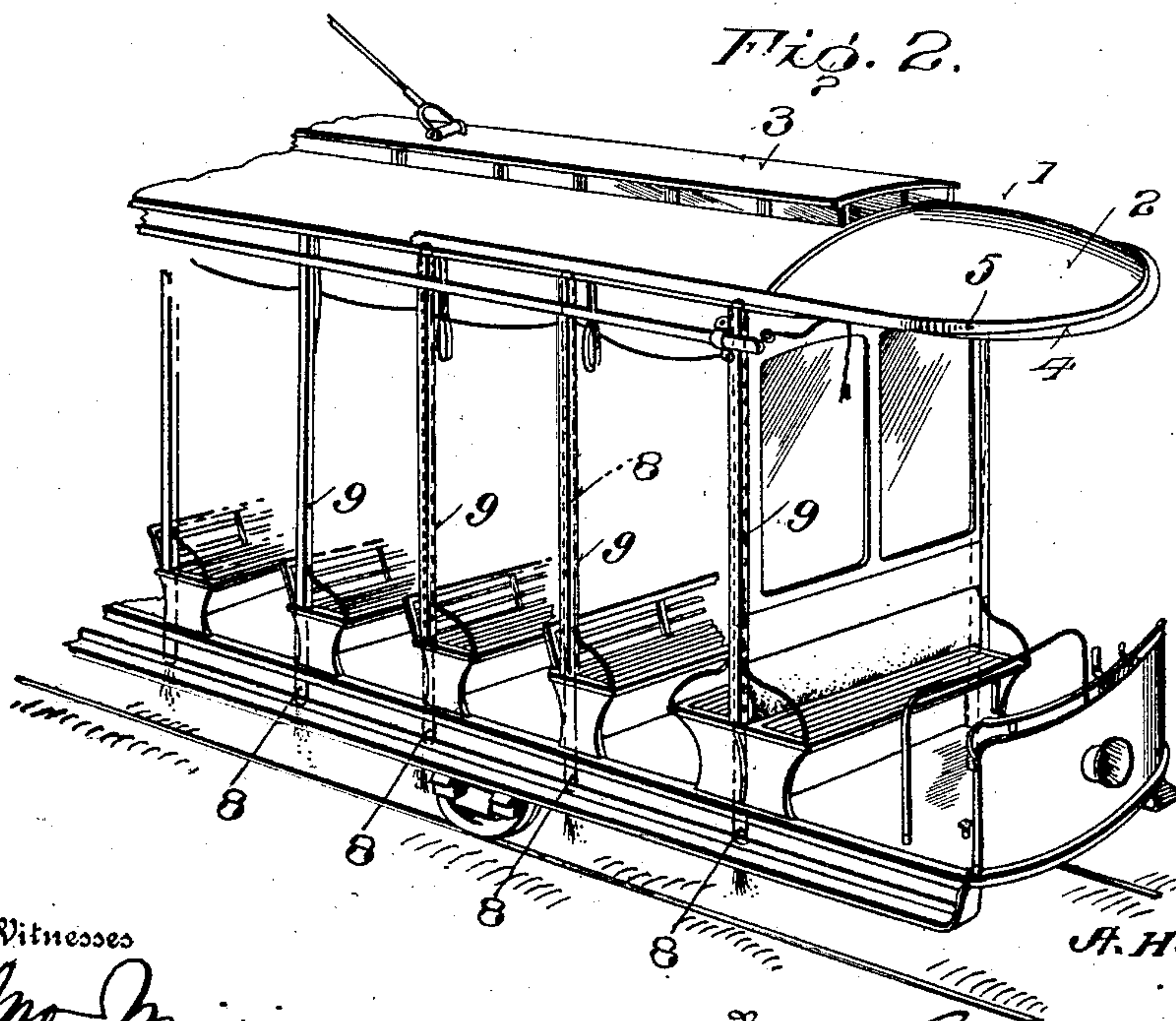
