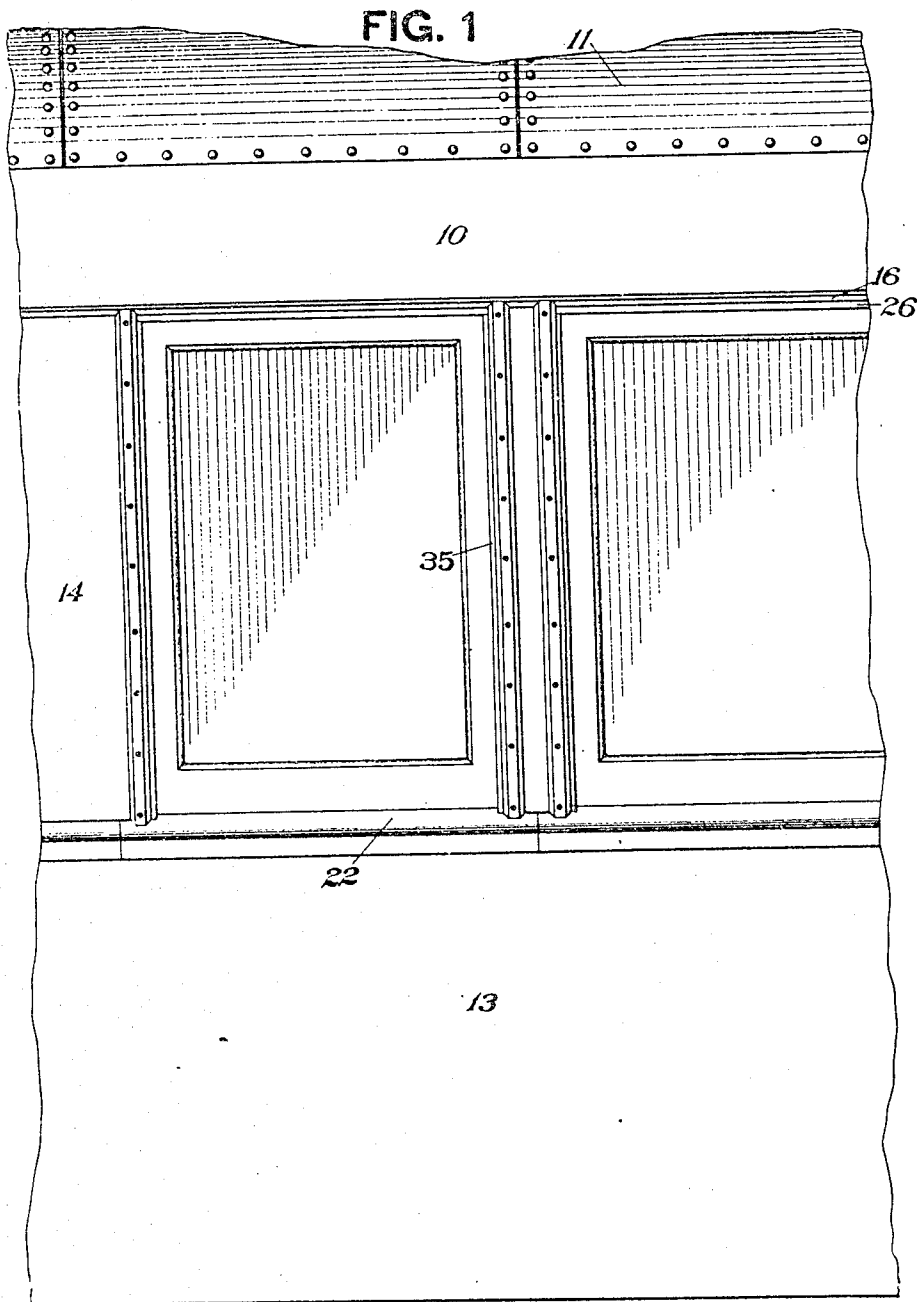


No. 854,331.

