

No. 822,474.

PATENTED JUNE 5, 1906.

A. PORTER.
CAR CONSTRUCTION.

APPLICATION FILED JULY 3, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

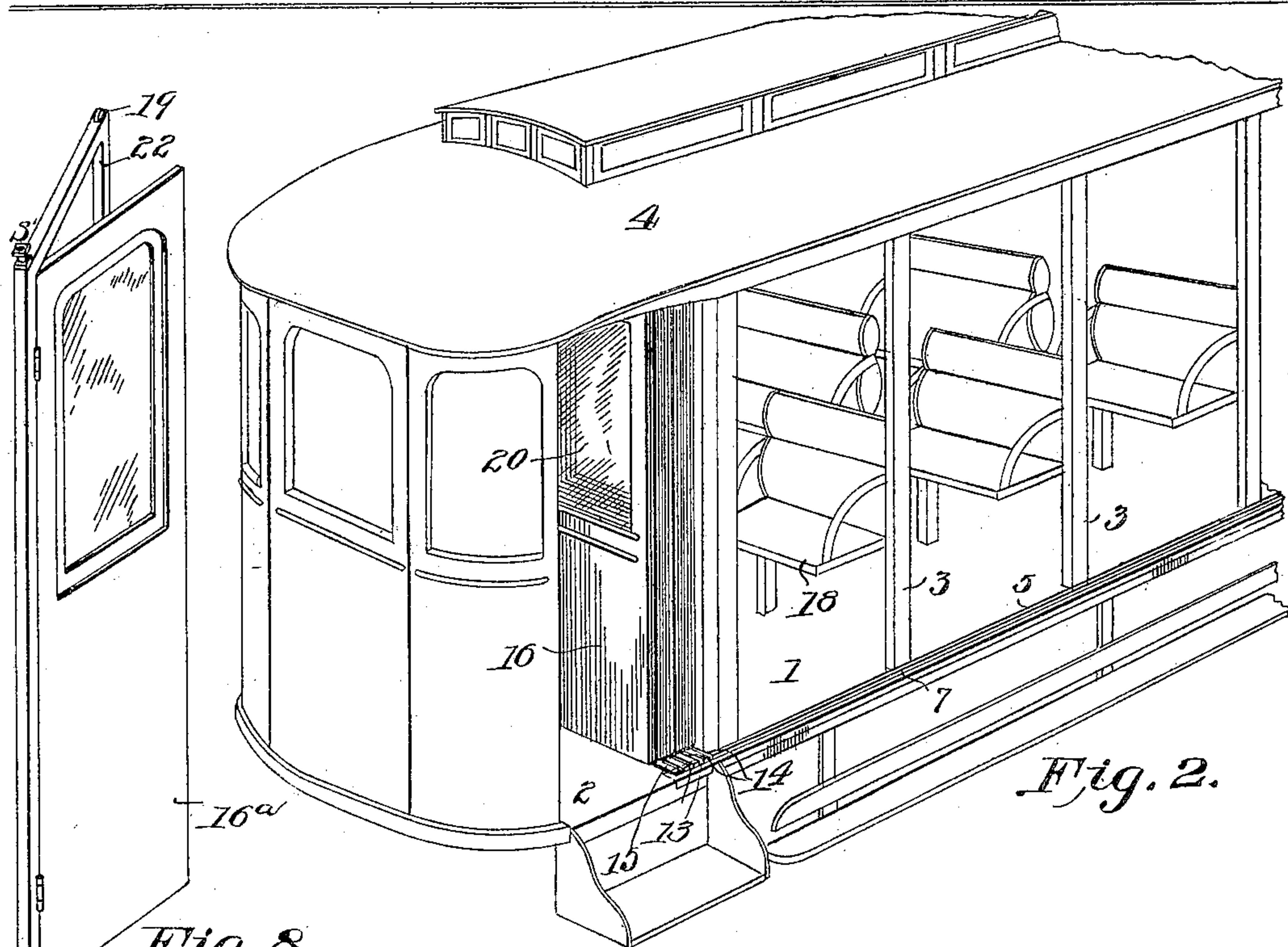
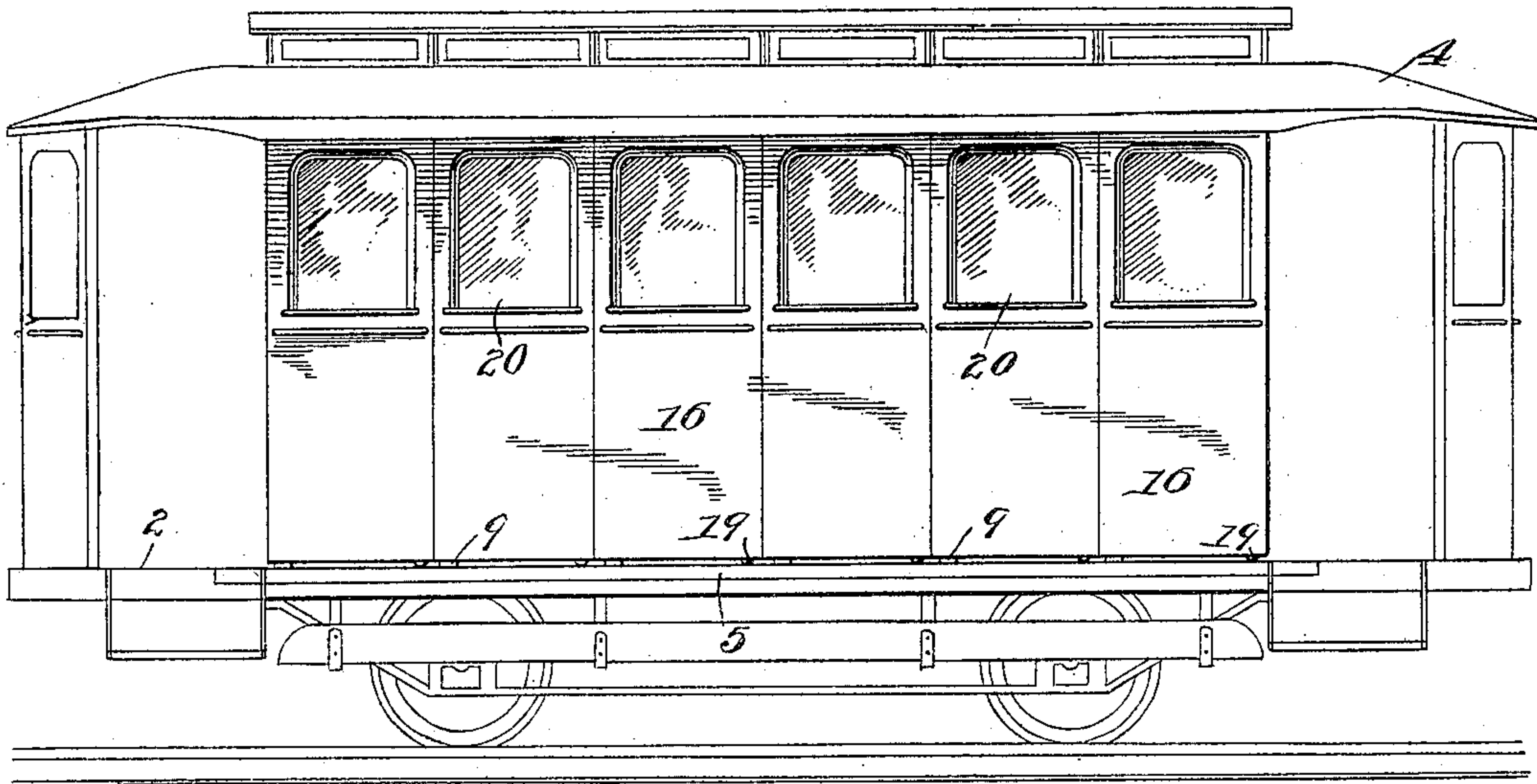


