J. HARRIS, Jr.

Railway Car.

No. 29,882. Patented Sept. 4, 1860.

Fig. 1.

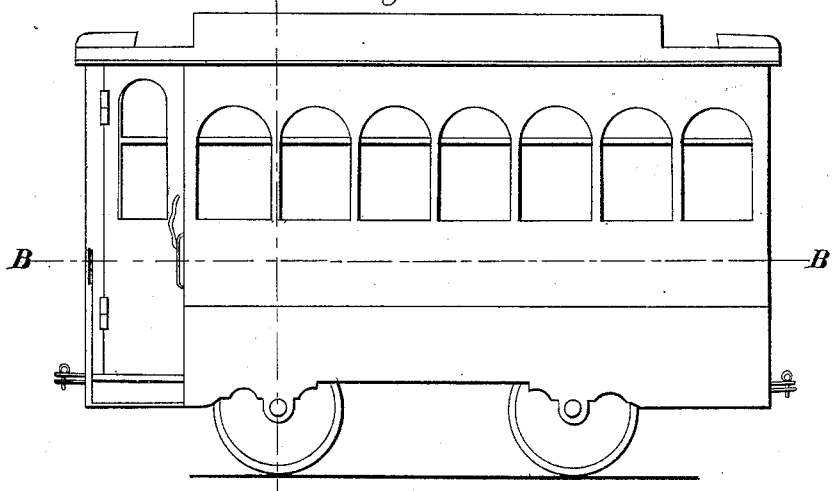


Fig. 2.

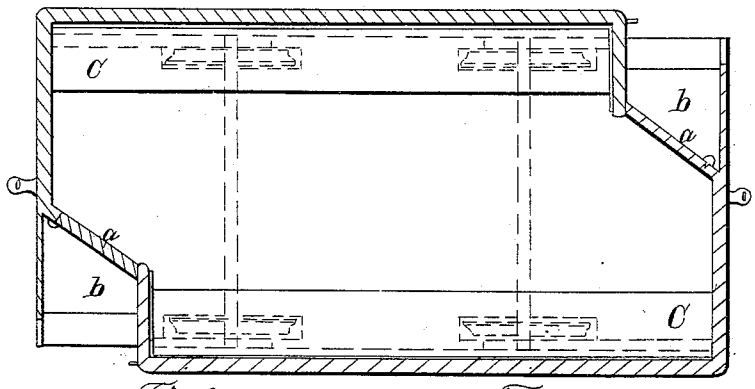


Fig. 3.

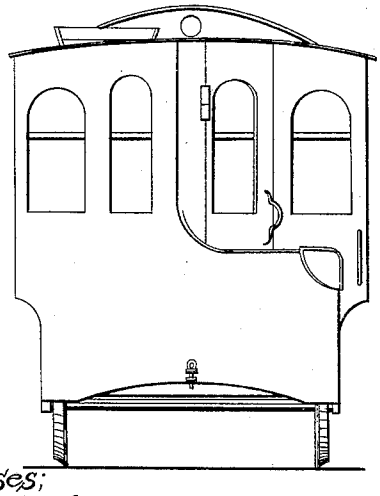
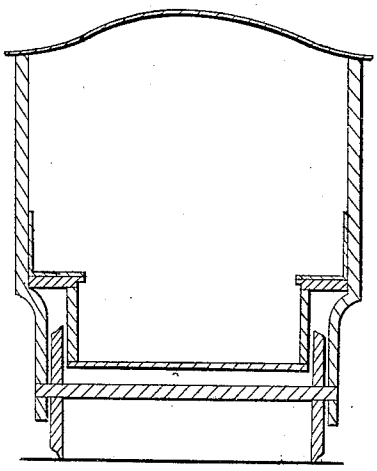


Fig 4



Witnesses;
Norman W. Harris
W. C. Kinsley

Inventor;
Joseph Harris Jr.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH HARRIS, JR., OF ROXBURY, MASSACHUSETTS.

CITY-RAILROAD CAR.

Specification of Letters Patent No. 29,882, dated September 4, 1860.

To all whom it may concern:

Be it known that I, JOSEPH HARRIS, JR., of Roxbury, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in the Construction of the Platforms and Doors of City Horse-Cars; and I do hereby declare the following to be a clear and complete description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an elevation of the side of said car. Fig. 2, is a horizontal section on AB of Fig. 1, representing also some parts below the cutting plane. Fig. 3, is an end elevation of the car. Fig. 4, is a vertical section on line CD of Fig. 1, showing nothing beyond the cutting plane.

By reference to the letters on the said figures, I will explain the nature and construction of my invention.

The doors *a*, *a*, when closed, are at an obtuse angle with a plane parallel to the end of the car, or at any angle which increases the facilities of passengers on their entrance and exit, and the usual annoyances now occasioned by passengers standing outside, and blocking the passageway, is obviated. By the present mode of constructing platforms, they extend from side to side entirely across the car, and the doors slide open at right angles to the sides. I construct my car in any of the known forms, except the platforms, doors and doorways. The ends of my car are constructed viz., the greater portion of the platforms are inclosed, thus making the interior more spacious, and economizing seat room for additional passengers, as represented by the letters *c*, *c*, on Fig. 2. I have two entrances and two doorways, or platforms, one at each end of the car, their relative position being diagonal. Consequently, no accident can occur to passengers, from cars coming in an opposite direction, as the peculiar construction of the doors and platforms oblige the passengers to enter and leave, on the outside or right hand of either rail track.

The doors are controlled by the driver by means of foot straps extending from the door, through the car and under his foot. This arrangement is not adopted in cars at present, where the horses are made to change from end to end, in reversing the draft of the car.

By the above mentioned improvements we are successfully enabled to dispense with the attendance of a conductor.

What I claim therefore as new, and desire to secure by Letters Patent is—

The arrangement and construction of a car when made in the manner and for the purposes herein described.

JOSEPH HARRIS, JR.

Witnesses:

NORMAN W. STEARNS,

ELI C. KINSLEY.