PATENTED MAY 21, 1907.

A. CHRISTIANSON.
PASSENGER AND LIKE CAR.
APPLICATION FILED SEPT. 7, 1906.

2 SHEETS—SHEET 1.



WITNESSES.

Arthur J. Loefer
Robert C. Lott

INVENTOR.

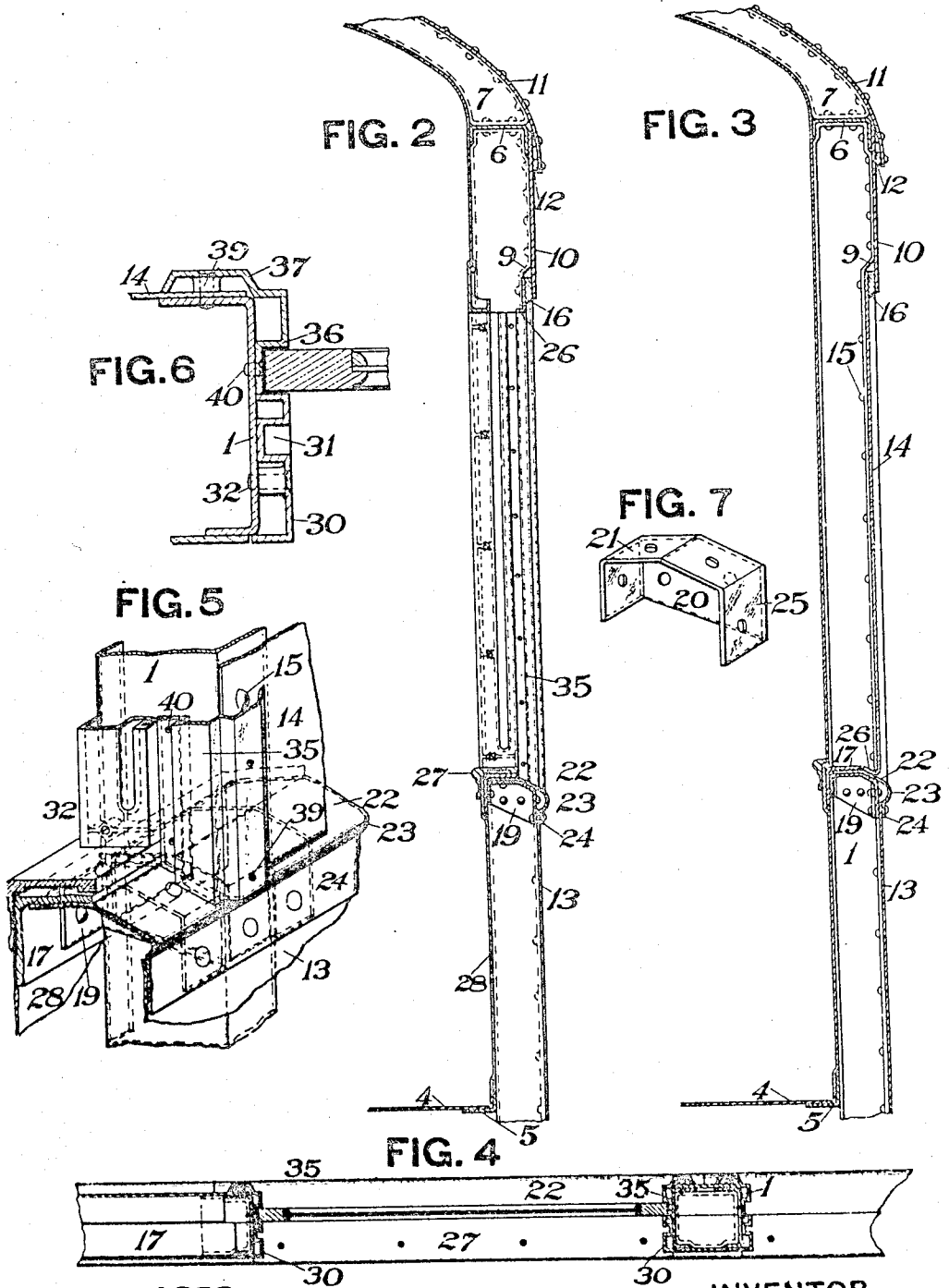
Anders Christianson
By Kay Zetter & White
attorneys

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2 SHEETS—SHEET 2.



