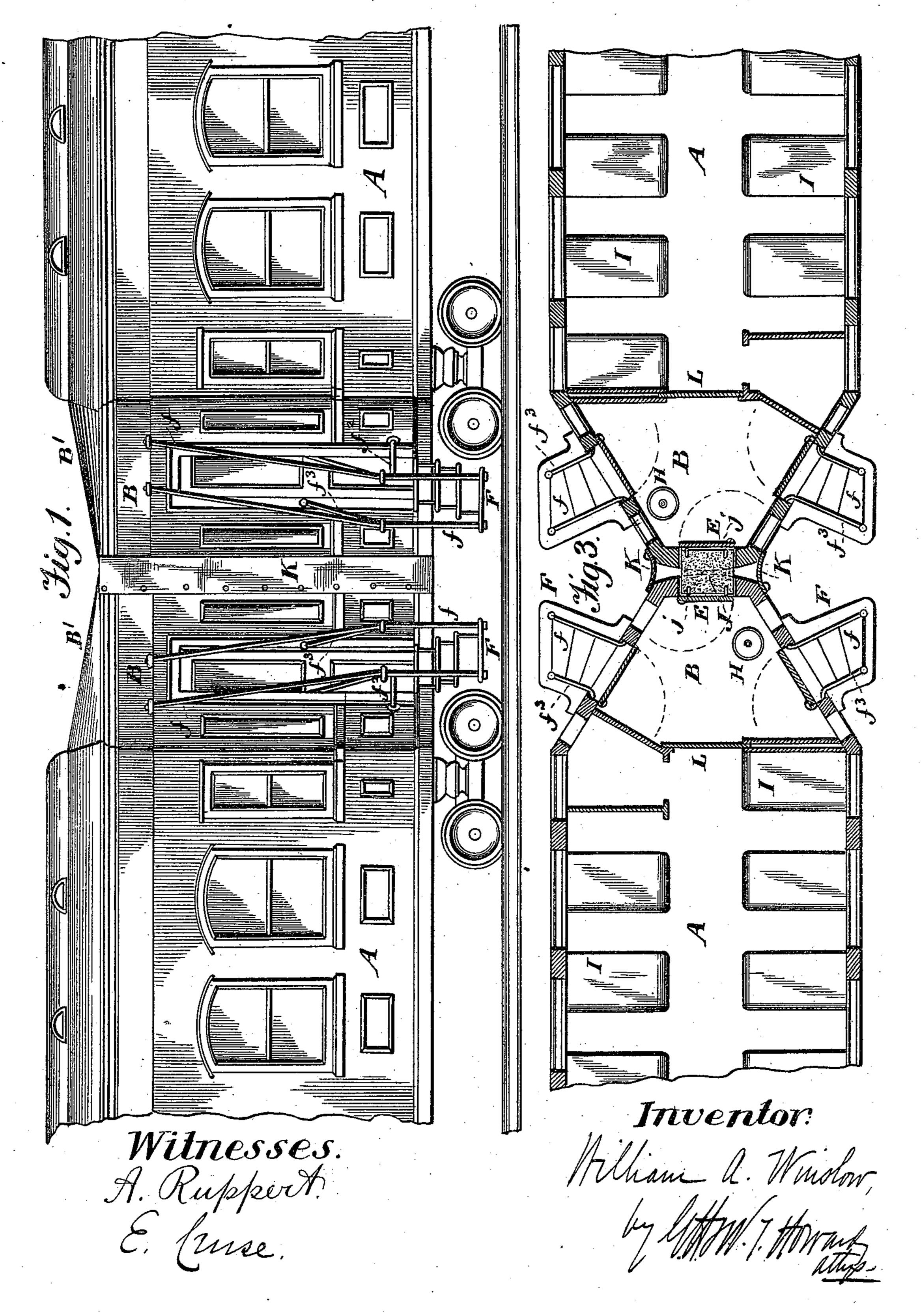
W. A. WINSLOW. PASSENGER CAR.

No. 486,313.

