Jan. 26, 1943. K. F. NYSTROM 2,309,606

RAILWAY CAR STRUCTURE

Original Filed Aug. 3, 1940

Fig. 1

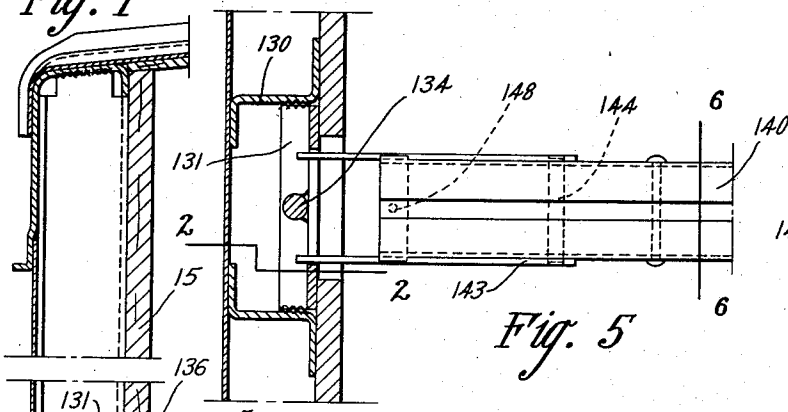


Fig. 5

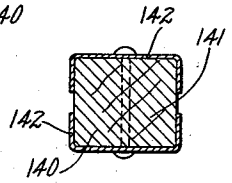


Fig. 6

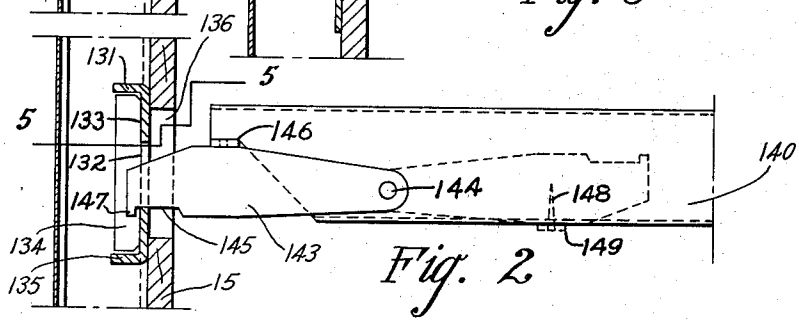


Fig. 2

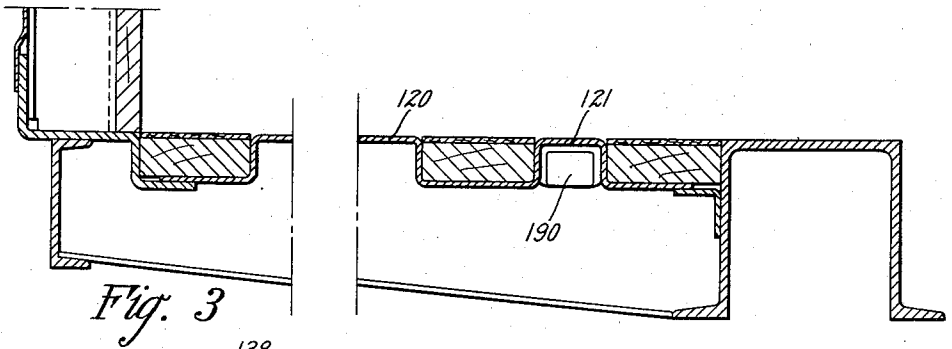


Fig. 3

Fig. 4

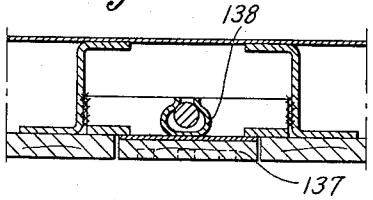


Fig. 8

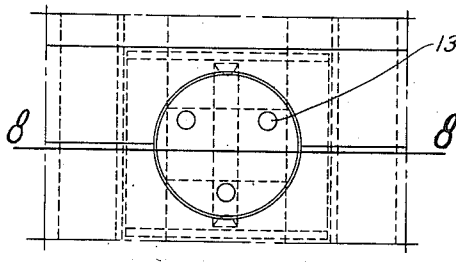


Fig. 7

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2,309,606

RAILWAY CAR STRUCTURE

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Original application August 3, 1940, Serial No. 350,487. Divided and this application December 24, 1940, Serial No. 371,530

5 Claims. (Cl. 105—369)

My invention relates specifically to means to anchor the lading directly to the side wall framing of the car to prevent the lading from shifting, which means is desirable for machinery or when only a partial load is in the car. Such means also provides means to support beams extending crosswise of the car for an upper deck (spaced above the floor of the car) for a second tier of lading. Such upper decks are desirable to support the upper part of the lading independently of the lower part of the lading to prevent the upper part from crushing the lower part, such, for instance, as oranges or potatoes and the like when shipped in bulk or light package stuff, such as breakfast foods. Automobile bodies are frequently transported in double deck arrangement. Unfinished tractors may be loaded on the floor of the car and the loose parts thereof placed on the upper deck. These tractors are completed (or assembled as it is called) near point of sale.

In the drawing:

Figs. 1, 2, 3 and 4 show a cross section of a typical railway car showing my improved anchorage and deck beam in the side wall thereof and my floor anchorage in the floor thereof.

Fig. 2 shows the anchorage in the side wall and the deck beam mounted therein.

Fig. 5 is a section on line 5—5 of Fig. 2.

Fig. 6 is a section on line 6—6 of Fig. 5.

Fig. 7 shows the closure for the opening in the lining for the reception of the latch mechanism.

