Oct. 9, 1923. 1,470,415

V. R. WILLOUGHBY

CAR CONSTRUCTION

Filed Oct. 31, 1922

Fig. 1.

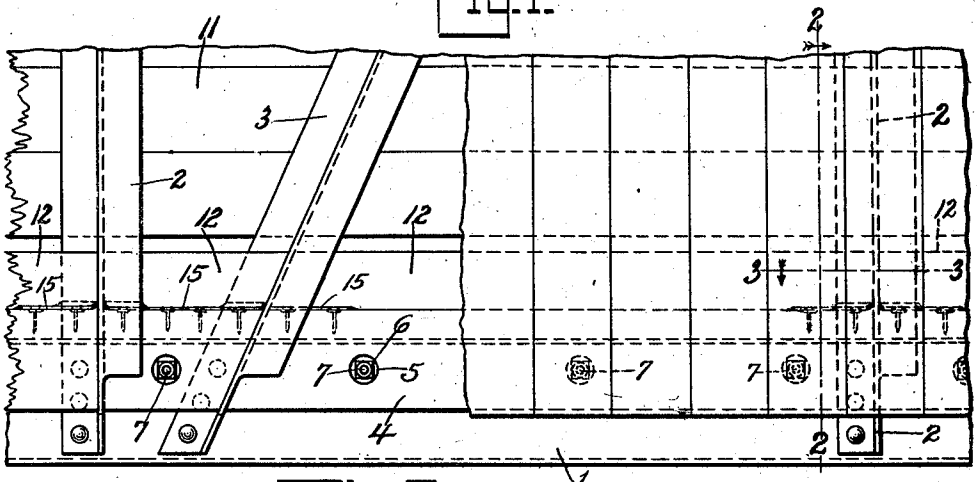


Fig. 3.

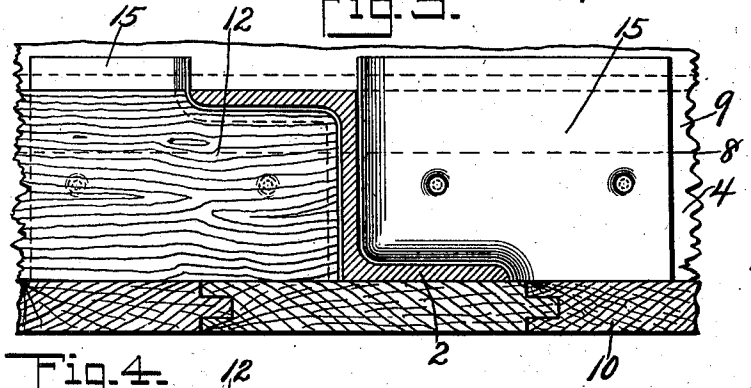


Fig. 2.

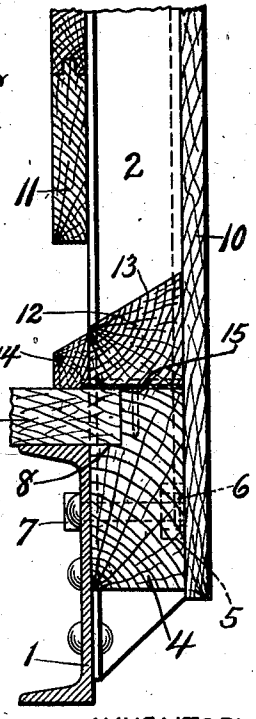
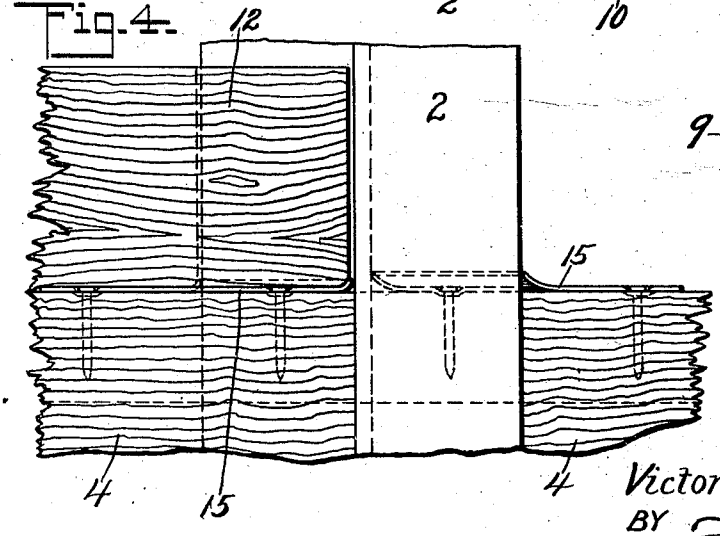


Fig. 4.



