

(No Model.)

J. F. MUNSIE.
RAILWAY CAR.

No. 550,835.

Patented Dec. 3, 1895.

Fig. 1.

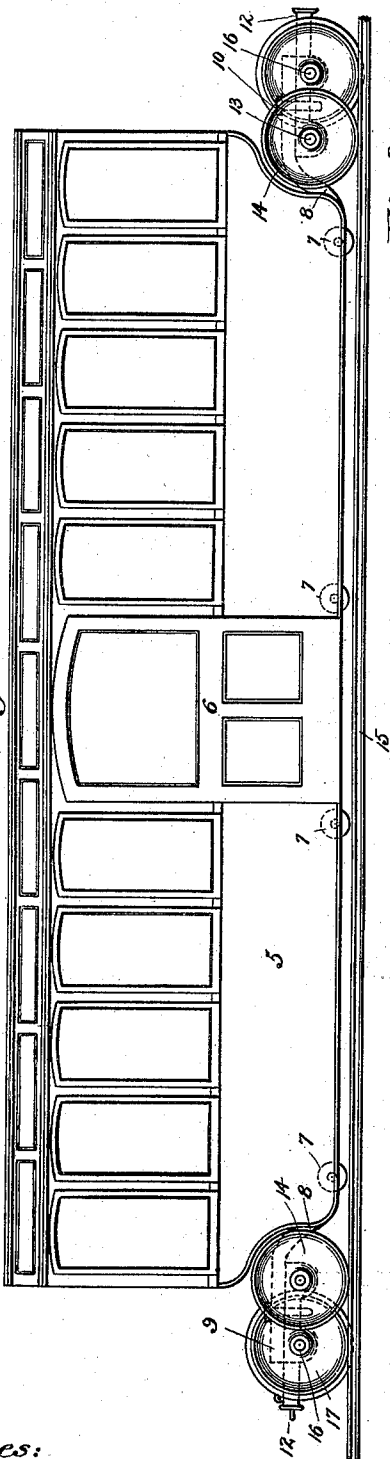


Fig. 3.

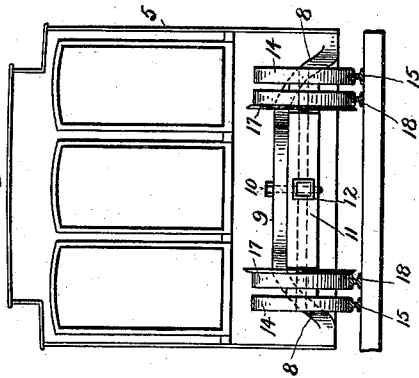
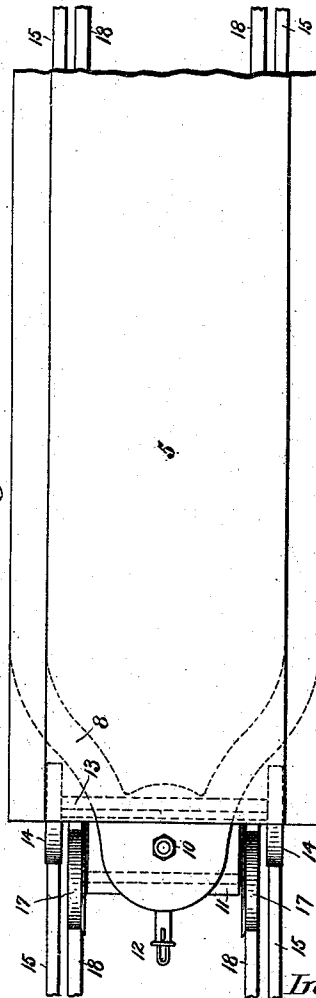


Fig. 2.



Witnesses:

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

JAMES F. MUNSIE, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE MUNSIE-COLES ELECTRIC RAILWAY EQUIPMENT COMPANY, OF NEW JERSEY.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 550,835, dated December 3, 1895.

Application filed April 1, 1891. Serial No. 387,291. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. MUNSIE, a British subject, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Railway-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in railway-cars designed especially for use in underground railways.

The main objects of the invention are to provide a car which will readily accommodate itself to the curvatures of the track and which may be used in tunnels exceeding but slightly the height of the car-body, while at the same time leaving the car interior unobstructed by the passage of the axles therethrough.

My invention also contemplates securing the maximum passenger-carrying capacity with the minimum length of car-body, so that the station-platforms may be of correspondingly less length.

In the accompanying drawings, Figure 1 represents a side elevation of a car embodying my improvements. Fig. 2 represents a partial plan view thereof, and Fig. 3 represents an end elevation.

Similar numerals of reference indicate similar parts throughout the several views.

Referring to the drawings, 5 indicates the body portion of a car forming part of the rolling-stock of an underground railway. The car-body is provided with a central door 6 for the entrance and exit of passengers, the lower edge of said door being on a level with the car-flooring. It will be noted that the car-flooring clears the road-bed but slightly, and in order to diminish the danger from possible vertical oscillations of the car-body I connect to the under side thereof a number of friction-rollers 7, for the purpose of protecting the car-body itself from actual contact with the road-bed should the vertical oscillation be excessive.

From the car-body the stringers 8 are curved upward and connect with the platforms 9 at

front and rear of the car, said platforms constituting a part of the truck-frames. The platforms 9 are connected by a king-bolt 10 with the subjacent platforms 11, mounted upon axles, and are provided at their forward ends with the usual coupling draw-bars 12.

The inner axle 13 of each truck and its wheels pass beneath the corresponding end of the car-body, which is correspondingly cut away, as shown. This, however, does not diminish the seating capacity of the car, but permits seats to be located directly above said axles and wheels at the car ends, where they will not interfere with the convenience of the passengers in going in and out, which would be the case if the axles or wheels projected into or through the car-body at some distance from its ends.

It will be observed that the axles 13 are provided with flangeless wheels 14, running upon the track-rails 15, and that said axles are longer than the axles 16, which are provided with the flanged wheels 17 and which run upon the track-rails 18. This construction and arrangement is designed to lessen the friction in passing around curves by providing one set only of the wheels with flanges, while the other set acts simply as bearers or trailers for the trucks.

Having thus described my invention, what I claim is—

A railway car, provided with trucks at its ends, and a main body portion suspended between the trucks, the trucks having pivotal connection with the car at points beyond the ends of the same, and the car body being cut away to permit the rear wheels of the truck to turn thereunder, said trucks carrying two axles one shorter than the other, the shorter axle having a flanged wheel at each end and the longer axle having a flangeless wheel at each end, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES F. MUNSIE.

Witnesses:

ROBERT WATT,
ORMI D. PERSON.