WITNESSES.

Arthur H. [unclear]
Robert C. Follen

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Att. in [unclear]

BEST AVAILABLE COPY
UNITED STATES PATENT OFFICE

ANDREW CHRISTIANSON, OF BUTLER, PENNSYLVANIA, ASSIGNOR
STANDARD STEEL CAR COMPANY, OF PITTSBURG, PENNSYLVANIA,
A CORPORATION OF PENNSYLVANIA.

PASSENGER AND LIKE CAR.

No. 854,331.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed September 7, 1906. Serial No. 333,620.

To all whom it may concern:

Be it known that I, ANDREW CHRISTIANSON, a resident of Butler, in the county of Butler and State of Pennsylvania, have invented a new and useful Improvement in Passenger and Like Cars; and I do hereby declare the following to be a full, clear, and exact description thereof.

This invention relates to metallic railway cars, and more especially to passenger, baggage, mail and express cars.

The object of the invention is to provide a metallic exterior finish for cars of this character which is simple and easy of application, which has the appearance of an ordinary wood finished car, and which is capable of being given a neat and ornamental finish.

To the accomplishment of the aforesaid object the invention consists of the arrangement and combination of parts hereinafter described and claimed.

In the accompanying drawings Figure 1 is a side view of a portion of a passenger car embodying my invention; Fig. 2 is a transverse section of the car side taken through a window opening; Fig. 3 is a similar view taken between windows; Fig. 4 is a horizontal section through the car side; Fig. 5 is a detail perspective view of a portion of a side post, the water table and connecting bracket; Fig. 6 is an enlarged sectional detail of a portion of Fig. 4; and Fig. 7 is a perspective view of one of the brackets.

The frame of the car may be of any desired construction except for the details which will be hereinafter described and claimed.

As shown in the drawings, the side frame includes posts 1, of general channel form, placed with their webs extending transversely of the car body. These posts are shown as of pressed plate, having outer flanges wider than the inner flanges, although this is not necessary so far as finish is concerned. These posts are secured to the under-frame in any suitable way (not shown). On the inner side of the post at the level of the floor 4 is an angle bar 5 secured to the posts and underframe. The upper ends of the posts have secured thereto the side plate 6, which is shown of channel form with the flanges projecting downwardly, and to which are secured the lower deck members 7, of the car-lines.

The peculiarity of the side posts, as far as the exterior finish is concerned, consists in the fact that the posts have their upper portions projected outwardly beyond their main bodies, as shown at 9. This is for the purpose of giving a beaded or ornamental finish at the bottom of the facia plate or lettering board 10, which is riveted to the outer flanges at the projecting upper portions of the stakes, with its upper edge overlapped by the lower deck plates 11, having an interposed filling strip 12, to give a slight cornice at this point.

The main side plates 13 of the car extend from the bottom edge of the car side to the window sills. Between the window openings above these plates are other finishing plates 14, called dead plates, which extend upwardly, being secured to the outer flanges of the posts by rivets 15 and having their upper edges inside of the lower edge of the facia plate 10, as shown in Fig. 3. A filling strip 16, is preferably inserted at this point so as to give a beaded or ornamental finish at the lower edge of the facia plate or lettering board.

