(No Model.)

J. DAIGNEAU.

FREIGHT CAR.

No. 259,750. Patented June 20, 1882.

Fig. 1.

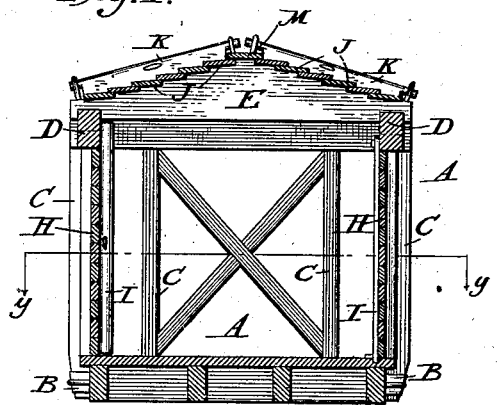


Fig. 2.

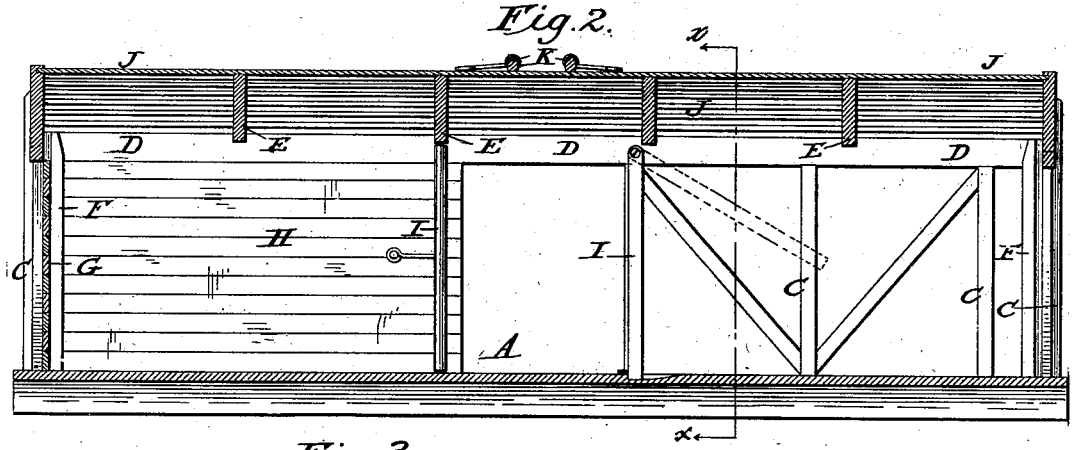


Fig. 3

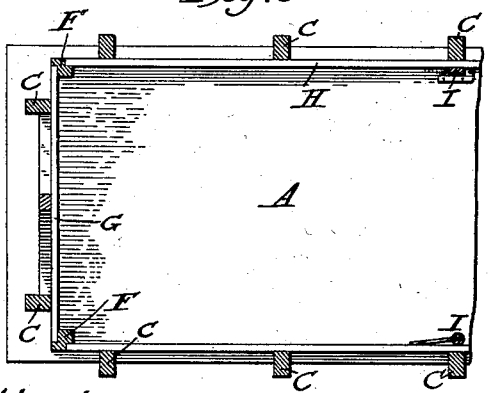


Fig. 4.

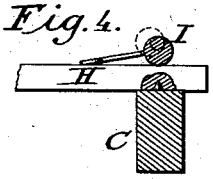
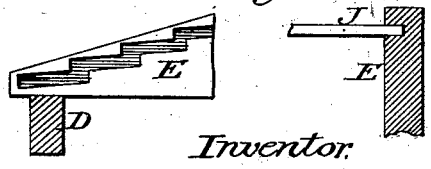


Fig. 5



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JÉRÉMIE DAIGNEAU, OF ST. HYACINTHE, QUEBEC, CANADA.

FREIGHT-CAR.

SPECIFICATION forming part of Letters Patent No. 259,750, dated June 20, 1882.

Application filed April 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, JÉRÉMIE DAIGNEAU, of the city and county of St. Hyacinthe, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Freight-Cars for Railroads, of which the following is a specification.

My invention relates to those cars which are used for transporting hay, tan-bark, lumber, and similar merchandise, and has for its object the ready conversion of the open platform-cars into housed or box cars at will, and vice versa.

It is a particular aim of the invention to secure the lumber which is used to form the roof and wall in place without the use of nails and without otherwise defacing the material, so that such material may form an incidental part of the load and be left at the end of the journey in serviceable condition. I attain this object as follows: The flat or platform car is provided with a skeleton framing consisting of uprights, longitudinal timbers, and transverse rafters framed and secured to the car in the ordinary manner. This frame is lined internally with boards of any convenient width and thickness and of suitable length, held temporarily in position against the framing by presser-bars, which are hinged, pivoted, or otherwise secured to the frame, so that they may be quickly adjusted to secure or release the boards. The roof-boards are laid with their edges overlapping each other, and are held by notched sustaining-rafters beneath them and presser-bars above. As an additional security the rafters may be provided with short points or teeth to engage in the boards, and the rafter at one end of the boards may be recessed or grooved to admit of the boards being inserted therein.