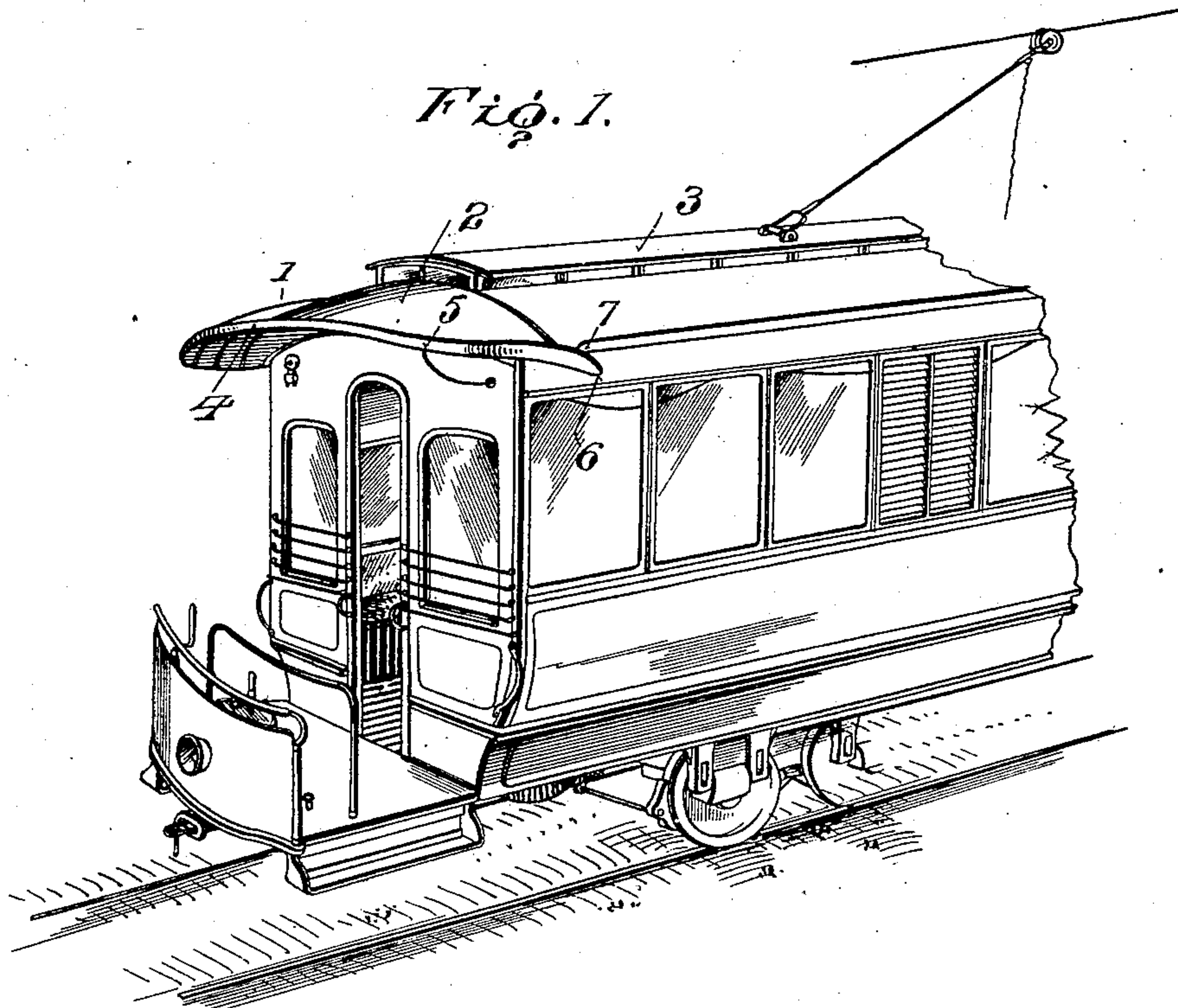


