R. W. SHOEMAKER.

GROOVED RAIL FOR MONORAIL RAILROADS.

APPLICATION FILED APR. 22, 1918.

1,355,800. Patented Oct. 12, 1920.

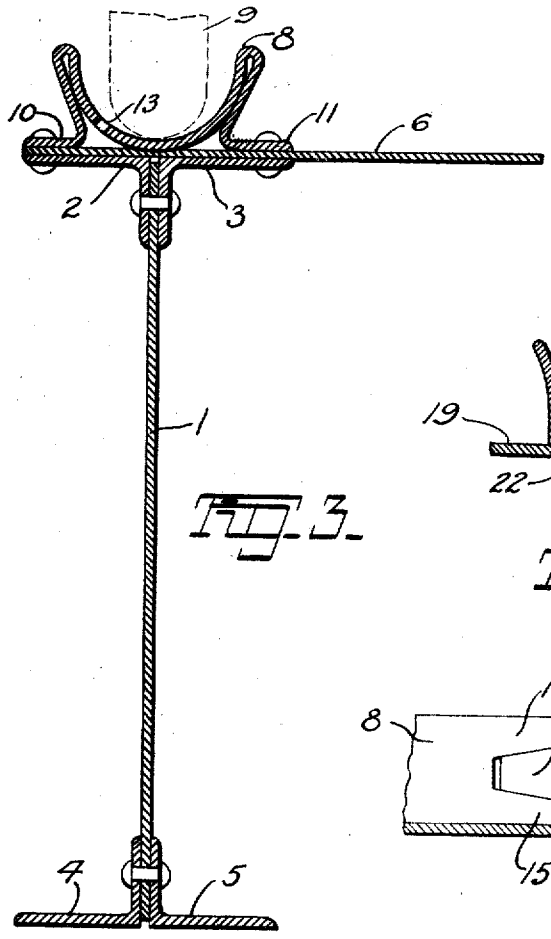


Fig. 3.

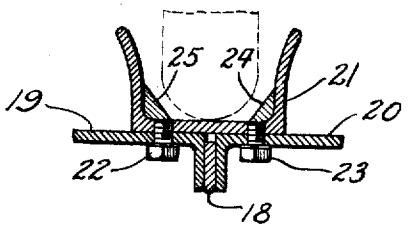


Fig. 4.

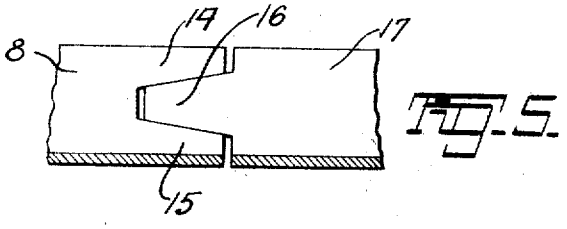


Fig. 5.

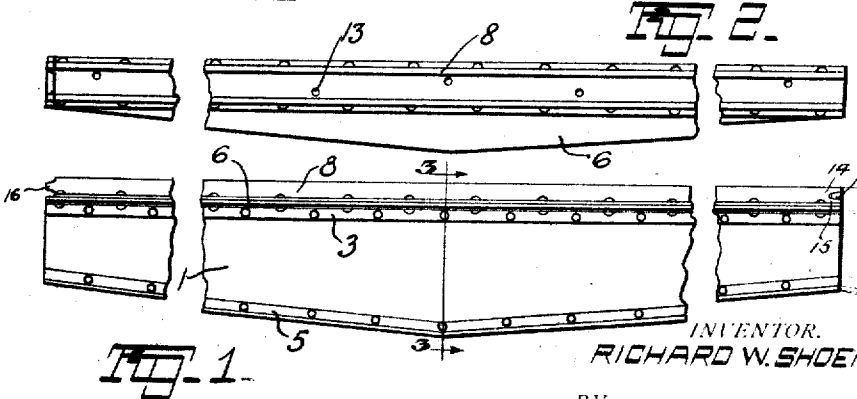


Fig. 2.

