No. 785,163. PATENTED MAR. 21, 1905.

J. V. GODMAN.

VEHICLE AND TRACK THEREFOR.

APPLICATION FILED MAY 16, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

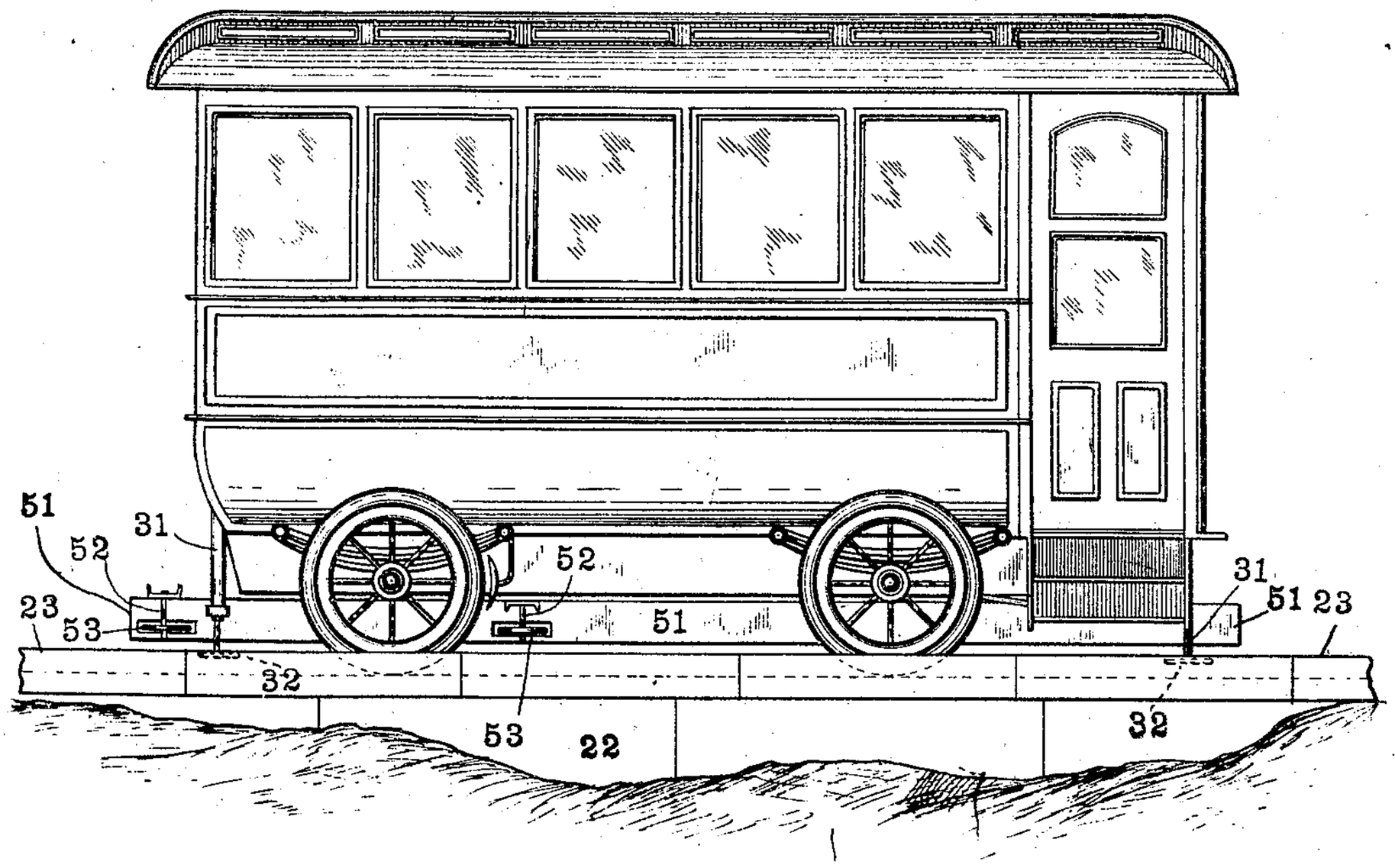
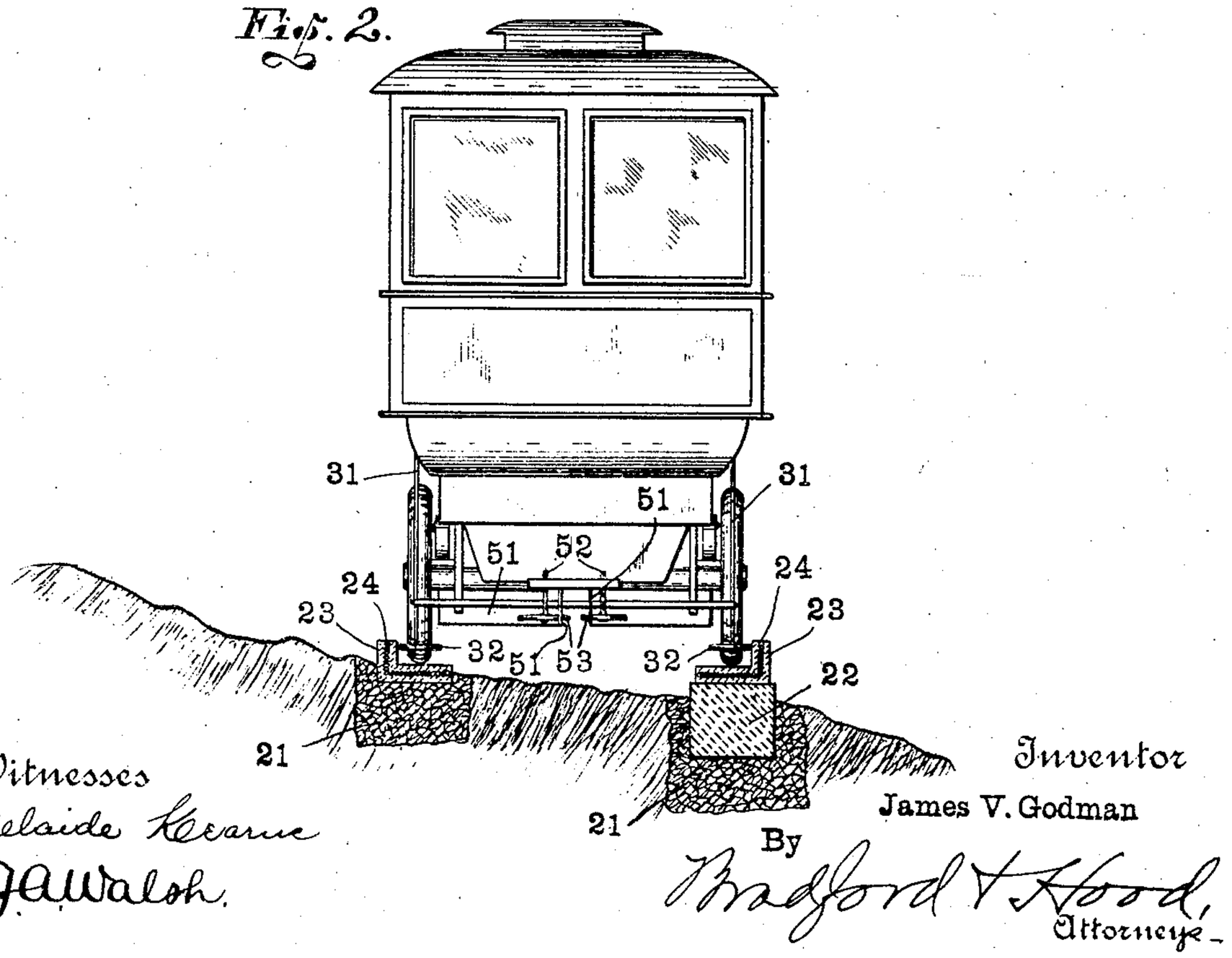


