G. ROY.

RAIL JOINT.

APPLICATION FILED AUG. 12, 1918.

1,292,520. Patented Jan. 28, 1919.

FIG. 1.

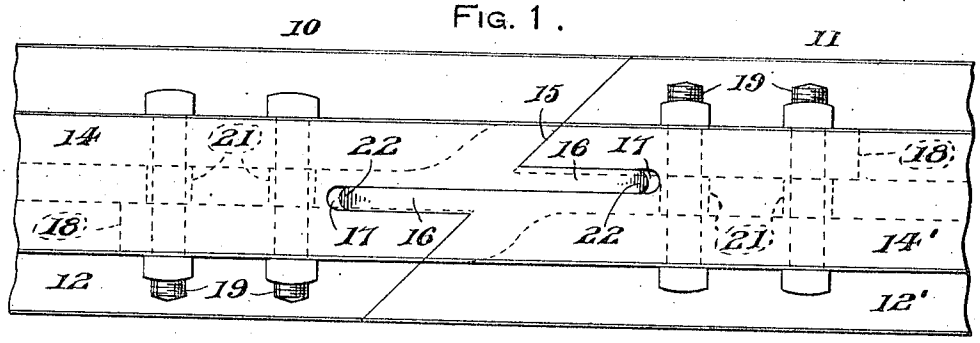


FIG. 2.

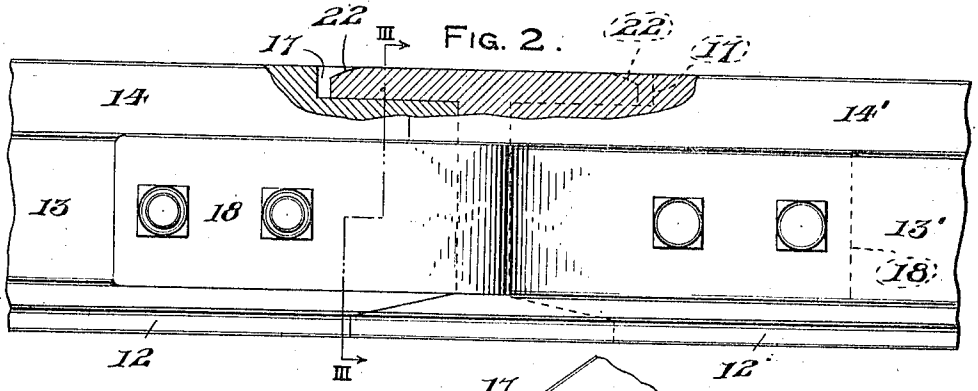


FIG. 4.

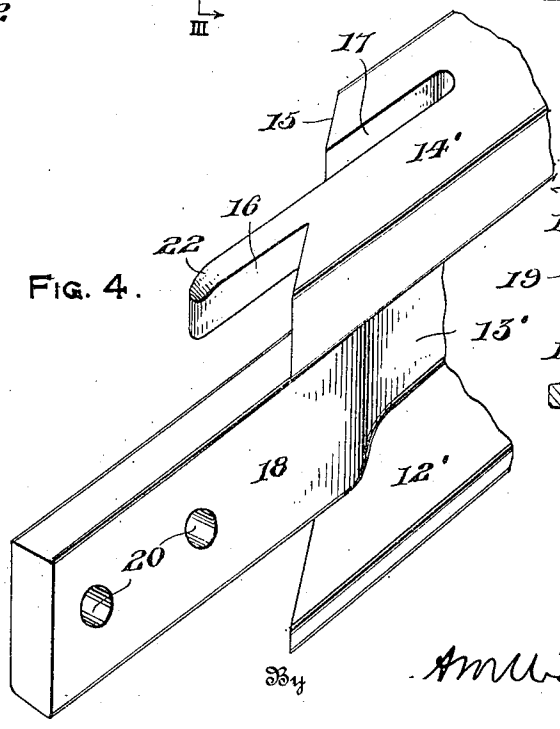
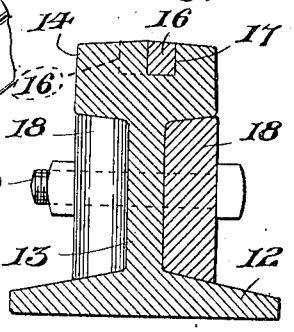


FIG. 3.



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RAIL-JOINT.

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Application filed August 12, 1918. Serial No. 249,498.

To all whom it may concern.