At the bottom of the window openings of the car is a belt rail 17, which extends continuously from end to end, this being shown as an angle bar having its horizontal leg notched so as to fit over the inner edges of the posts, but having the vertical leg inside and continuous from end to end of the car. This belt rail is secured to the posts by means of connecting brackets 19, which are shown as pressed plates, although they might be cast. These brackets have a vertical web portion 20, riveted to the web of the post and having integral flanges on the inner, outer and top edges, as shown. The flange 21 at the top is horizontal to the outer edge of the belt rail, and then slopes downwardly. The bottom of the window opening on the outside is formed by a water table 22, which is formed of a pressed plate having its inner edge secured between the brackets 20, and the horizontal leg of the belt rail, said water table sloping downwardly as shown and projecting beyond the exterior finishing plates of the car, and then bowed inwardly to form the bead 23, and having its lower edge 24 turned downwardly and overlapping the upper edges of the main exterior sheets 13, and se-

by rivets passing through the upper edges of sheets 13, and the flange 25 of the brackets 19. These water tables are therefore supported practically by the brackets 19. They are notched to pass over the side posts. If desired one continuous water table for the whole length of the car might be employed, but for convenience of manufacture I prefer to make the same in sections, the ends meeting in the spaces between the window openings. In these spaces the dead plates 14 have inturned lower edges 26, shown in Fig. 3, resting on the sloping face of the water table.

The window sash rests directly on the sloping face of the water table and is adapted to pass upwardly in the space at the upper end of the car side. The head of the window opening is formed by an angle bar 26, riveted to the outer faces of the posts with a flange projecting inwardly and contacting with the window sash. The window sill is preferably a metallic member 27, shaped to give an ornamental appearance, and covering the belt rail and extending downwardly inside of the same in a manner to give a beaded appearance and overlapping the upper edges of the outside finishing sheets 28, being secured with the latter to the vertical flange of the belt rail.

The inside window stops are shown at 30, these being of metal construction, having the groove 31, for receiving the window curtains and being recessed on the back so as to lighten the same, and are secured to the webs of the posts by tap screws 32, whose heads fit in the grooves 30. The outer window stops are shown at 35, these being recessed on the back to lighten the same and having the integral projecting portion 36, which forms the lining or the sash groove. Integral with the outer window stops and at right angles thereto, is a molding portion 37, which overlaps the edges of the outside finishing plate 14. The molding portion 37 is recessed on its back so as to cover and receive the heads of the rivets 15 of said plates. This combined molding and window stop is secured in place by means of screws 39, extending into the outer flange of the post and other screws 40, extending into the webs of the posts.

By the construction above described, the car may be given an all metallic exterior finish. It contains a minimum number of parts, therefore greatly reducing the weight, as well as labor and cost of construction. The parts, furthermore are so arranged that they give an ornamental appearance to the car. Practically all of the fastening means are concealed so that the car as a whole is very light.

While I prefer the special form of side posts and framing shown, this is not essential, as the plates and window stops may be applied in various forms of framing without departing from the spirit of my invention.

What I claim is:

1. In a metallic railway car, the combination of side posts provided with outwardly extending portions at their upper ends, finishing sheets secured to the outer edges of the posts below said outwardly extending portions, and a facia plate or lettering board secured to the outwardly projecting portions of the posts and having its lower edge overlapping the outside finishing sheets.

2. In a metallic railway car, the combination of side posts having their upper ends projecting outwardly beyond their main bodies, exterior finishing sheets secured to the outer edges of the posts and extending up to the outwardly projecting portions thereof, a facia plate or lettering board secured to the outwardly projecting portions at the upper ends of the posts and having its lower edge overlapping the upper edges of the main finishing sheets, a filling strip between said plates, and securing means passing through the same.

3. In a metallic railway car the combination of side posts providing window openings there between, side sheets secured to the outer edges of the posts and extending up to the bottom of said window openings, and a beaded metallic water table secured between the posts and the window openings and having its edge below the bead projecting downwardly and overlapping the upper edges of the side sheets.

4. The combination in a metallic railway car of side posts, brackets secured thereto at the bottoms of the window openings, a side sheet secured to the outer edges of the posts and extending up to the brackets, and a metallic water table secured to the brackets and extending outwardly, being beaded and bent downwardly and overlapping the upper edges of the finishing sheets and secured with the same to said brackets.

