

(No Model.)

J. REIFERT.
RAIL JOINT, &c.

No. 458,342.

Patented Aug. 25, 1891.

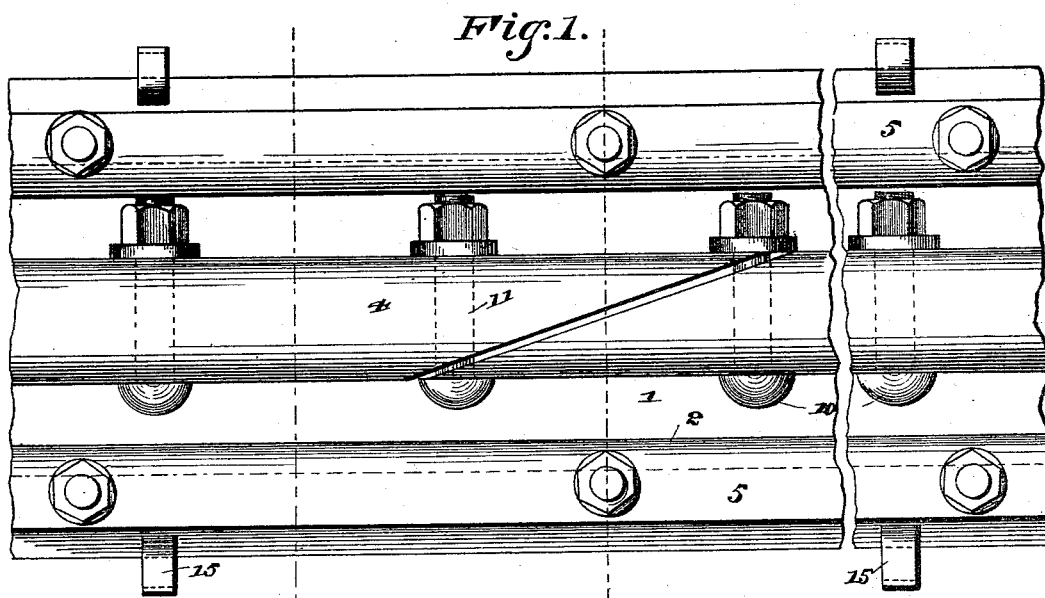
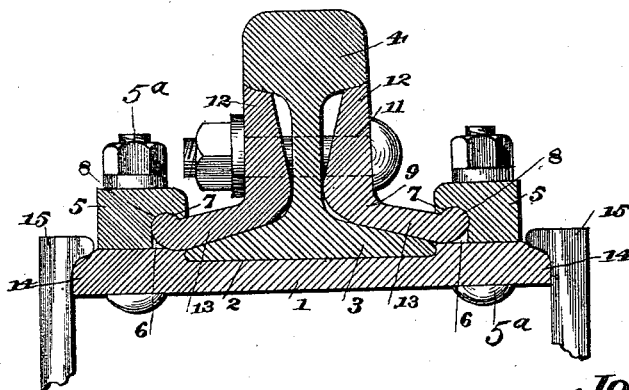


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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RAIL-JOINT, &c.

SPECIFICATION forming part of Letters Patent No. 458,342, dated August 25, 1891.

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To all whom it may concern:

Be it known that I, JOHN REIFERT, a citizen of the United States, residing at the city of Rome, in the county of Oneida and State of New York, have invented an Improvement in Rail-Joints and the Chairs and Plates for Holding Rails, of which the following is a specification.

The invention relates to improvements in rail-joints.

The object of the present invention is to effect economy of time in laying and relaying and replacing rails and to provide a simple and inexpensive rail-joint capable of securely gripping a rail and of having its parts readily assembled and separated for the purpose of laying or replacing rails.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a plan view of a rail-joint constructed in accordance with the invention. Fig. 2 is a transverse sectional view.

Referring to the accompanying drawings, 1 designates a rail-chair base-plate constructed of suitable metal and provided in its upper face with a longitudinal depression or recess 2, in which are arranged the bottom flanges 3 of rails 4, which have their meeting ends beveled and resting upon the said base-plate 1. The base-plate 1 has secured on its upper face longitudinal flanges 5, arranged near the side edges of the base-plate and are provided on their inner opposed longitudinal faces with recesses 6, which have their top walls 7 concaved and adapted to receive curved edges 8 of angle fish-plates 9, which engage the flanges 5 and the inner bevels of the tread of the rails, and are secured to the latter by bolts 11, passing through them and the webs of the rails. The flanges 5 are formed by separate removable strips secured by bolts 5^a to the upper face of the base-plate at the longitudinal edges of the same. The angle fish-plate 9 is composed of approximately vertical and horizontal plates 12 and 13, the

former of which has its upper edge engaging the under bevel of the tread of the rail, and the horizontal portion or plate 13 has its outer edge 8 bent slightly upward and outward and extending above its upper face and forming a curved rib adapted to engage the recess of the flange 5 and fit snugly in the upper portion thereof and conform to the configuration of the curved wall 7, the portions or plates 12 of the angle fish-plates 9 arranged at a slight angle to each other and to the rail, and when the bolts 11 are tightened by their nuts the angle fish-plates grip the rail at the lower bevel of the tread and at the bottom of the web and the bottom flanges, and at the same time the ribs 8 of the horizontal plates 13 are locked into the recesses of the flanges 5. The longitudinal edges 14 of the base-plate 1 are beveled and are engaged by the heads of spikes 15, which secure the base-plate to the cross-ties. The bottom flanges of the rails sink into the rail-recess, and the rails are thereby prevented from shifting laterally of each other. Should the rails and fish-plates become loose in the chair, all wear can be readily taken up and the parts tightened by the strips 5 and the bolts and nuts 5^a, which is advantageous.

It will readily be seen that the rail-joint is simple and inexpensive in construction, and it can be readily separated and assembled for the purpose of releasing and gripping a rail.

What I claim is—

In a rail-joint, the combination of the chair composed of the base-plate having the rail-recess 2 and the beveled edges 14 to be engaged by spikes, the separate removable metal strips forming flanges 5 and extending longitudinally of the base-plate and within the edges 14 and provided in their inner opposed faces with longitudinal recesses having their top walls concave, the bolts and nuts 5^a, securing the said strips to the base-plate, the rails, the angle fish-plates having their angles curved and engaging the webs and bottom flanges of the rails and spanning the angles of the same and being thereby fulcrumed on the webs, and composed of the portions 12 and 13 the portions 13, having their

edges curved and engaging the recesses of the removable strips and the portions 12 being arranged at an angle and diverging and having their upper edges beveled and engaging the lower faces of the treads of the rails, and the bolts 11, arranged horizontally and passing through the webs of the rails and the portions 12 and adapted to force the latter into engagement with the treads of the rails, substantially as described.

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Witnesses:

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