Be it known that I, GEORGE ROY, a subject of the Emperor of Austria, residing at Aurora, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

The primary object of the invention is the provision of a joint for railway rails whereby rails are maintained operatively positioned in alinement with each other without the aid of the ordinary fish plates, the joint possessing great strength and providing a tread substantially continuous adapted for preventing jars during the travel of a wheel thereover.

A further object of the device is to provide a joint for railway rails that is comparatively inexpensive and constructed by complementally forming the ends of railway rails, it being only necessary to employ the usual bolts and nuts for maintaining the rails jointed together in operative alinement with each other.

The invention will now be fully described in view of the foregoing objects thereof in connection with the accompanying drawing and in which like reference characters designate corresponding parts throughout the several views.

In the drawing:

Figure 1 is a top plan view of portions of rails having their ends connected together by means of my invention;

Fig. 2 is a side elevation thereof partially broken away.

Fig. 3 is a vertical transverse sectional view taken upon line III—III of Fig. 2; and

Fig. 4 is a perspective view of an end portion of one of the rails.

My invention consists of a joint adaptable for any form of railway rails and is herein illustrated in connection with end portions of two rails 10 and 11 having base flanges 12, 12′, webs 13, 13′, and treads 14, 14′, respectively, the closed joint being shown in Figs. 1 and 2 and the complementally formed end of one of the rails making up such joint, being shown in perspective in Fig. 4. The complementally formed end of each rail 10 and 11 is provided with a diagonal face 15 adapted for flat engagement when the ends of the rails are positioned abutting each other with the rails in longitudinal alinement as required for track formation, a projecting finger 16 being carried by the tread of each rail adjacent the center line of the tread and adapted for reception within a complementally formed recess 17 in the tread of the adjacent rail.

A plate 18 is integrally provided upon the web of each rail, projecting forwardly of the diagonal face 15 thereof and whereby the plates 18 are adapted for flat engagement with the webs of the adjacent rails when the faces 15 of the rails are in substantially abutting engagement with the finger 16 in the recesses 17. Bolts 19 are adapted to be positioned through perforations 20 in the plates 18 and corresponding perforations 21 in the webs of the rails. The joint is temporarily maintained in its closed position before the bolts 19 are assembled by the position of the plates 18 between the base flanges and treads of the rails as well as by the fingers 16 positioned within the recesses 17 adjacent the diagonal abutting faces 15 of the rails. It will be understood, however, that when the rails are employed for the traveling of wheels thereover, the bolts 19 must be locked in position firmly connecting the rails 10 and 11 together. The fingers 16 are of slightly less length than the recesses 17 to allow for expansion and contraction, while the upper faces of the fingers adjacent the free ends thereof are slightly beveled as at 22, for permitting wheels to readily pass thereover in the event of the fingers becoming slightly elevated. By complementally forming the opposite ends of railway rails in the manner illustrated in Fig. 4 of the drawing, the rails are readily assembled in position upon the road bed in the usual manner without requiring the transportation and handling of separate fish plates, while the device is readily disassembled by removing the bolts 19 and provide a substantially unbroken tread surface for permitting wheels to smoothly travel over the same.

What I claim as new is:—

1. A rail joint comprising rails having diagonal faces at their free ends adapted for abutting relations when the device is assembled and having the treads of the rails provided with recesses, a projecting finger carried by the tread of each rail at the diagonal face thereof adapted for positioning within the recess of the adjacent rail when the device is assembled, and a plate projecting from the web of each rail

adapted for engaging the web of the adjacent rail between the tread and base flange thereof.

2. A rail joint comprising complementally formed end portions of rails having the treads thereof provided with recesses, a finger projecting from the free end of the tread of each rail end adapted for seating within the recess of the tread of the adjacent rail when the joint is assembled and with the upper face of the free end portion of the finger outwardly beveled, and an attaching plate member projecting forwardly of the end of each rail carried by the web thereof.

3. A device of the class described comprising rails in longitudinal alinement having abutting diagonal end faces, the treads of the rails provided with elongated recesses terminating in said diagonal faces and positioned at one side of the center line of the treads, beveled fingers projecting from the end faces of the treads of the rails adapted for positioning within the said recesses when the joint is assembled, plates carried by the webs of the rails adapted for positioning between the tread and base flange of the adjacent rail when the device is assembled and bolts attachably connected between the said plates and the webs of the adjacent rail.

In testimony whereof I affix my signature.

GEORGE ROY.