W. C. ALLISON.

Railway Car.

No. 26,730. Patented Jan. 3, 1860.

Fig. 1.

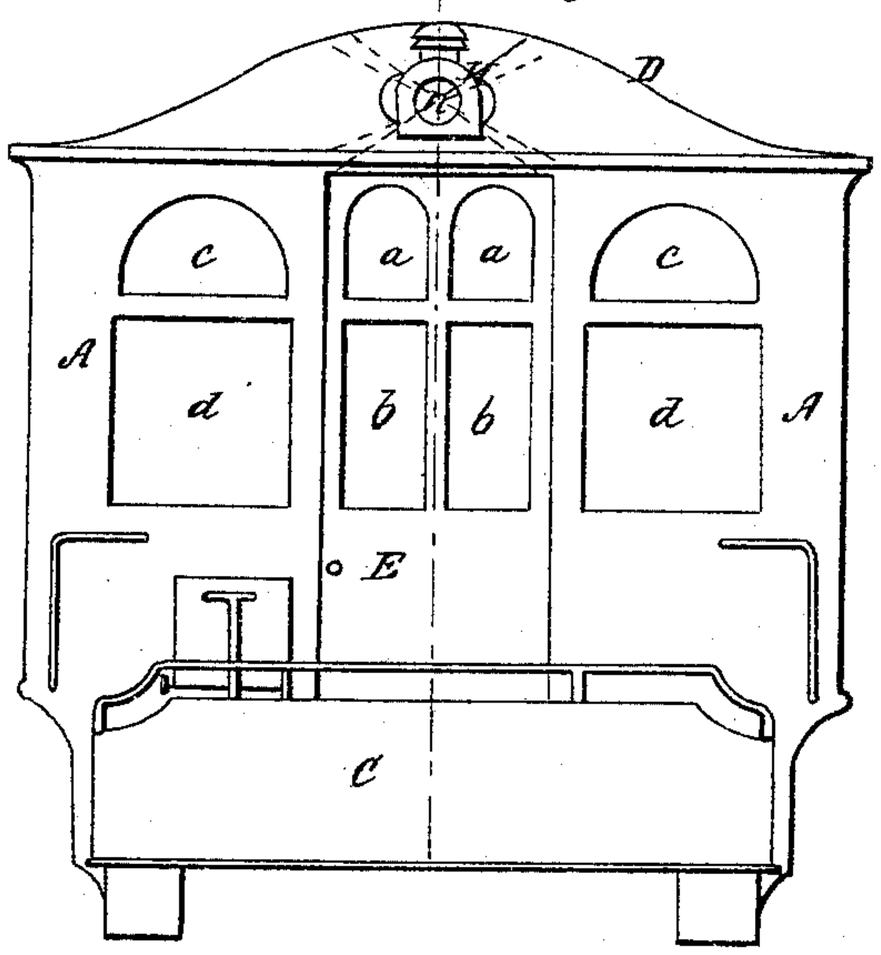


Fig. 2.

