

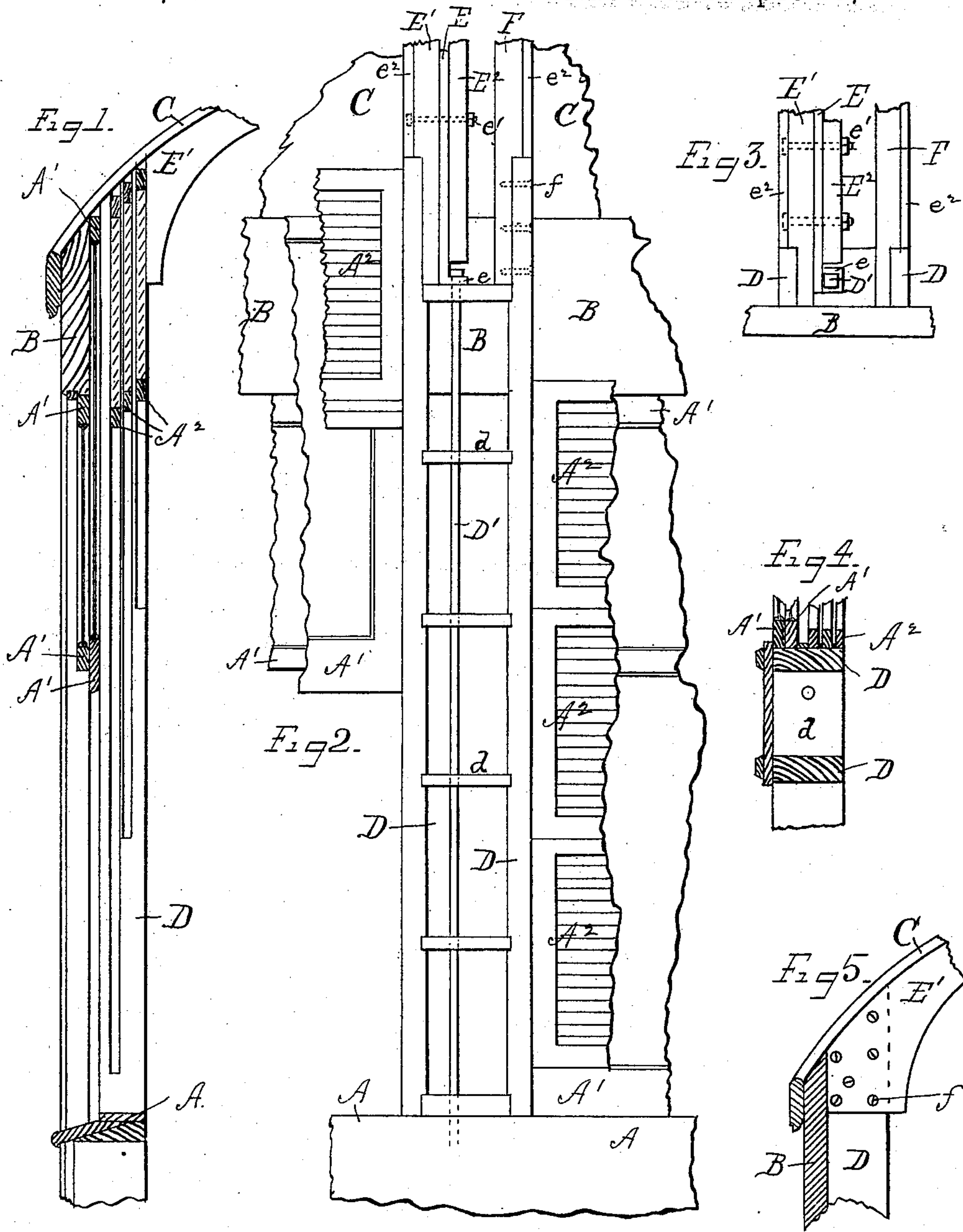
(No Model.)

A. LONGSTREET.

PASSENGER CAR.

No. 275,397.

Patented Apr. 10, 1883.



Witnesses:
Edw. S. Evans
J. M. Munday

Inventor
Aaron Longstreet

UNITED STATES PATENT OFFICE.

AARON LONGSTREET, OF CHICAGO, ILLINOIS.