Fig. 2.



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2 SHEETS—SHEET 2.

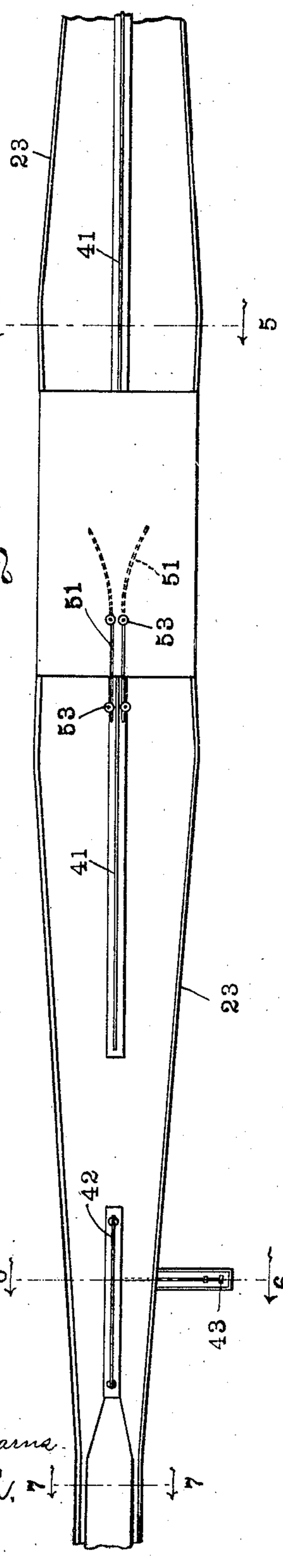

Fig. 3.

