestals on each side of the car. There are also bars or slats C, of wood or other proper material, arranged above and parallel to the hollow pipes or tubes B at the sides of the car. These longitudinal bars or slats C are kept in position by vertical bars or slats attached to the sides of the car, and

extending downward to the tubes B. At the platforms of the car the bar or slat D is placed above and running parallel to the tube or pipe B.

The lower part of the car is thus perfectly inclosed, and a complete, inexpensive, and durable guard is formed, which will prevent persons from falling under the wheels of the car.

The tubes also furnish an additional brace for holding the pedestals of the car in a proper position.

From the tubes B, arranged around and under the platforms of the cars, braces can be run under the platforms to strengthen them.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The hollow tube or pipe B, connecting with the pedestals for holding the pedestals in position, and as a safety-guard, substantially as arranged and described.
2. The combination of the tube B and bars C with the body of a street-car, connected with the pedestals and sides of the car for holding the pedestals in position, and as a safety-guard, substantially as arranged and described.
3. The combination of the tube B and bar D with the platforms of street-cars, substantially as arranged and described.
4. As a pedestal-brace and safety-guard for street-cars, the combination, with the body of a street-car, of the pipe or tube B, bars C, and bar D, substantially as arranged and described.

WILLIAM N. MORRISON.

Witnesses:

SAMUEL D. HALLOWELL,
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