Fig. 2.

Fig. 8.



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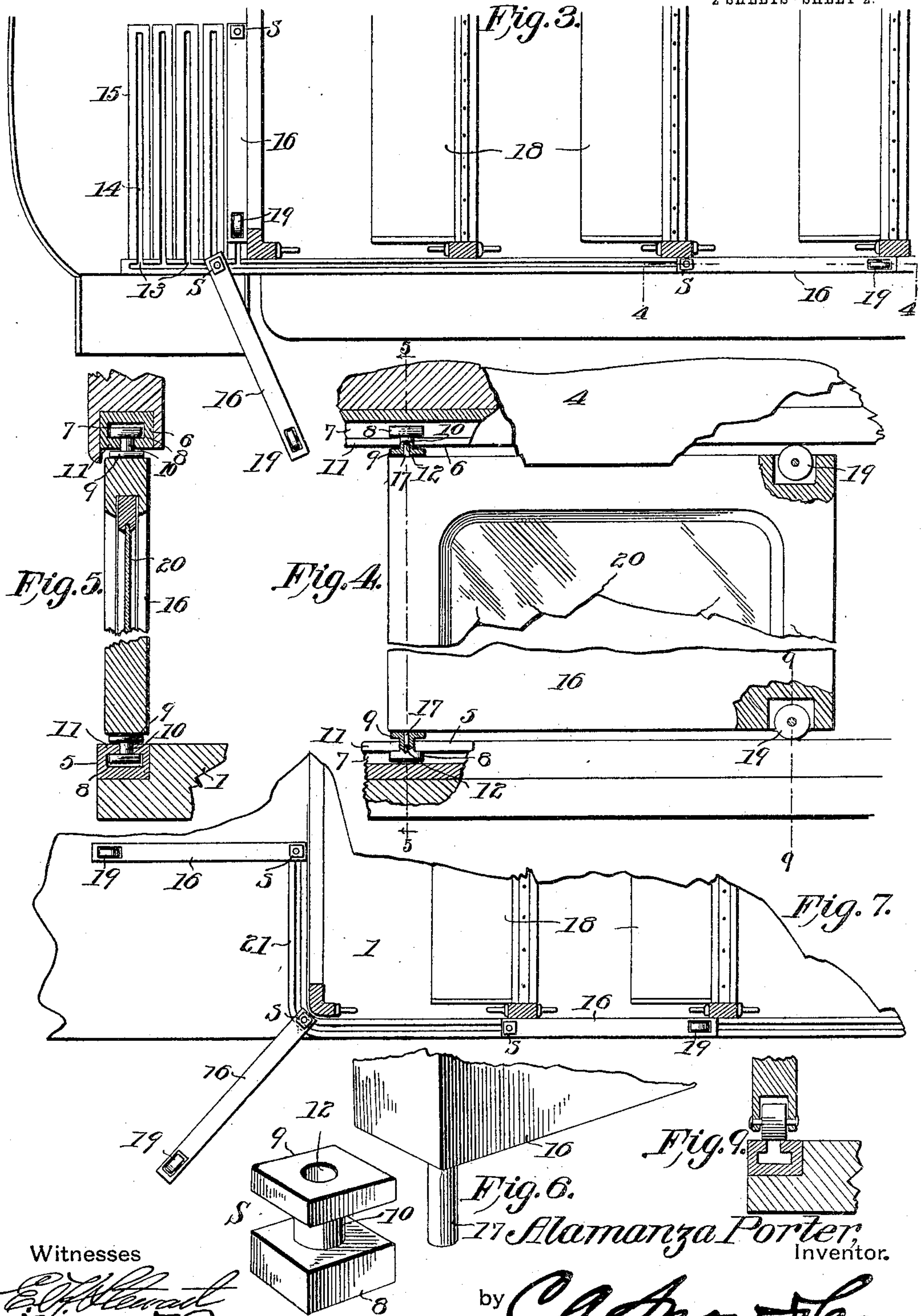
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ALAMANZA PORTER, OF SCRANTON, PENNSYLVANIA.

CAR CONSTRUCTION.

No. 822,474.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed July 3, 1905. Serial No. 268,126.

To all whom it may concern:

Be it known that I, ALAMANZA PORTER, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and useful Car Construction, of which the following is a specification.

This invention relates to construction of cars, especially for street-railway use, and it has particular reference to what are generally known as "summer-cars," in which the seats are constructed transversely of the car-body, the object of the invention being to provide improved means for inclosing the sides of the car to protect the occupants of the car in wet and inclement weather, the nature of the improvement being such that by the use thereof a summer-car may be practically transformed into a closed or winter car.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a side view of a car equipped with the improved closures, the same being shown in operative position. Fig. 2 is a perspective view of one end of a car, showing the closures in the position where they are stored when not in use. Fig. 3 is a horizontal sectional detail view. Fig. 4 is a longitudinal vertical sectional detail view taken on the plane indicated by the line 4 4 in Fig. 3. Fig. 5 is a vertical transverse sectional detail view taken on the plane indicated by the line 5 5 in Fig. 4. Fig. 6 is a perspective detail view showing the pivotal supporting means for the closures of the device. Fig. 7 is a horizontal sectional detail view illustrating a modification. Fig. 8 is a perspective detail view illustrating another modification. Fig. 9 is a sectional detail view taken on the line 9 9 of Fig. 4.

Corresponding parts in the several figures

are indicated throughout by similar characters of reference.

This invention is applicable to most, if not all, of the various forms of open or summer cars now in use, and the drawings illustrate a conventional car-body including the floor 1, platform 2, and uprights 3, supporting the roof 4. Only one side of the car has been shown, it being understood, of course, that the other side is an exact duplicate.