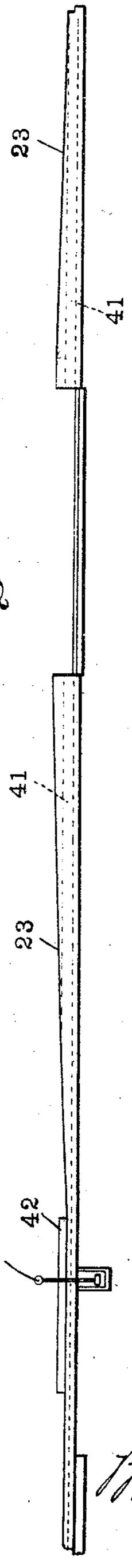

Fig. 4.

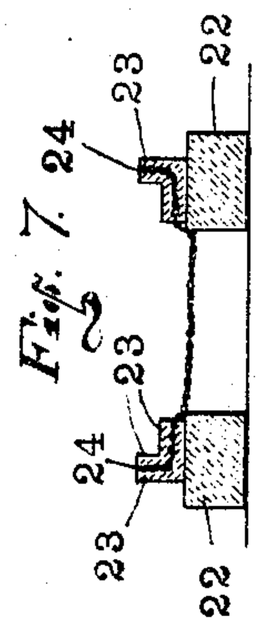

Fig. 7.

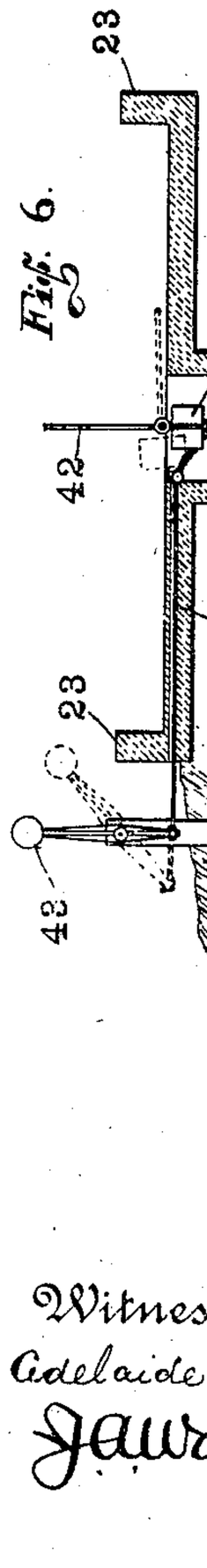

Fig. 6.

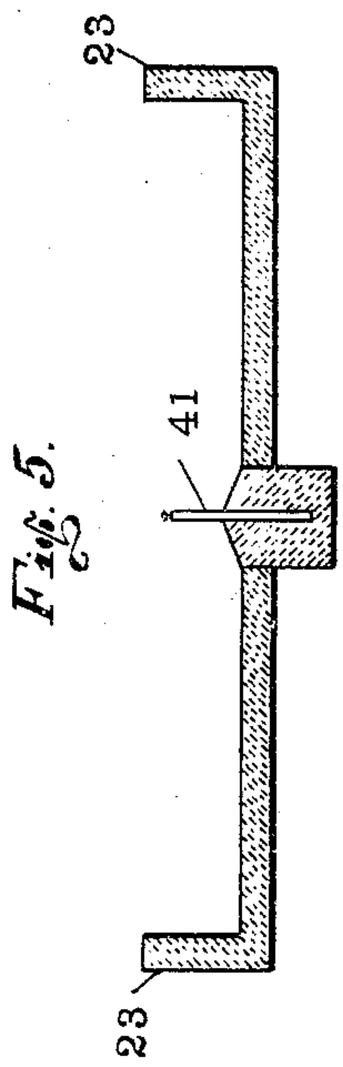

Fig. 5.

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No. 785,163. Patented March 21, 1905.

UNITED STATES PATENT OFFICE.

JAMES V. GODMAN, OF WARSAW, INDIANA, ASSIGNOR OF ONE-HALF TO JOHN W. NUSBAUM, OF WARSAW, INDIANA.

VEHICLE AND TRACK THEREFOR.

SPECIFICATION forming part of Letters Patent No. 785,163, dated March 21, 1905.

Application filed May 16, 1904. Serial No. 208,274.

To all whom it may concern:

Be it known that I, JAMES V. GODMAN, a citizen of the United States, residing at Warsaw, in the county of Kosciusko and State of Indiana, have invented certain new and useful Improvements in Vehicles and Tracks Therefor, of which the following is a specification.

This invention relates to tracks for vehicles and means of guiding vehicles properly on such tracks. It is designed to be used especially in connection with rubber-tired vehicles, such as motor-cars and the like. Its object is to enable such vehicles to be driven with greater speed and a higher degree of safety than is possible with ordinary roadways, and by the use of less power.