No. 863,709.

PATENTED AUG. 20, 1907.

A. H. FUNKE.  
MEANS FOR CONDUCTING WATER FROM CAR ROOFS.  
APPLICATION FILED NOV. 3, 1906.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALBERT H. FUNKE, OF NEW YORK, N. Y.

## MEANS FOR CONDUCTING WATER FROM CAR-ROOFS.

No. 863,709.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed November 3, 1906. Serial No. 341,912.

*To all whom it may concern:*

Be it known that I, ALBERT H. FUNKE, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in

5 Means for Conducting Water from Car-Roofs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to cars, coaches and other vehicles designed for passenger transportation, and the object is to provide such vehicles with a roof or covering equipped with means for collecting water falling upon them as in rainy weather or created by melting snow

15 and ice, and conducting the water to a point along the edge or eaves of the roof where it may be permitted to fall to the ground away from the platform and step or entrance.

The difficulties which this invention seeks to overcome are well known. The roofs upon the cars or coaches of street surface lines and "elevated" systems are usually convex to carry off the water and are of semicircular formation at both ends, their edges terminating approximately in the planes of the dash-

20 boards and car steps. In the open or summer cars the side edges of the roof are directly above the running board and a portion of each of the transverse seats so that in rainy weather passengers boarding or leaving the car and those occupying the end seats are subjected to a

25 stream of water which is increased by the convex formation of the roof. In the closed cars, having entrances at the ends the same annoyance is experienced. In cold weather icicles frequently form and depend from the roof. From these and the melting snow upon

30 the top of the car water drips constantly even under fair weather conditions. By my invention these difficulties are effectively overcome.

In the accompanying drawing I have shown in Figure 1 a portion of a street or surface car of the closed

40 type equipped with my improvements. Fig. 2 illustrates the invention applied to an open or summer car.

Referring to the drawing, 1 designates the car roof of the ordinary general formation, having its upper surface convexed as at 2 and provided with a central raised

45 portion 3 equipped with windows and transparencies to admit ventilation and indicate the route or destination of the car.

The edge or rim of the eaves 4 I have shown provided with a gutter 5 which may be formed by extending the

50 material covering the surface of the convexed portion 2 and bending it into the desired shape to form a spout or conductor. This gutter is provided near or along the edges of the circular end portions of the roof and it may extend entirely around the car. This, however,

is not essential to the closed type of car, but is required 55 on the open or summer car. The gutter is shown equipped with a leader or outlet 6 terminating away from the platform and steps. This is preferably provided by making the gutter inclined downwardly at each side of the vehicle from about the longitudinal 60 center of the latter, that is, from the center of the end portion of the eaves, to a point in advance of the steps. When the gutter is provided entirely around the car roof the portion at the sides of the car terminate within the downwardly extending gutter at each end of the 65 car, as shown at 7.

The means for conducting the water from the gutter may, of course, be varied, and leaders may be provided extending down from the gutter instead of forming the gutter so as to itself fill the two offices of gutter and 70 leader. This is shown in Fig. 2 where the invention is illustrated as applied to a summer car. The gutter 5 in this instance extends entirely around the car roof and may be of uniform size and disposition although it is desirable that it be slightly inclined at the ends or at 75 that portion over the dash-boards, similarly to the form shown in Fig. 1. This may readily be accomplished by making the gutter of gradually increasing depth from the end along both sides of the car to the point of location of the first leader. These leaders I have in- 80 dicated at 8 in Fig. 2. An appropriate means for mounting them is furnished by the posts 9 with which this open style of car is equipped at the ends of each of the transverse seats. Any number of leaders may be provided. They may extend downwardly from the 85 gutter to any suitable point at which the discharge of water from them will not interfere with passengers boarding or leaving the car.

I claim as my invention:—

1. In a car or other vehicle designed for passenger 90 transportation having an entrance point or step, a roof and a covering therefor, said covering forming a gutter for said roof sloping from the end of the car to the sides thereof and beyond said entrance point or step.

2. In a car or other vehicle designed for passenger 95 transportation having an entrance point or step, a roof and a covering therefor, said covering forming a gutter on said roof of increasing depth from the end of the car to the sides thereof and beyond said entrance point or step.

3. In a car or other vehicle having an entrance point 100 or step and a roof, spouts extending along the rim or edge of said roof at the sides and at the ends thereof, the end spouts sloping from the car end along the sides thereof to points beyond said entrance, and the spouts at the sides of the car terminating within the length of said end 105 spouts.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

ALBERT H. FUNKE.

Witnesses:

HENRY MUCKY,

STEPHEN J. LOUGHMAN.