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UNITED STATES PATENT OFFICE.

VICTOR R. WILLOUGHBY, OF RIDGEWOOD, NEW JERSEY, ASSIGNOR TO AMERICAN CAR AND FOUNDRY COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

CAR CONSTRUCTION.

Application filed October 31, 1922. Serial No. 598,097.

To all whom it may concern:

Be it known that I, VICTOR R. WILLOUGHBY, residing at Ridgewood, Bergen County, New Jersey, and being a citizen of the United States, have invented certain new and useful Improvements in a Car Construction, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and to use the same, reference being had to the accompanying drawings, which illustrate 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.

In said drawings:

Fig. 1 is a fragmentary side elevation of a car with the invention applied thereto;

Fig. 2 is a section taken on the line 2—2 of Fig. 1;

Fig. 3 is a section taken on the line 3—3 of Fig. 1; and

Fig. 4 is a view in elevation at one of the side posts the sheathing being removed and one of the filler blocks being omitted.

It is an object of this invention to provide an improved sealing means for the joint between the side and flooring of a grain car which will be simple in construction and durable and will not be caused to leak by the racking or distortion of the car.

In the drawings this invention is shown applied to a car having a channel side sill 1 to which are secured Z-shaped side posts 2 and side braces 3. Secured to the side sill 1 and extending between the posts 2 and braces 3 is a side nailing strip 4 counterbored, as at 5, to receive the nuts 6 of the bolts 7 which secure the nailing strip to the side sill 1. The nailing strip 4 is rabbeted, as at 8, to receive the flooring 9 which rests upon the upper flange of the side sill. Secured to the side nailing strip is the sheathing 10 while secured to the posts and braces in the usual manner is the lining 11. Resting upon the side nailing strip 4 and flooring 9 and extending between the posts 2 and braces 3 are filler blocks 12 provided with inclined upper surfaces 13 while secured to the floor and engaging the front faces of the filler blocks is a grain shoe 14 having an inclined upper surface which forms substantially a continuation of the inclined surface 13 of the filler blocks 12.

At each side of each post and side brace there is placed upon the side nailing strip and secured thereto a plate 15 which extends a short distance away from the posts or brace and which, adjacent the posts or brace, is provided with an upturned flange which is shaped to conform to the shape of the post or brace and which possesses sufficient resiliency to stay in engagement with the post or brace despite the movement of the car in service. Each plate 15 is of sufficient width to project beyond the joint of the flooring and the nailing strip and beyond the joint between the filler block and the grain shoe, the lower surfaces of the grain shoe and filler block being cut away for a short distance to receive the plate 15.

While I have shown and described this invention as applied to the side of a car, it is to be understood that this invention may be applied equally well to the car ends.

What is claimed is:

1. In a car, posts, a nailing strip between said posts, a filler block between said posts and engaging said strip and metal plates between said filler block and strip adjacent said posts, said plates being flanged to conform to said posts.

2. In a car, posts, a floor, a nailing strip between said posts and rabbeted to receive said floor, a filler block between said posts and engaging said strip and floor, a grain shoe engaging said filler block and floor and plates between said grain shoe and floor adjacent said posts, said plates being flanged to conform to said posts.

3. In a car, side posts, a floor, side nailing strips between said posts and rabbeted to receive said floor, filler blocks between said posts and engaging said floor and nailing strips and plates between said filler blocks and said floor and nailing strips adjacent posts, said plates having upturned flanges fitting said posts.

4. In a car, side posts, a floor, side nailing strips between said posts and rabbeted to receive said floor, filler blocks between said

posts and engaging said floor and nailing strips and plates secured to said nailing strips and projecting between said filler blocks and floor adjacent said posts.

5. In a car, side posts, a floor, side nailing strips between said posts and rabbeted to receive said floor, filler blocks between said posts and engaging said floor and nailing strips and a grain shoe engaging said filler blocks and floor.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

VICTOR R. WILLOUGHBY.

Witnesses:
LEO V. JOYCE,
BESSIE D. STRONG.