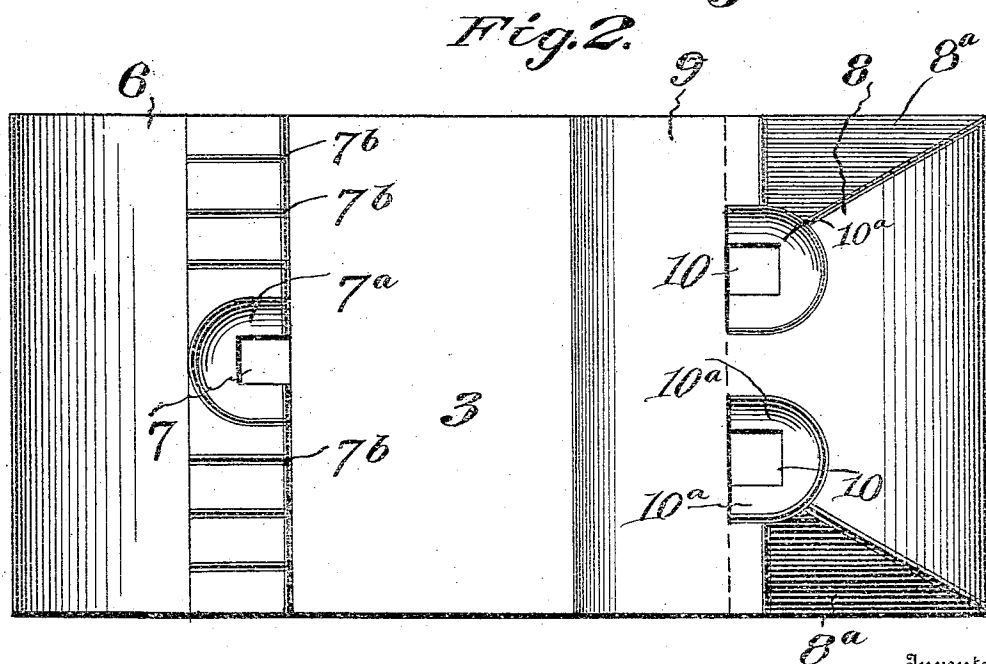
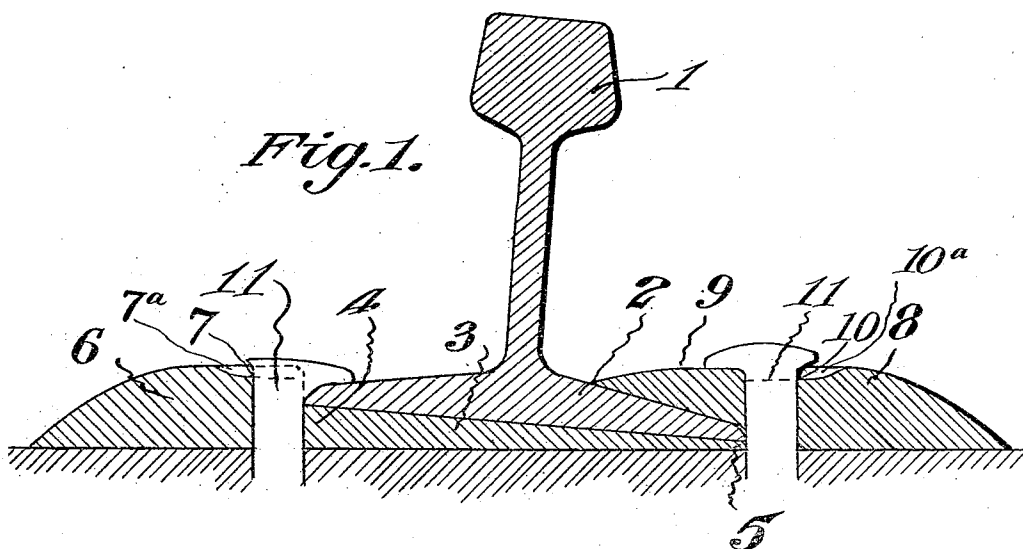


J. E. DOUGHERTY.
RAIL CURVE SEAT.
APPLICATION FILED FEB. 3, 1909.

941,312.

Patented Nov. 23, 1909.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN E. DOUGHERTY, OF MISSOULA, MONTANA.

RAIL-CURVE SEAT.

941,312.

Specification of Letters Patent.

Patented Nov. 23, 1909.

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To all whom it may concern:

Be it known that I, JOHN E. DOUGHERTY, a citizen of the United States of America, residing at Missoula, in the county of Missoula and State of Montana, have invented new and useful Improvements in Rail-Curve Seats, of which the following is a specification.

This invention relates to rail curve seats designed for the purpose of giving the proper inclination to the rails in curved tracks, and one of the principal objects of the same is to provide a rail seat or chair having an inclined bearing for the rail and means for securing the base flanges of the rail to said chair and to the rail tie.

Another object of the invention is to provide a rail seat or chair having a bottom or bearing surface inclined to the required degree depending upon the length and radius of the curve.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which,—

Figure 1 is a vertical section taken through a rail and through a rail seat, the latter made in accordance with my invention. Fig. 2 is a plan view of the rail seat or chair.

Referring to the drawing, the numeral 1 designates an ordinary railway rail, and 2 is its base flange. The rail seat or chair comprises the base portion 3 which is inclined toward the inner side of the track, as shown in Fig. 1, the thickened portion 4 being at the outside of the rail and the thinner portion 5 being at the inner side. Extending across the chair or seat is a thickened portion 6 provided with a central spike hole 7 at a point in line with the inner edge of said thickened portion. Surrounding the spike hole 7 is a curved recess 7^a designed for the purpose of admitting a spike puller under the head of the spike. Ridges 7^b are formed in the thickened portion 6 at the top

thereof in line with the recess 7^a, as shown in Fig. 2. At the opposite side of the chair or seat a flange 8 is formed, said flange having an overhanging lip 9 to engage the inner side of the base flange 2 of the rail. Two spike holes 10 extend through the flange 8 at a point in line with the inner edge of the lip 9, and spikes 11 are driven through said spike holes to hold the rail and seat in position. A concaved recess 10^a is formed around each of the spike holes 10, and the flange 8 is provided with oppositely inclined portions 8^a, as shown in the drawing.

It is a well known fact that rolling stock in passing around curves will cant toward the outside, and when the rails are set in exact horizontal positions there is considerable strain upon the rails. It is to overcome this strain and to give to the rails the required inclination to insure a bearing of the rolling stock upon the rails at all times in passing around the curves that my invention is designed. It will be understood that the inclination of the rails will vary in curves of different radii and of different length.

I claim:—

The herein described rail curve seat comprising an inclined bearing portion for the base flange of the rail, a flange extending over the inclined bearing portion to engage the upper surface of the base flange of the rail, said flange having bolt holes provided with recesses around their outer portions, said rail seat having an integral thickened portion opposite the flange, said thickened portion having a bolt hole extending through the same and provided with a recess for the head of the bolt.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN E. DOUGHERTY.

Witnesses:

JOHN V. EGAN,
DANIEL L. O'HERN.