At the outer edge of the floor is laid a track 5, a mate to which, 6, is supported under the roof near the outer edge of the latter. The tracks 5 and 6 are provided with T-grooves 7, in which supporting-blocks S are mounted for sliding movement, said supporting-blocks comprising inner and outer members 8 and 9, preferably rectangular in shape and connected by a shank 10, the latter fitting between the flanges 11 of the rails, while the inner blocks 8 move in the widened portions of the T-grooves. The outer members of the supporting-blocks are provided with cylindrical recesses or bores 12, extending into the shanks 10 or through the supporting-blocks, if preferred.

The rails of the tracks 5 are laid flush with the floor of the car and are extended for some distance along the edges of the platforms, where they are provided in their inner edges with notches 13, communicating with grooves 14 of similarly-constructed track-rails 15, laid upon the platform transversely of the car-body. It is obvious that the supporting-blocks may be very readily removed from the main tracks into engagement with the auxiliary track-rails 15.

Closures 16, resembling doors, are provided, each of said closures being provided near one edge and at its upper and lower corners with pintles 17, engaging the bores 12 of a pair of the supporting-blocks S, movable, respectively, in the lower and upper tracks. The said doors are obviously made of suitable height to fit between the lower and upper track, and they are preferably made of a weight approximately equal to the distance from center to center of the uprights 3, thus forming complete closures for the open spaces adjacent to the ends of the car-seats, which latter are shown at 18. The doors or closures are provided near their free edges with track-engaging rollers 19, which are of a width exceeding the width of the grooves in the track-rails, so that said free edges of the doors may be readily swung outward for the

purpose of enabling passengers to enter the car or descend from the same. Locking or latching mechanism may be provided; but it has not been shown, not forming a part of the present invention.

Each of the doors or closures may be provided with a transparent pane 20 and with any other suitable and appropriate finish.

The doors or closures when not in use may be stored upon the side tracks located on the platforms. When desired for use, the said doors are moved outward until the supporting-blocks engage the main-track rails, along which they may be moved to the desired position. It is obvious that within the scope of the invention all the doors belonging to one side of the car may be stored upon one end platform, or they may be divided between the two platforms usually found at the ends of the car.

Under the modification illustrated in Fig. 7 of the drawings no side tracks are provided; but the main-track rails are provided with inturned ends, one of which is shown at 21. When this construction is resorted to, the doors or closures may be simply swung around the curve, as shown in Fig. 7, and disposed upon the platform longitudinally upon the body of the car.

Under another modification (illustrated in Fig. 8 of the drawings) each of the doors or closures (here designated 16^a) is hingedly mounted in a frame 22, having track-engaging supporting-blocks (here designated S') at their upper inner corners. Under this modification the frames 22 when adjusted in position may be secured by any suitable means, so that the doors may be operated independently thereof.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood by those skilled in the art to which it appertains. The construction is extremely simple, and the device is capable of being readily applied to summer-cars of ordinary construction, it being understood, of course, that such changes and modifications in the shape, size, and proportions of the closures as may be found necessary to adapt them to various types of cars are to be considered as being within the scope of the invention.

Having thus described the invention, what is claimed is—

1. Upper and lower longitudinal tracks,

and door-sections supported for slidable and pivotal movement between said tracks and provided near their free edges with track-engaging rotary members.

2. Longitudinal upper and lower tracks having T-grooves, supporting-blocks slidably engaging said grooves, and door-sections pivotally connected with said supporting-blocks.

3. Longitudinal, grooved upper and lower tracks, grooved side tracks diverging therefrom and communicating with the main tracks through notches in the sides of the latter, supporting members engaging the grooves of the tracks, and door-sections having pintles engaging said supporting members.

4. Upper and lower longitudinal tracks having T-grooves, supporting members engaging said grooves and comprising inner and outer members having connecting-shanks and provided with recesses or bearings, door-sections movable between the surfaces of the tracks and having pintles engaging the bearings in the supporting members, and track-engaging rollers near the free edges of the door-sections.

5. In a street-car, longitudinally-disposed upper and lower tracks having grooves therein, divergent track members upon the platforms of the car, and a plurality of door-sections mounted slidably and pivotally between the main track-sections and supported for storage upon the divergent track-sections.

6. The combination with a street-car having upper and lower track-sections, of door-sections, and supporting sections or frames hingedly connected therewith, said sections or frames being slidably supported between the upper and lower track-sections.

7. In a street-car, a movably-supported frame, and a door-section hingedly supported in said frame to swing upon an approximately vertical axis.

8. Upper and lower track-rails, a frame supported for slidable and swinging movement between said rails, and a door-section hingedly supported in said frame.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALAMANZA PORTER.

Witnesses.

W. W. BAYLOR,
H. S. KELLER