

N. C. DAY.

Improvement in Car-Roofs.

No. 129,215.

Patented July 16, 1872.

Fig 1.

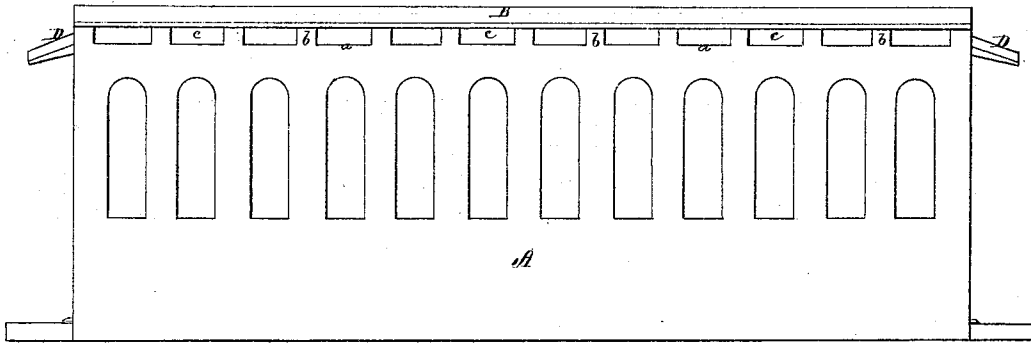


Fig 3.

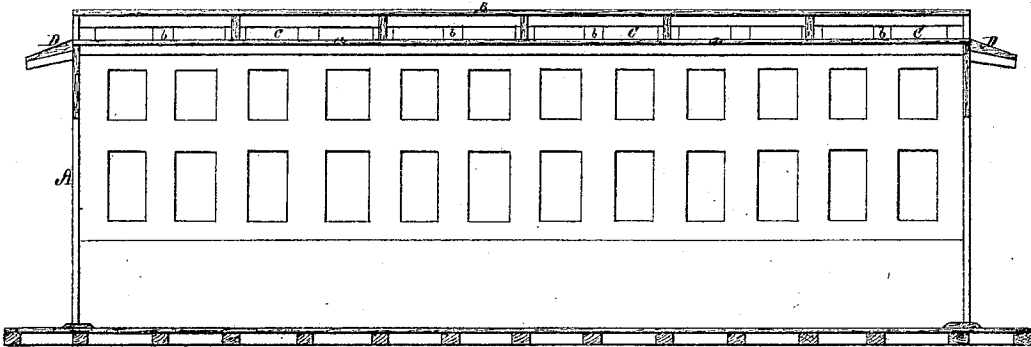
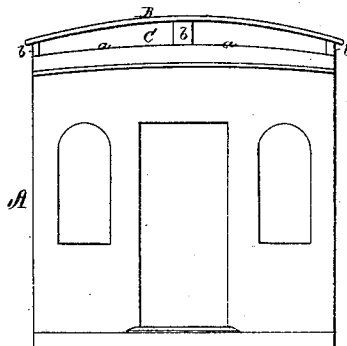


Fig 2.



Witnesses.

S. N. Piper.

L. N. Miller.

Nathaniel C. Day.

by his attorney.

N. C. Day

UNITED STATES PATENT OFFICE.

NATHANIEL C. DAY, OF NASHUA, NEW HAMPSHIRE.

IMPROVEMENT IN CAR-ROOFS.

Specification forming part of Letters Patent No. 129,215, dated July 16, 1872.

To all persons to whom these presents may come:

Be it known that I, NATHANIEL C. DAY, of Nashua, of the county of Hillsborough, of the State of New Hampshire, have invented a new and useful Improvement in Railway Carriages; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a side elevation, Fig. 2 an end view, and Fig. 3 a longitudinal section, of a carriage-body with my invention.

In carrying out my said invention I combine with the carriage-body and arrange above and a short distance from its top or roof what I term a sun-guard or auxiliary roof, which may, at its ends and sides or other parts, be supported on or by posts or standards erected on the top or roof of said body, such guard being a thin wooden or metallic cap to extend entirely over the roof of the carriage, and with an open air-space between the two for the air to circulate in or through.

Railway carriages, by exposure to the rays of the sun, are liable to become very much heated, and, as a consequence, to heat the air within them, very frequently to the inconvenience or discomfort of passengers as well as to the injury of freight or live stock when within such carriages.

I have found that, by constructing a railway carriage with an auxiliary roof raised over the main roof and open at the ends or sides, or at the ends and sides of the carriage, so that air may freely enter within and pass out from the space between the main and auxiliary roofs, the difficulty experienced by heating the main roof will be avoided—in other words, that it will be protected by the auxiliary roof or sun-guard and the air-space between the two, so that the heat absorbed by the guard will be obstructed by the air which will pass into and out of the air-space, especially when the carriage may be in movement.

To facilitate the inrush of air into the air-space, and also to protect the door of the carriage from rain, I apply to each end an inclined deflector, as shown in the drawing. When the carriage may be in rapid motion the deflector will cause a larger volume of air to pass into and through the air-space under the sun-guard, and thereby operate to prevent the lodgment of any sparks or cinders or dust upon the main roof.

In the drawing, A denotes the car-body; B, the sun-guard; C, the air-space between the latter and the roof *a* of the carriage. D is the inclined deflector, and *b b b* are the posts or standards for supporting the sun-guard or auxiliary roof.

I make no claim to anything shown or described in either of the United States patents 61,482 and 67,894, as in carrying out my invention the auxiliary roof or the space between it and the main roof of the carriage must be open at the ends, or at such and on the sides of the carriage, in order to secure a proper flowage of air between the two roofs; and, furthermore, I so arrange the deflector D that it shall answer not only as a roof for the platform of the carriage, but as a means of deflecting air into the passage C between the two roofs, the same thereby improving the abstraction of heat from the sun-guard and main roof.

I therefore claim—

A railway carriage-body, A, provided with the auxiliary roof or sun-guard B arranged over the main roof, as specified, and having the air-space C between the two open at its ends, or ends and sides, and provided with deflectors D disposed over the end platforms and with respect to such space C, all substantially as hereinbefore explained.

NATHANIEL C. DAY.

Witnesses:

R. H. EDDY,
J. R. SNOW.