5. In a metallic railway car the combination of side posts, a belt rail secured thereto at the bottom of the window openings, finishing sheets secured to the outer edges of the posts and extending up to the belt rail, and a metallic water table secured to the belt rail and extending outwardly and downwardly with the lower edge overlapping the side finishing sheets.

6. In a metallic railway car, the combination of side posts, a belt rail, brackets securing the belt rail to the side posts and having their upper faces sloping downwardly and outwardly, and a metallic water table provided with an outwardly and downwardly sloping portion resting on the brackets and extending beyond the car side and then bent inwardly to form a bead.

7. In a metallic railway car, the combination of side posts, a belt rail secured thereto, side sheets, window sills on the belt rail, a water table comprising a metallic sheet hav-

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ing its inner edge secured below the belt rail and sloping thence outwardly and downwardly, being provided with a bead beyond the car side and having its lower edge overlapping the car side sheets.

8. In a metallic railway car, the combination of side posts, a belt rail, brackets for securing the belt rail to the side posts, side sheets, a water table consisting of a metallic sheet having its inner edge secured between the brackets and the belt rail and extending outwardly and downwardly beyond the sides of the car and then bent inwardly to form a bead and having the lower edge overlapping the side sheets.

9. In a metallic railway car the combination of side posts providing window openings, a water table secured to the posts and extending not only in the spaces of the window openings but also in the spaces unoccupied by windows and having a downwardly sloping upper face, and outside finishing plates secured to the side posts in the spaces between the windows and having their lower edges flanged inwardly and resting on the sloping face of the water table.

10. In a metallic railway car, the combination of posts, side sheets secured to the outer edges thereof, and a combined molding and outer window stop secured to a post and provided with a recessed portion at right angles to its body and overlapping the edges of the side plates and concealing the securing means thereof.

11. In a metallic railway car, the combination of side posts of channel form placed with their webs transverse of the car and providing window openings there between, outside finishing sheets secured to the outer flanges of the posts, and an outer window stop fitting against the webs of the post and having a molding portion at right angles which overlaps the edges of the outside finishing sheet.

12. In a metallic railway car, the combination of side posts providing window openings there between, outside finishing sheets secured to the outer edges of the posts below and between the window openings, a metallic water table secured between the posts and having its outer edge overlapping the plates below the window openings, and a

combined outer window stop and a molding portion at right angles secured to a post and covering the edges of the plates at the sides of the window openings.

13. In a metallic railway car, the combination of channel shaped side posts placed with the webs transversely of the car and providing window openings there between, outside finishing sheets secured to the posts both below the window openings and between the same, a water table secured between the posts of the window openings and extending outwardly and downwardly and overlapping the upper edges of the sheets below the window openings, and a combined window stop and molding recessed on its back and overlapping the edges of the sheets at the sides of the window openings and concealing the fastenings of the latter.

14. In a metallic railway car, the combination of posts providing window openings there between and having webs transverse of the car, outside finishing sheets, a metallic inside window stop grooved for receiving the curtains and secured to the webs of the posts, and a metallic outside stop having an integral groove lining and a molding part at right angles thereto and overlapping the side sheets.

15. In a metallic railway car, the combination of channel shaped posts having the webs arranged transversely of the car, outside finishing sheets secured to the outer edges of the posts both below and between the window openings, an inside metallic window stop secured to the webs of the posts and provided with a groove for the curtains, a metallic combined outside window stop and molding secured to the posts and having a molding portion at right angles thereto and recessed on its back and overlapping and concealing the securing means for the side sheets, and fastening means passing through said molding portion and the outside flange of the post.

In testimony whereof I the said ANDREW CHRISTIANSON have hereunto set my hand.

ANDREW CHRISTIANSON.

Witnesses:

ROBERT C. TOTTEN,
J. R. KELLER.