2 Sheets—Sheet 1.

W. C. ALLISON.

Railway Car.

No. 28,530. Patented May 29, 1860.

Fig. 1.

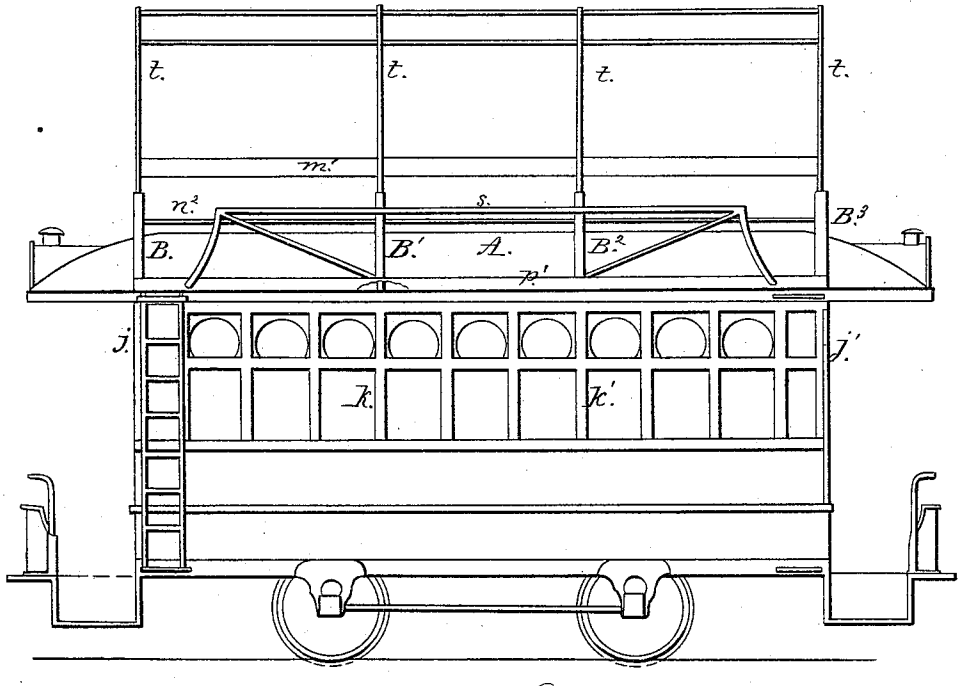


Fig. 2.

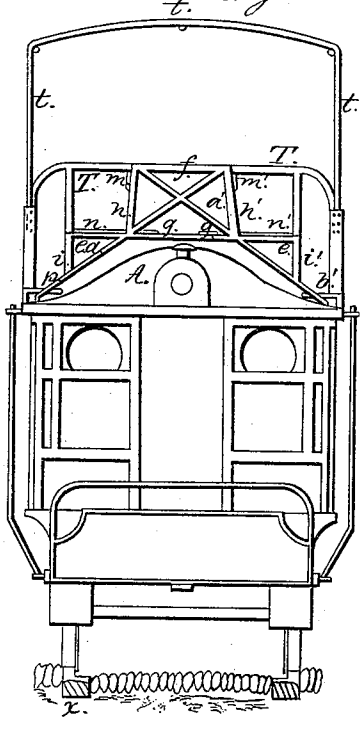


Fig. 4.

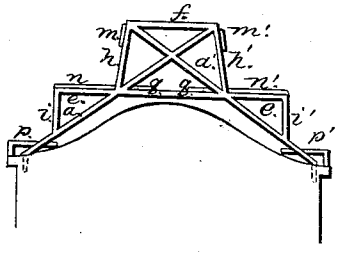
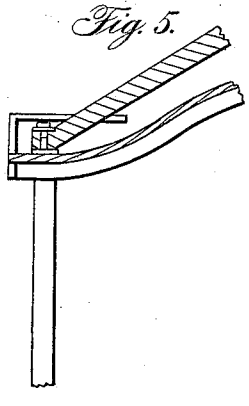


Fig. 5.