PASSENGER-CAR.

SPECIFICATION forming part of Letters Patent No. 275,397, dated April 10, 1883.

Application filed December 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, AARON LONGSTREET, of Chicago, Cook county, State of Illinois, have invented certain new and useful Improvements in Railway Passenger-Cars, of which the following is a specification.

This invention is designed to strengthen the construction of railway passenger-cars and at the same time to lighten their weight, and render them more attractive and pleasant interiorly by enabling the raising of both window sash and blinds the full height of the window-opening.

The nature of the invention will be fully set forth below; and it consists in the novel features hereinafter particularly set forth and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a section through a car-side constructed after my invention. Fig. 2 is an interior view of a portion of same, with the interior ceiling or covering parts left off. Fig. 3 is a top view of the framing. Fig. 4 is a horizontal section on the line *x x* of Fig. 2. Fig. 5 is a side view of the joint between one of the rafters and a side post.

Similar letters indicate like parts in the drawings.

In said drawings, A represents the window-sill; A' A', the window-sash; A², the blinds; B, the letter-board, and C the roof of a railway passenger-coach. D D are the usual vertical posts forming the sides of the window-openings, and D' is the ordinary supporting-rod, which usually reaches from the horizontal timber known as the "plate" to the sill of the car. Instead of being secured at its upper end to the plate, as I dispense with said plate, said rod is secured to the metal part E of the rafter, said part E having a horizontal bend, *e*, at its foot, through which the rod passes. Filling-blocks *d* are inserted between the posts D at interval in the usual manner, the rod passing through them.

I employ two pieces, E' and F, between the windows. One of these, E', is strengthened and stiffened by the flat metal rafter E, already mentioned, being bolted to it and the furring-strip E² by bolts *e'* at intervals. Both rafters may have light furring-strips *e*², as shown, and do not differ from the like parts of cars already in use except in the manner of attachment to

the posts D, as now to be specified. The posts D are extended above the point where the plate is usually located, sufficiently so that they may be firmly screwed to the wood rafters E' and F by screws *f*, as indicated, the parts being preferably cut away or halved together where they are lapped upon each other. In this manner a very strong joint is formed between the rafter and post, so strong, indeed, that it enables me to dispense with the plate. I believe the car thus built to be less likely to give way at this point than those built upon the old plan with the plate.

The metal part of the rafters may be dispensed with, and so also in some cases may the rods D', as my invention renders the cars so much stronger and less likely to give way at the upper corner than the old construction. The invention, however, is chiefly valuable in cars having sharp upper corners, such as the prevailing styles at present in use, in contradistinction from the cylindrical and other cars provided with bent ribs.

The doing away with the plate lightens and cheapens the construction and enables me to extend the slideways of both windows and blinds to the top of the car, so that both may be raised completely out of the way of any passenger sitting by the same, and so the blinds, when raised, need not obstruct the vision of a person standing in the car. In addition to these items of utility, this feature renders the car more attractive and permits the use of larger windows and the entrance of more light and air.

I am aware that the plate has sometimes been cut away to permit the windows to be raised to the car-top, and hence I do not claim that manner of construction.

The blinds may be raised to the top without extending the passage for the sash, and thereby the added light be gained. I prefer, however, to make both in the manner shown, as the whole benefit of that part of my invention is obtained in that way instead of a portion only.

I am aware that the plate has been mortised through above the window to permit the sash and blinds to slide up through the same; also, that curved ways extending into the roof have been provided for flexible blinds; also, that

the plate has been made of two parallel tim-
bers placed far enough apart to leave a ver-
tical space between them, through which the
sash may be passed; also, that the posts and
5 rafters have been made in one piece of timber,
bent to the form desired; and hence I do not
here claim broadly a car provided with pas-
sage-ways for the sash and blinds extending
to the top of the car; nor do I claim a car pro-
10 vided with posts and rafters made in one piece.
I claim—

1. The passenger-car in which the vertical

side posts are each joined and secured directly
to a rafter or carling at the upper corner of
the car without the intervention of a plate, 15
substantially as specified.

2. A passenger-car provided with rafters
directly connected by the supporting-rod to
the sill, substantially as specified.

AARON LONGSTREET.

Witnesses:

EDW. S. EVARTS,

H. M. MUNDAY.