It consists in certain devices (in part embodied in the roadway and in part attached to the vehicle) by means of which the vehicle is properly guided, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a side elevation of a vehicle and a fragment of its roadway wherein my invention is employed; Fig. 2, an end elevation of the vehicle and a cross-sectional view of the track on which it runs at a point where the track is single, as between the crossings and sidings; Fig. 3, a plan view of a section of roadway or track which includes fragments of the straight track at the ends, a highway-crossing in the center, and a widened trackway or roadway area at intermediate points suitable for sidings such as I desire to provide at intervals for passing-points, the position of the guiding device on the car or vehicle when such vehicle is moving in a straight line without turning out being indicated by dotted lines; Fig. 4, a side elevation of the section of roadway or track of which Fig. 3 is a plan; and Figs. 5, 6, and 7 transverse sectional views at the points indicated by the dotted lines 5 5, 6 6, and 7 7.

The character of the plain roadway or track which I employ is indicated in Figs. 2 and 7 of the drawings. In building this track I first make suitable excavations or fills, and in such excavations when made I provide gravel subbases 21, upon which or upon the fills when made I place concrete girders 22 where required, while the track 23 itself is made of concrete molded in an L-shaped form and strengthened by a metallic web 24 of such suitable material as may be desired, such as what is known as "expanded" metal. These tracks extend from point to point, as desired, and, as clearly indicated in Fig. 2, serve both as tracks upon which the wheels of the vehicle run and as guides by means of which the vehicle is kept from moving sidewise off the track, the former purpose being accomplished by the horizontal portion and the latter purpose by the vertical portions. Vertical shafts 31 are carried by the vehicle, and upon the lower ends of these shafts are the horizontal guide-wheels 32, which are adapted to come in contact with the vertical portions of the track 23, and thus prevent the vehicle from moving sidewise, so that it is securely held upon the track.

In Figs. 3 to 7, inclusive, especially in Fig. 3, I have illustrated the construction at and in the vicinity of highway-crossings and have embodied in this illustration the construction and arrangement which I have designed as suitable for sidings to enable vehicles to pass each other. The highway-crossing is of course unobstructed. On each side of the highway-crossing I have shown my track or roadway widened to somewhat more than double its regular width, the vertical portion or flange of the track heretofore described being continued along its edges and forming the borders through the intervening space. These will prevent the vehicle from running farther to one side than is permitted by these borders or vertical track portions, the same as on the straight portion of the track, and thus the vehicle is prevented from escaping entirely from the roadway structure, although the space on which it runs is wider than the standard width. At a central point in these widened

spaces I place an upright stationary guide in the form of a flat plate 41 set edgewise. This extends, preferably, from the margin of the highway straight in each direction. Between the ends of these stationary guide-plates and the beginning of the straight portions of the roadway I put similar plates 42, which are capable of being moved by means of the switch-lever 43, but which are designed to return automatically to erect position, being impelled thereto by the weights 44, which are connected to the levers 43 by connections 45, which are in part or in whole flexible. Secured to the under side of the car, midway thereof transversely and preferably running from end to end thereof, are depending guide-plates 51, in which are mounted vertical shafts 52, carrying horizontally-arranged antifriction-trucks 53. As the car passes along when moving in a straight line the forward ends of the plates 51, which, as best indicated in Fig. 3, are a considerable distance apart at the forward end and incline gradually toward each other, pass one on either side of the guide-plates of the track, and thus keep the vehicle moving in a straight line, so that it may pass easily and readily onto the single track after it has crossed this widened space without danger and without diminution of speed. If the vehicle is to pass another similar vehicle at this point, the movable guides are dropped by means of the switch-levers and each vehicle is directed to the appropriate side of the widened space and passes along the edge of such space, being kept from departing therefrom by the vertical portion of the track, as above explained.

Having thus fully described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a vehicle, of a suitable track therefor upon which it runs having a vertical member formed integrally therewith and extending above the surface upon which the wheels of the vehicle run, vertical shafts carried by the vehicle, and rollers carried by said shafts and arranged alongside the vertical member of the track, whereby the vehicle is kept on said track and the sides of the ground-wheels thereof kept from contact with the vertical portions of said track.

2. The combination of a vehicle-track having a widened space for passing, and a guide arranged centrally of said space, of a vehicle having depending guides arranged to pass astride of the guide in the roadway and guide said vehicle in a straight line while passing through the widened space.

3. The combination of a vehicle, a roadway therefor having widened spaces for sidings and a vertical guide arranged in the middle of said widened space, guide-plates secured to said vehicle with diverging ends adapted to pass alongside said guide-plates and provided with antifriction-wheels.

In witness whereof I have hereunto set my hand and seal, at Warsaw, Indiana, this 4th day of May, A. D. 1904.

JAMES V. GODMAN. [L. S.]

Witnesses:
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E. D. BAKER.