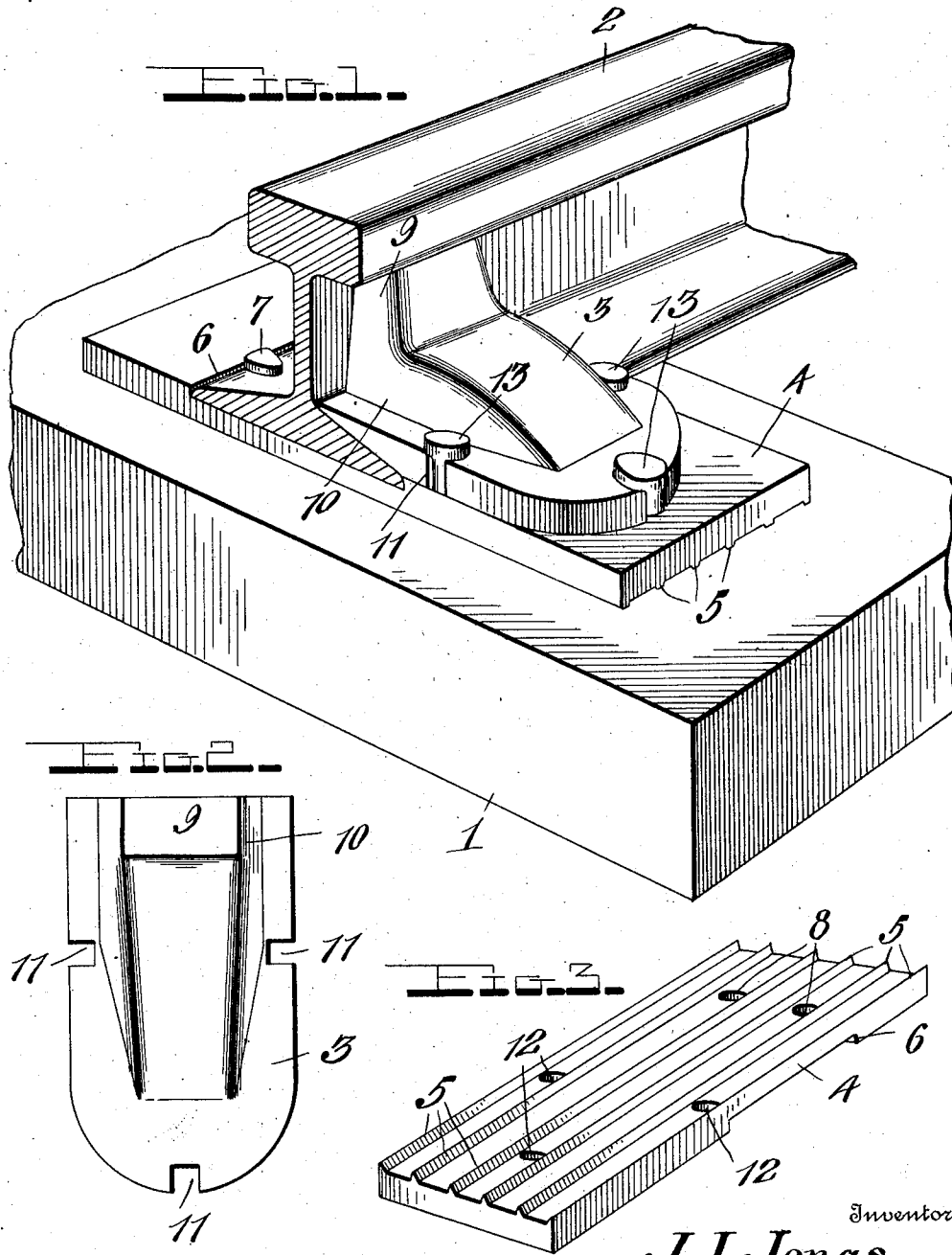


J. I. JONAS.
RAIL BRACE.
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997,391.

Patented July 11, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES I. JONAS, OF BONDTOWN, VIRGINIA.

RAIL-BRACE.

997,391.

Specification of Letters Patent.

Patented July 11, 1911.

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To all whom it may concern:

Be it known that I, JAMES I. JONAS, a citizen of the United States, residing at Bondtown, in the county of Wise and State of Virginia, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in devices for fastening rails to cross ties, and more particularly to a combined bracing and fastening device which is especially useful at curves in railway tracks, but which may be employed at other places.

The object of the invention is to provide a simple and practical rail-bracing and fastening structure which may be easily applied to cross ties of wood or other material, and which will effectively support the rail to prevent it from twisting and spreading.

With the above and other objects in view, the invention consists of the novel construction, combination and arrangement of parts, hereinafter fully described and claimed, and illustrated in the accompanying drawings in which:—

Figure 1 is a perspective view of one end of a cross tie and a portion of a track rail showing the invention applied thereto. Fig. 2 is a detail view of the brace. Fig. 3 is a bottom perspective view of the base plate.

Referring more particularly to the drawing 1 denotes a part of an ordinary wooden cross tie, 2 denotes a portion of a T-shaped track rail, and 3 and 4 denote respectively the brace and base members of my improved rail-bracing and fastening device. The base member 4 is in the form of a rectangular metal plate arranged longitudinally on top of the tie 1 and formed on its bottom with longitudinal ribs 5 adapted to sink into the tie, whereby said base plate will be effectively prevented from shifting. Formed in the upper face of the plate 4 is a transversely extending recess forming a seat which is of just sufficient size to receive the base flanges of the track rail 2. The rail is retained in this seat by means of the brace member 3, and also by means of two spikes or analogous fastenings 7 which pass through vertical openings 8 formed in the plate 4 in the plane of the inner wall of the

seat or recess 6. The brace member 3 is cast in a single piece and has an enlarged central portion of substantially right angular shape. The vertical part 9 of this brace abuts against the web of the rail 2 and extends from the lower face of the head or ball of the rail downwardly, while the horizontal part 10 of the brace has its inner portion shaped to rest on the upper face of the outer base flange of the rail, and its outer portion resting on the top of the plate 4. This horizontal portion 10 of the brace has a surrounding, outwardly projecting, flange formed on its opposite side portions and provided at its outer rounded end with notches 11 adapted to register with similarly arranged vertical openings 12 in the plate 4, for the reception of spikes or analogous fastenings 13. Owing to this construction it will be seen that the spikes, bolts or analogous fastenings 7, 13 when driven into or passed through the tie 1 will not only effectively secure the plate 4 on the tie, but also retain the rail in the seat of the plate 4 and retain the brace 3 on the plate and in engagement with the rail.

What is claimed is:

The combination of a tie, a metallic base plate thereon having a transverse seat in its upper side and provided with spike holes in the bottom of the seat near one side thereof and also with spike holes in that portion of the base plate which projects from the opposite one of said seat, a rail having its base disposed in the seat, one of the base flanges of the said rail having spike holes coincident with those in the seat, spikes driven into the tie and through the spike holes of the rail base and the seat of the base plate, and a brace bearing against the opposite side of the rail and having a base portion bearing on one base flange of the rail and provided with notches coincident with the spike holes of the base plate and spikes in said notches and holes and driven into the tie.

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

JAMES I. JONAS.

Witnesses:

J. C. ROSE,
W. A. DAVIS.