Fig. 8 is a section on line 8—8 of Fig. 7.

Each unit comprises a vertical cripple post 130 preferably extending from the sill to the plate and secured thereto. These cripple posts are positioned adjacent a corner or door post and have a preferably channel shaped bracket 131 having an aperture 132 in the web 133 thereof which extends between the cripple post 130 and the adjacent vertical post and is secured thereto so as to be supported thereby. If it is desired to support a unit by a corner post or door post the bracket extends between the flanges thereof and the cripple post is omitted.

A short vertical rod or other member 134 is positioned adjacent the aperture 132 in the bracket 131 and is preferably welded to the web and both flanges 135 of the bracket. An opening 136 is provided in the lining 15 registering with the aperture 132 in the bracket, which opening is temporarily closed by the closure member 137, which is provided with a clasp spring 138 to snap over the rod 134. The closure member is provided with finger holes 139 for holding the closure member when opening or closing the opening. The lading is held in place by inserting a steel tape or other means through the aperture 132 in the bracket and wrapping it around the rod 134. If desired, the tape may extend between brackets on opposite sides of the car.

A plurality of beams 140 are provided extending crosswise of the car to support an upper deck above the floor of the car. As illustrated, each of these beams comprises a wooden piece 141 between two steel channel members 142 secured together by bolts or rivets. A small space is left between the two channel members so that decking, blocking, etc., may be spiked to the wooden beam. A pair of latches 143 are secured to each end of the beam by a pivot pin 144, which latches extend beyond the beam and have notches 145 in the under sides thereof for engagement with the parts of the brackets below the apertures therein. The latches at the same end of the beam are connected for cooperative action by the cross piece 146, which piece engages the end of the beam 140 to support it.

Figs. 2 and 5 show the beam being supported by brackets on the opposite sides of the car (only one side of the car being shown). When it is desired to remove the beam one end of the beam is raised until the lip 147 will pass through the aperture in the bracket and then the beam is moved away from the bracket until the pair of latches swings downwardly by gravity. The beam is then moved in the opposite direction until the pair of latches at the opposite end of the beam also swings downwardly. Both pairs of latches are then moved into the position shown in dotted lines in Fig. 2 and a small nail 148 is driven through the hole in the cross piece 149 into the wooden beam 141 to temporarily hold the latches to prevent them from being damaged when stored. The beams are preferably stored under the car until again wanted.

When the beams are not in use, or the device is not being used to secure the lading in place, the closure means 137 is clamped in place by the spring 138 to prevent grain or other plastic lading from getting behind the lining. The clamping means shown comprises a spring 138 formed to yieldingly clamp over the rod 134. The outer surface of the closure means 137 is flush with the inside surface of the lining 15, as a projection would interfere with the lading.

Any number of units of anchor and deck supports may be used in a car to accommodate various kinds of lading and upper decking. Several series of units may be used to provide upper decks at different heights from the floor of the

car and at different distances from the end wall of the car to accommodate any partial load.

The lading may be secured against shifting by putting two deck beams in place and securing the lading in place between the deck beams.

The accompanying drawing illustrates the preferred form of the invention, though it is to be understood that the invention is not limited to the exact details of construction shown and described, as it is obvious that various modifications thereof, within the scope of the claims, will occur to persons skilled in the art.

This is a division of my co-pending application Serial No. 350,487 filed August 3, 1940.

I claim:

1. An anchorage device for a railway car having vertical side wall posts, a sheathing and a lining, said device comprising a bracket supported by said posts between the sheathing and the lining and having an aperture therein registering with an opening in said lining, a vertical rod secured to the inside of said bracket so as to be accessible from the inside of the car, and a closure member for the opening in said lining provided with a clasp spring engageable with said rod to hold said closure member in place.

2. An anchorage device for a railway car having vertical side wall posts, a sheathing and a lining, said device comprising a bracket supported by said posts between the sheathing and the lining and having an aperture therein registering with an opening in said lining, a vertical rod secured to the inside of said bracket so as to be accessible from the inside of the car, and a closure member for the opening in said lining provided with a clasp spring engageable with said rod to hold said closure member in place, said closure member providing a flush surface with the inner face of the lining and having finger holes therein.

3. A removable deck supporting device for a railway car having spaced apart walls each comprising posts, sheathing and lining, said device comprising a bracket in each wall between sheathing and lining thereof and supported by the posts thereof, said bracket having an aperture therein registering with an opening in the lining, a beam extending crosswise of the car to support a deck above the floor of the car, means at each end of said beam engageable with said brackets so as to be supported thereby, said means being disengageable from said brackets for removal of said beam, said means comprising a pair of latches pivotally connected to said beam on opposite sides thereof and extending beyond said beam for engagement with said brackets, and a cross piece connecting said latches and engaging the end of the beam between the pivoted connection thereof and the bracket, whereby when the latches are disengaged from the bracket the beam may be moved crosswise of the car until the latches swing downwardly and then moved in the opposite direction until the opposite latches are disengaged from the opposite bracket.

4. A combined removable deck support and lading anchoring device for a railway car having vertical side wall posts, a sheathing and a lining, said device comprising a bracket supported by said posts between the sheathing and the lining and having an aperture therein registering with an opening in said lining and a member secured to the inside of said bracket so as to be accessible from the inside of the car for anchoring a lading thereto by a steel tape or the like, said device being arranged to support one end of a deck beam extending crosswise of the car to support a deck above the floor of the car, said beam being provided with means engageable with said bracket so as to be supported thereby and retained therein, said means being disengageable from said brackets for removel of said beam.

5. A structure as defined in claim 4 wherein said beam comprises a wooden piece secured between two steel channel members with a space between the two channel members for the purpose specified.

KARL F. NYSTROM.