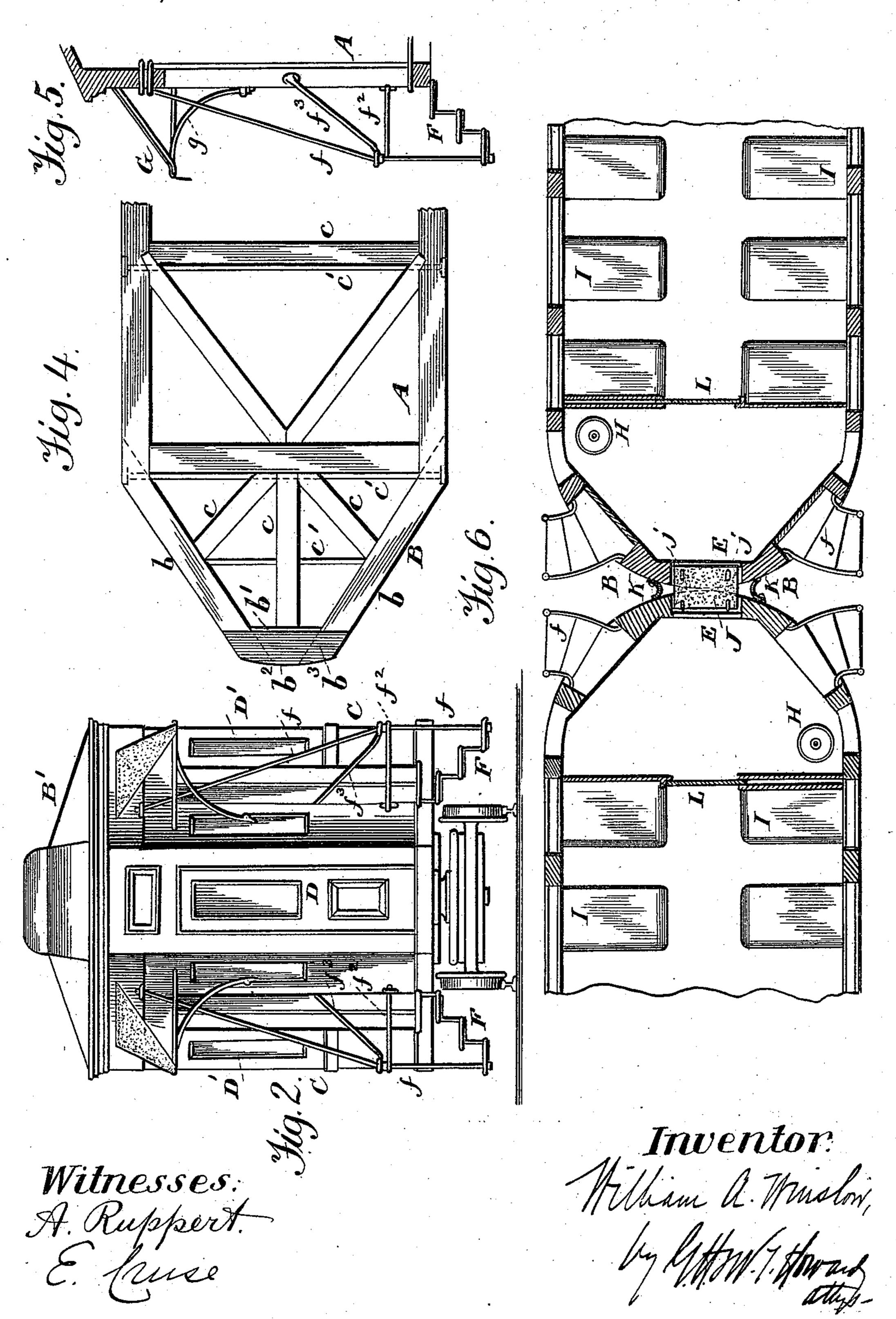
Patented Nov. 15, 1892.



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United States Patent Office.

WILLIAM A. WINSLOW, OF WATERTOWN, NEW YORK.

PASSENGER-CAR.

SPECIFICATION forming part of Letters Patent No. 486,313, dated November 15, 1892.

Application filed April 6, 1892. Serial No. 427,971. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. WINSLOW, of Watertown, in the county of Jefferson and State of New York, have invented certain new 5 and useful Improvements in Passenger-Cars for Railways, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to improve the construction of passenger-cars in order that the usual exposed platform may be dispensed with and that passengers may have ingress to or egress from the cars without being exposed to the danger which often arises from the slippery condition of platforms and steps, caused by rain, ice, &c., and also that the passengers in the car may not be unduly exposed to drafts of air when other passengers are entering or leaving such car.

Another object of my invention is to obviate in a great measure the danger of telescoping in case of collision, and a further object is to enable passengers to pass from one car to another without danger or being exposed to the elements.

My invention consists of the several details of construction and combination of parts hereinafter fully set forth, and particularly 30 pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of portions of two cars coupled together embodying my invention. Fig. 2 is an end view of one of the cars. Fig. 3 is a sectional plan of portions of two cars coupled together. Fig. 4 is a plan showing the framework of one end of a car. Fig. 5 is a vertical transverse section of a portion of one end of a car, and Fig. 6 is a plan 40 showing a modification.

Similar letters of reference indicate similar parts in the respective figures.

Referring to Fig. 4, A represents the framework of the main body of the car, and B the framework of an extension. As shown, this extension consists of two side beams b, firmly secured in any suitable manner at one end to the framework A. These beams b b incline toward each other at their forward ends and 50 are united together by means of the crossbeam b'. This cross-beam b' is rounded at

its front edge, as shown at b^2 , and protected by an iron plate b^3 , firmly bolted to it.

and B to strengthen the latter, and c' c' c' 55 represent iron rods to prevent the frames A and B from spreading laterally. It will be seen that the end of the car is of a wedge shape and that its extreme end is rounded. The object of rounding the end is to permit 60 the adjacent ends of the cars to have sufficient play in traveling on curves.