Fig. 1.

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UNITED STATES PATENT OFFICE.

RICHARD W. SHOEMAKER, OF ALAMEDA, CALIFORNIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO NATIONAL SUSPENDED MONORAIL COMPANY, A CORPORATION.

GROOVED RAIL FOR MONORAIL RAILROADS.

1,355,800. Specification of Letters Patent. Patented Oct. 12, 1920.

Application filed April 22, 1918. Serial No. 229,883.

To all whom it may concern:

Be it known that I, RICHARD W. SHOEMAKER, a citizen of the United States, residing at Alameda, in the county of Alameda, State of California, have invented a new and useful Grooved Rail for Monorail Railroads, of which the following is a specification in such full and clear terms as will enable those skilled in the art to construct and use the same.

This invention relates to a track for suspended railways and its object is to produce a grooved track with sufficient rigidity for long spans, the length of the span determining the depth and width of the supporting beam for the track.

An embodiment of the invention is shown in the drawing in which the same reference numeral is applied to the same portion throughout, but I am aware that there may be many modifications thereof.

Figure 1 is a side elevation of a complete beam having a long span with this rail applied thereto,

Fig. 2 is a plan view of the rail shown in Fig. 1,

Fig. 3 is a vertical sectional view of the rail on the line 3—3, Fig. 1,

Fig. 4 is a vertical sectional view of a slightly modified form of rail in which a channel iron is used for the track, and

Fig. 5 shows the method of joining the ends of adjacent rails of both forms.

The numeral 1 indicates the vertical web of a beam having flanges 2 and 3 at the top thereof with flanges 4 and 5 riveted to its lower edge, the latter pair of flanges being inclined downwardly so as to give the beam greater depth at its center. In order to give the beam great lateral rigidity and prevent it from twisting a flat horizontal member 6 is provided, said member being wider at the center of the beam than at any other portion whereby the greatest cross section is produced at the center of the beam.

Mounted upon the plate 6 and riveted thereto and to the flanges 2 and 3 is a plate 8 grooved in its top to form a track for the wheel 9. The plate 8 has both of its edges bent over into an L shape in cross section so that there are two parts 10 and 11 which are riveted to the flanges 2 and 3 and to the plate 6.

The track is trough-like and is provided with a plurality of holes 13 to prevent the accumulation of water therein, and in order to make the track as smooth as possible its ends are joined to the ends of the adjacent track by means of the two tongues 14 and 15 and the coöperating tongue 16 on the next adjacent track member 17.

While the form of track shown in Fig. 3 is the most acceptable, the form of track illustrated in Fig. 4 may be used as well. In this figure of the invention the center plate of the I-beam is illustrated at 18, the two upper angle plates at 19 and 20, while the flared side channel iron 21 is suitably secured to the angles 19 and 20 by means of bolts 22 and 23. In order to prevent the wheel from binding on the outturned flanges of the channel 21 suitable blocking bars 24 and 25 are inserted in the inner corners of the channel.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is as follows, express reservation being made of permissible modifications:—

1. A railway track comprising a grooved plate, a horizontal stiffening plate, means on opposite sides of the axis of the grooved plate to secure it to the horizontal plate, a tongue at the end of the rail for holding the next adjacent rail in alinement, and a channel beam secured to the grooved plate below its axis.

2. A railway track comprising a grooved plate having wings on opposite sides of its axis, a channel beam, a horizontal plate to strengthen said channel beam laterally, and means to secure the wings of the track to the channel beam on opposite sides of the web thereof.

3. A railway track comprising a grooved rail plate having wings on opposite sides of its axis, a beam, means to secure the rail to the beam on opposite sides of the rail, and a tongue projecting at the end of the rail for holding the next adjacent rail alined.

In testimony whereof I have hereunto set my hand this 30th day of March, A. D. 1918.

RICHARD W. SHOEMAKER.