Figure 1 represents a vertical cross-section of my car on the line *x x*, Fig. 2, as it appears when provided with a closed body. Fig. 2 is a longitudinal vertical section of the car. Fig. 3 is a horizontal section on the line *y y*, Fig. 1, through one end of the car. Figs. 4 and 5 are views of details which will be hereinafter explained.

A represents the body of an ordinary flat platform-car, such as are now in common use for the transportation of heavy and coarse materials which do not need protection. As usual, the car is provided around its outer sides or edges with strong vertical sockets in which I mount the standards C, designed to sustain the side walls. At the two ends I also secure, in sockets or otherwise, standards C, similar to those at the sides. To the upper ends of the side standards I secure longitudinal beams or timbers D, and upon these timbers I mount a series of transverse rafters, E, the upper surfaces of which incline upward from their ends to the center, as shown in Fig. 1. At each corner of the frame I secure a post or standard, F, which is rabbeted on its outer sides.

In proceeding to close the ends of the car, boards G, cut to the proper length, are arranged upon each other, edge to edge, against the end standards C, with their ends seated against the outer sides of the corner-posts F, as shown in Figs. 2 and 3. It will be seen that the boards thus inserted are held securely between the corner posts and the standards and that they are held by the standards against end movement. It will be seen that the standards are of greater height than the posts, so that the boards may be passed over the tops of the posts in slipping them to their places.

The sides of the car are closed by boards H, placed upon each other against the inner sides of the standards in the same manner as at the ends. As a means of securing these side boards in place I provide the body on the inside with upright clamping-bars I, which may be suspended on pivots at their upper ends and arranged to engage at their lower ends in seats in the floor, or mounted eccentrically in bearings at their ends, so that by turning them they may be caused to clamp or release the boards.

The pendent clamping-bar is shown on the right hand in Fig. 1, while the eccentric turning bar is shown on the left in the same figure. The rotary bar is provided with a lever or handle by which to turn it, and it is arranged to turn "past the center" in order that it may not unlock accidentally. The side boards bear at their ends against the corner-posts, and are thereby prevented from sliding out endwise.

The roof is formed by the longitudinal boards J, laid on top of the rafters E and arranged to overlap at the edges, after the ordinary manner of roof-boards. The better to hold the boards in position the rafters are notched or

shouldered to conform to the under surface of the boards, as shown. The boards are held down firmly in place upon the rafters by the transverse presser-bars K, which are mounted at their ends eccentrically in plates or bearings of any suitable character on the frame, as shown, so that when turned downward they will bear firmly on the boards. Each presser-bar is provided with a handle or lever, by which it is turned.

Owing to the inclination of the roof, it is necessary, as shown, to provide two sets of the presser-bars, one set for each side. The presser-bars may be made in any form preferred, and, instead of being made eccentric, they may be secured at their ends by bolts, screws, or other equivalent fastening devices. The rafters at the ends of the boards may be extended above them and grooved or recessed to receive their ends, as shown in the drawings.

When the car is to be made perfectly tight a ridge-board, M, may be applied, as shown.

The roof, sides, and frame may be speedily removed to leave an ordinary platform-car, or the side and end walls may be used without the roof, or the roof may be left off while the car is being loaded to facilitate the operation, and subsequently applied.

Having thus described my invention, what I claim is—

1. The platform-car, in combination with the removable frame, the detachable side and roof boards, and means, substantially such as described, for securing said boards temporarily in place.

2. In a railway-car, the combination of the standards, the rabbeted corner-posts, and the clamping-bars to secure the side boards in place.

3. In combination with the rafters and the loose roof-boards, the presser-bars, substantially as described and shown, for holding the boards in place.

4. In combination with the roof-boards and the presser-bars, the rafters provided with points or studs to hold the boards, as set forth.

5. In a railway-car, the combination of a skeleton frame, loose side boards seated against the inside of the frame, and presser devices, substantially such as shown, acting against the inner sides of the boards to hold them temporarily in place.

6. The convertible railway-car, consisting of a platform-car provided with a removable skeleton frame-work, sectional side walls and sectional roofing applied to said frame-work, and means, substantially as described, whereby the roof and the wall portions are secured in place independently of each other.

JÉRÉMIE DAIGNEAU.

Witnesses:
A. HARVEY,
J. COURSABLE.