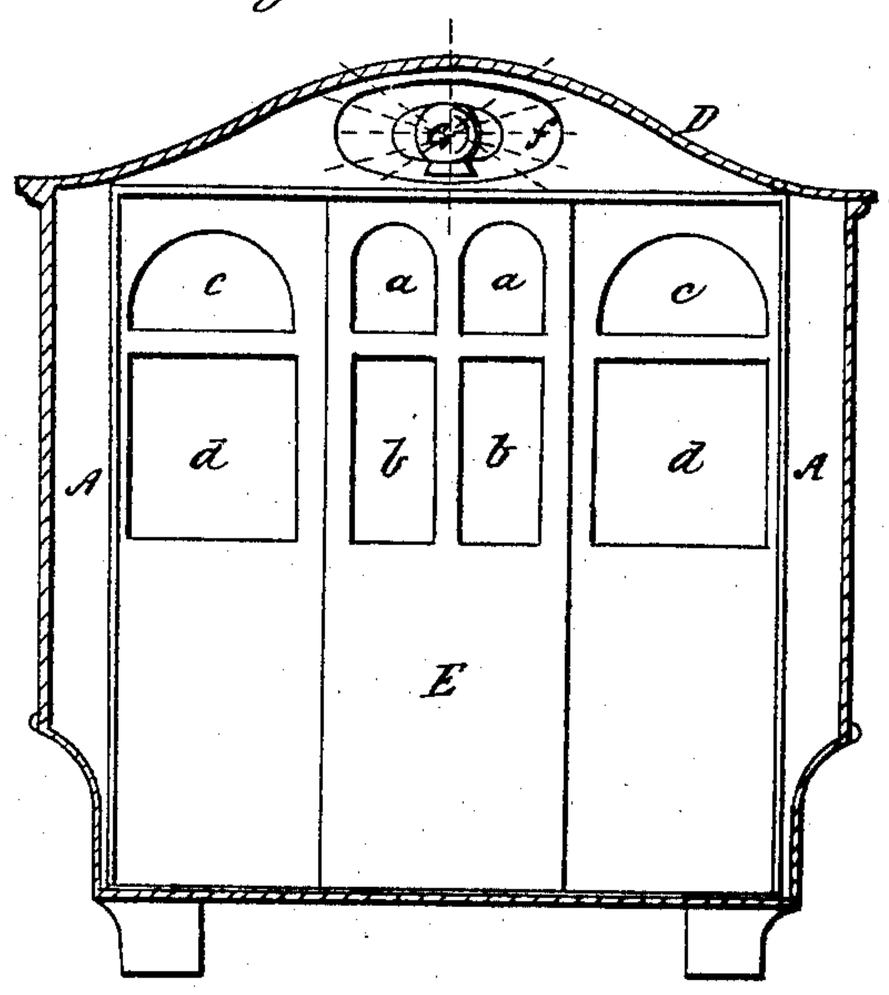


Fig. 3.

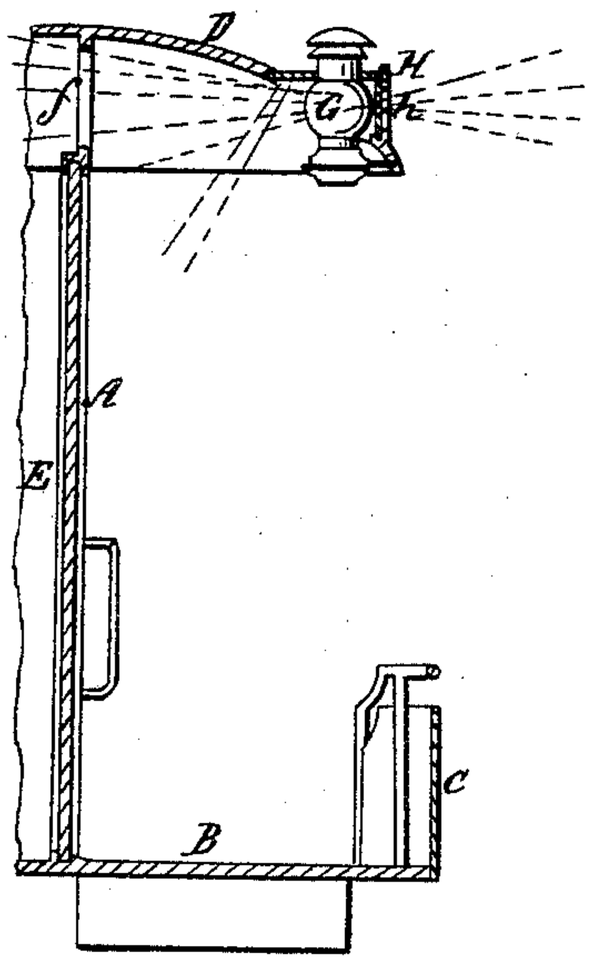
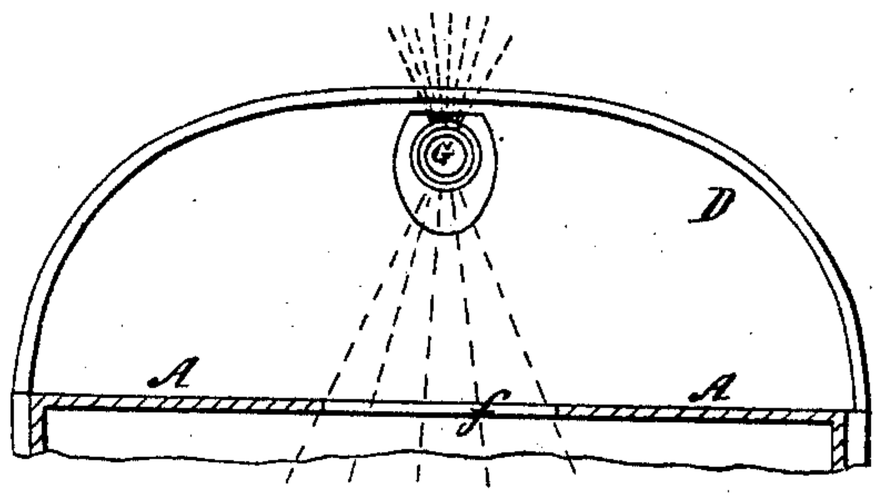