Witnesses:

Henry Howson

Horace See

Inventor:

William E. Allison

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

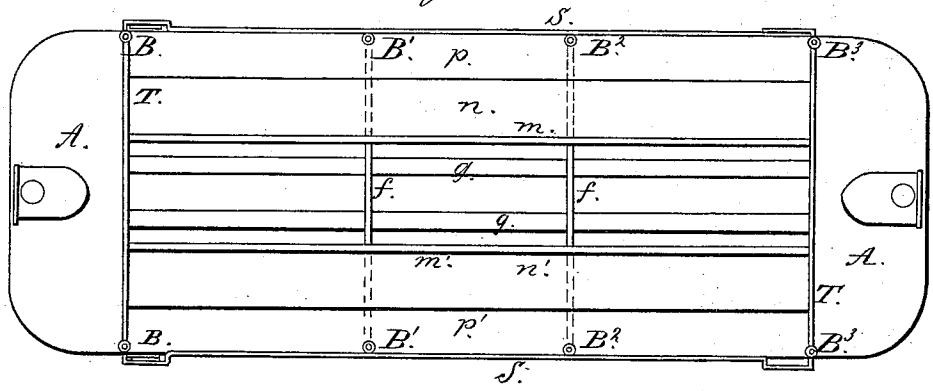
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Railway Car.

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Fig. 3.



Witnesses:

Henry Howson

Horace See.

Inventor:

William C. Allison.

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

WILLIAM C. ALLISON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ALLISON & MURPHEY.

CITY RAILROAD-CAR.

Specification of Letters Patent No. 28,530, dated May 29, 1860.

To all whom it may concern:

Be it known that I, WILLIAM C. ALLISON, of the city of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in City Railway-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to the peculiar construction of seats to be applied to that class of city railroad cars which have arched tops, and my improved seat consists of a series of transverse truss frames constructed and connected together in the manner set forth hereafter, the said seat being arranged on and combined with the arched roof of a railroad car in the manner hereafter explained so that while the seat presents every accommodation for the passengers the whole is supported on the side frames of the car and totally independent of the roof with which the feet of the passengers are also free from contact.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawing which forms a part of this specification, Figure 1, is a side view of a city railroad car with my improvement. Fig. 2, an end view. Fig. 3, a plan view. Fig. 4, a sectional view of part of the car with my improvement, and Fig. 5, a detached sectional view (drawn to an enlarged scale) of part of my improvement.

Similar letters refer to similar parts throughout the several views.

The body, frame, platform, and running gear of the car may be similar to those of cars at present in use on city railways, the roof A of the car being of the arched and curved form represented in Figs. 2 and 4. The seats for the accommodation of passengers on the roof of the car consist of the four frames B, B^1, B^2 & B^3, connected together in the manner described hereafter. Each frame consists of the diagonal pieces a and a^1, the upper transverse bar F, lower transverse bar e the inclined bars h and h^1 and the vertical bars i and i^1 the whole being rigidly secured together and assuming the position in respect to each other illustrated in Fig. 4, so that each frame is free from contact with the roof of the car at all points excepting where the lower ends of the diagonal pieces a and a^1 of each frame are connected to the roof near the edge of the same by simple bolts as seen in Fig. 5, or any other attachments which can be readily disconnected. The points where the frames are thus connected to the roof are immediately above the side frames of the car and are so arranged that the bearing of the frame B is directly above the corner post j j at one end of the car and that of the frame B^3 above the corner posts j^1 at the opposite end of the car, while the bearing point of the frame B^1 is directly above the posts k of the side frames of the car and the bearing points of the frame B^2 above the posts k^1 and k^1 of the side frames.

The whole of the frames are connected together by the longitudinal slats m and m^1, the longitudinal boards n and n^1 and p and p^1 and the slats q q. The slats m and m^1 are secured, the former to the inclined bar h and the latter to the bar h^1 in such a position that one slat shall form the back of one seat and the other slat the back of the other seat. The boards n and n^1 are secured to the transverse bars e e of the frames in such a position as to form the bases of the seat, and the boards p and p^1 are secured to the diagonal braces a and a^1 of the frames in such a position as to form a rest for the feet of the passengers who occupy the seats.

It will be seen that a frame of the above described peculiar construction affords accommodations for a number of passengers without interfering with the roof which is generally of very slight construction, the weight of the entire seat as well as the passengers being supported by the posts of the side frame of the car, the feet of the passengers being at all times free from contact with the roof. It will also be seen that the entire seat may be readily removed in one piece from the roof of the car when it is not required for use in winter months. A railing S is secured to the foot board in front of the seats and a railing T to the end frames for the prevention of accidents.

A frame t over which to spread an awning may also be secured to the truss frame, or to the railing.

I do not claim broadly a seat so applied to the roof of a railroad car that it shall be supported by the frame of the car and not by the roof, but

I claim as my invention and desire to secure by Letters Patent—

A seat, composed of a series of transverse truss frames constructed and connected together as set forth when the said seat is arranged on and combined with the arched roof of a railroad car in the manner and for the purpose specified.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WILLIAM C. ALLISON.

Witnesses:
HENRY HOWSON,
CHARLES HOWSON.