In Fig. 6 I have shown the extension B as semicircular, and while I prefer the wedge shape shown in Fig. 4 I do not intend to 65 limit my invention to that particular construction, as it is obvious that the construction shown in Fig. 6 is equally within the

scope of my invention.

The frame at the top of the car is provided 70 with a similar extension, but this should be somewhat shorter in order that there may be

somewhat shorter in order that there may be sufficient play between the ends of two adjacent cars at the roof to permit the cars to pass over any depression on the track with- 75 out unduly straining the framework. The intention is to have the bearing always at the lower portion of the car. The framework at the roof of the car may be of lighter timber than that at the floor. Otherwise it is similar. 80 Suitable panel-work connects the upper and lower extension-frames B, thereby forming an inclosed extension or vestibule, which is also provided with a roof B'. The two sides C of the extension are each provided with a door 85 D and with windows D'. The end of the extension is also provided with a door E, and between the doors at the ends of two adjacent cars is provided a movable mat J of strong flexible material, which mat is held in 9c place by hooks j j or other suitable devices and forms a continuation from the floor of one car to that of the other. As the forward end of the extension is rounded, there will be an open space at each side when two cars are 95 coupled together, and in order to close these spaces I provide each car with a strip of flexible material K, extending from the roof to the floor and projecting outwardly a sufficient distance to engage one of the sides C of the roo extension of the adjacent car. By following

a certain side of each car—say on the right-hand side when looking out of the end of the car—the strips on abutting cars will be diagonally opposite to each other and both side spaces will be closed when two cars are coupled together. It will be seen, therefore, that passengers can safely pass from one car to the other without danger and without being exposed to the elements.

or D. These steps are supported by rods f, which extend vertically from the lower step to a point about one foot above the level of the car-floor and are then bent inwardly and secured at their upper ends to the side or

roof of the car.

 f^2 are stay-rods interposed between the rods f and the sides of the extension B to brace the said rods in position, and f^3 are hand20 rails for the convenience of passengers. The lower step extends out on a line with the side of the car.

G G represent awnings supported on suitable frames g, secured to the sides C of the extension. These awnings extend slightly beyond the line of the sides of the car and are designed to protect the steps from rain.

H H represent the brakes, and I the seats

in the car.

L represents a door leading from the inclosed extension or vestibule to the main body of the car. In cold weather this door can be closed while passengers are entering or leaving the vestibule at stations, and the passengers in the car will not, therefore, be unduly

exposed to drafts of air. In warm weather by opening the doors L and E the entire train

can be thoroughly ventilated.

In case of collision it is well known that there is much danger of telescoping with the ordinary passenger-car having an exposed platform, inasmuch as there is but little obstruction offered by the platform of one car to prevent another car from riding up over it.

By having abutting surfaces extending from the roof to the floor this danger is almost entirely obviated. Furthermore, the inclined sides of the extensions of my improved car will have a tendency to deflect the cars in opposite directions and allow them to pass each

other should the collision be of sufficient force to beak the couplings.

By giving the ends of the cars a circular or

wedge-shaped form a much better view can be obtained from the doorways and vestibules 55 of the cars, and at the same time the cars have a novel and pleasing effect.

Having described my invention, I claim-

1. A passenger-car provided at each end with an inclosed extension or vestibule hav- 60 ing its outer end of less width than the body of the car, combined with a strip of flexible material attached to each of said extensions and projecting outwardly to engage the similar extension of an adjacent car, the strip on 65 one car being diagonally opposite that on the abutting car, said strips extending from the roof to the floor of the extensions, substantially as described.

2. A passenger-car having an inclosed ves- 70 tibule or extension at each end, said extension having inclined sides and a rounded outer end of less width than the body of the car and provided with a door in each side of the extension, a door at the rounded end, and a 75 door leading to the main body of the car.

3. The combination, with two cars, each provided with an inclosed extension or vestibule having inclined sides and an outer rounded end of less width than the body of the car, so said rounded ends abutting when the cars are coupled together, of a removable mat of flexible material adapted to be attached to the floor of each car and to extend across the point between the cars and a strip of flexible so material secured to each extension and projecting outwardly to engage the opposite extension, the strip on one car being diagonally opposite to that on the abutting car, said strips extending from the roof to the floor, substantially as and for the purpose specified.

4. The combination, with a car and its steps, of supporting-rods extending vertically from the lower step to a short distance above the floor of the car and then bent inwardly and 95 secured at their upper ends to the side of the car near the roof and stay-rods extending from the supporting-rods to the side of the car, substantially as specified.

In testimony whereof I have hereunto set 100 my hand and seal.

WILLIAM A. WINSLOW. [L. s.]

Witnesses:

H. C. WINSLOW, DANIEL J. EAMES.