Fig. 4.



Witnesses:

L. C. Pierce

Henry Howson

Inventor:

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UNITED STATES PATENT OFFICE.

WILLIAM C. ALLISON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND JOHN MURPHY, OF SAME PLACE.

IMPROVEMENT IN CITY-RAILROAD CARS.

Specification forming part of Letters Patent No. **26,730**, dated January 3, 1860.

To all whom it may concern:

Be it known that I, WILLIAM C. ALLISON, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and Improved Mode of Illuminating 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 drawings, and to the letters of reference marked thereon.

My invention consists in illuminating city-railroad cars by placing on that portion of the roof which overhangs the driver's platform an arched reflector having a plate of glass in front and a lamp inside, as described hereinafter, so that the rays of light may be directed by the reflector through the windows of the car to the interior of the same, and so that the lamp which illuminates the inside of the car may afford an efficient signal-light in front.

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 drawings, which form a part of this specification, Figure 1 is a front view of a city-railroad car, illustrating my improved arrangement of lamp and reflector for illuminating the same; Fig. 2, the same as Fig. 1, viewed from the inside of the car; Fig. 3, a vertical section of the front end of the car, and Fig. 4 a plan view of the same.

Similar letters refer to similar parts throughout the several views.

A represents the front of the car; B, the platform for the driver; C, the dashboard; D, the portion of the roof overhanging the driver's platform; E, the door of the car; *a a*, its upper windows, and *b b* its lower windows, *c* and *d* being windows in the front of the car on both sides of the door, and F a window in front of the car directly above the door.

It will be observed that the overhanging portion of the roof is dome-shaped or arched on the top in both directions. Near the outer end and in the center of this overhanging portion of the roof is cut an opening, which is covered by an arched casing H, of any suitable material, lined on the inside with tin-plate or other bright metal, which will serve as a reflector. Within this arched casing is situated the transparent portion of the lamp G, the chimney of which projects through the top of the casing. The face of the latter is straight and is furnished with a disk *h* of plain or colored glass, the disk being directly opposite to the transparent portion of the lamp. The sides of the casing H are flared outward from the front toward the rear, so that its inside may form an expanded reflector.

The overhanging roof at the opposite end of the car is furnished with a lamp and reflector similar to that described above.

An efficient signal-light is afforded by the glass *h* in front of the lamp, the rays of light from which are directed by the reflector on the inside of the casing *h* through the window F, as well as through the windows in the front of the car and door into the interior of the car, which is thus sufficiently illuminated.

It will be seen without further description that by adopting the above arrangement of lamp and reflector the lamps usually placed inside the car so as to interfere with the headroom and the signal-lanterns suspended to the outside of the car may be dispensed with.

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

The arched reflector H, its plate of glass *h*, and the lamp G, when arranged on and adapted to the overhanging portion D of the roof in respect to the window F and the other windows of the car, substantially as and for the purpose herein set forth.

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

W. C. ALLISON.

Witnesses:
L. I. PIERS,
HENRY HOWSON.