

1,048,606.

FIG. 1



INVENTOR

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RAIL-JOINT.

1,048,606.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK VENCHES, a subject of the King of Hungary, residing at Holden, in the county of Logan and State of West Virginia, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail joints, and the objects of my invention are to furnish an ordinary tie with a novel rail chair for supporting the abutting or confronting ends of rails, and to provide a chair with novel splice bars that firmly hold the rails in position thereon.

Further objects of my invention are to provide a rail chair that prevents vertical and lateral displacement of rails and maintains the same in alinement, and to accomplish the above results by a mechanical construction that is inexpensive to manufacture, easy to install, durable, and highly efficient as a rail joint.

With the above and other objects in view the invention resides in the novel construction, combination and arrangements of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

Figure 1 is an end view of the rail joint, Fig. 2 is a plan of the same partly broken away and partly in section, Fig. 3 is a cross sectional view of the rail joint, Fig. 4 is an elevation of the inner side of a detached splice bar, and Fig. 5 is a perspective view of a rail chair partly broken away and partly in section.

The reference numeral 1 denotes a tie and arranged upon this tie is a chair, comprising an inverted channel bar 2 that has the side flanges 3 thereof engaging the sides of the tie 1. The inverted channel bar 2 has the inner side thereof provided with transverse teeth or serrations 4 to engage in the top of the tie and prevent the chair from sliding thereon. The inverted channel bar has the top thereof provided with a central transverse enlargement 5 upon which are placed

the base flanges 6 of abutting or confronting rails 7. The base flanges 6 extend beyond the side edges of the enlargement 5, as best shown in Fig. 3.

The reference numerals 8 denote splice bars engaging and bracing the sides of the rails 7, said splice bars having the lower edges thereof provided with inwardly projecting flanges 9 that extend under the base flanges 6 of the rails and engage the side edges of the enlargement 5. The ends of the splice bars 8 have depending arms 10 provided with rectangular openings 11 and arranged in said openings are transverse bolts 12, which for the greater part of their length are rectangular. The bolts 12 have heads 13 engaging the arms of one of said splice bars and the opposite ends of said bolts are reduced and screw threaded, as at 14 to receive nuts 15.

The inner sides of the splice bars 8 are provided with lugs 16 that extend into notches 17 provided therefor in the base flanges 6 of the rails 7, said lugs preventing longitudinal displacement of said rails relatively to said splice bars. The splice bars are provided with transverse alining openings 18 and extending through these openings is a bolt 19 that passes through grooves 20 provided therefor in the ends of the rails 7. The bolt 19 is provided with a nut 21 and said bolt coöperates with the bolts 12 in holding the splice bars in position.

It is practically impossible for the rail chair to shift relatively to the tie 1 and the manner in which the rails are held prevents said rails from shifting relatively to the chair.

What I claim is:

In a rail joint, the combination with a tie, and rails, of an inverted channel-shaped chair mounted upon said tie and having transverse teeth engaging in said tie, an enlargement carried by said chair and supporting said rails, splice bars engaging the sides of said rails, inwardly projecting flanges carried by said splice bars and extending under the base flanges of said rails and against the sides of said enlargement, depending arms carried by the ends of said

splice bars and having rectangular openings
formed therein, transverse bolts arranged
in the openings of said arms and connect-
ing said arms, inwardly projecting lugs car-
ried by said splice bars and engaging in the
5 base flanges of said rails, and a bolt extend-
ing between said rails and connecting said
splice bars.

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

FRANK VENCHES.

Witnesses:

WANDA M. KULEZA,
MAX H. SROLOVITZ.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
