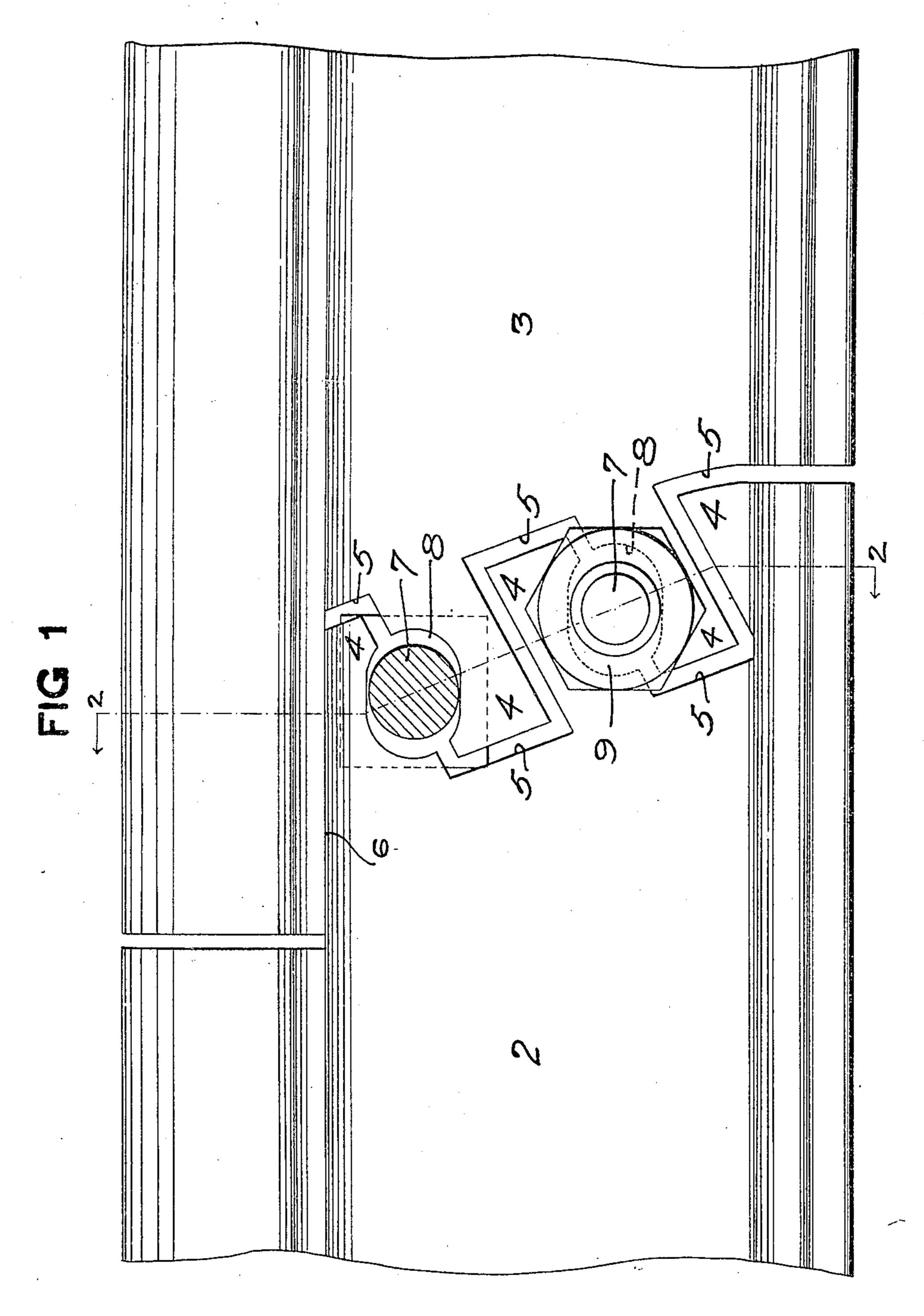
## A. RISTUCCIA.

TIE JOINT FOR RAILS AND BEAMS.
APPLICATION FILED JUNE 21, 1909.

943,788.

Patented Dec. 21, 1909.

2 SHEETS-SHEET 1.



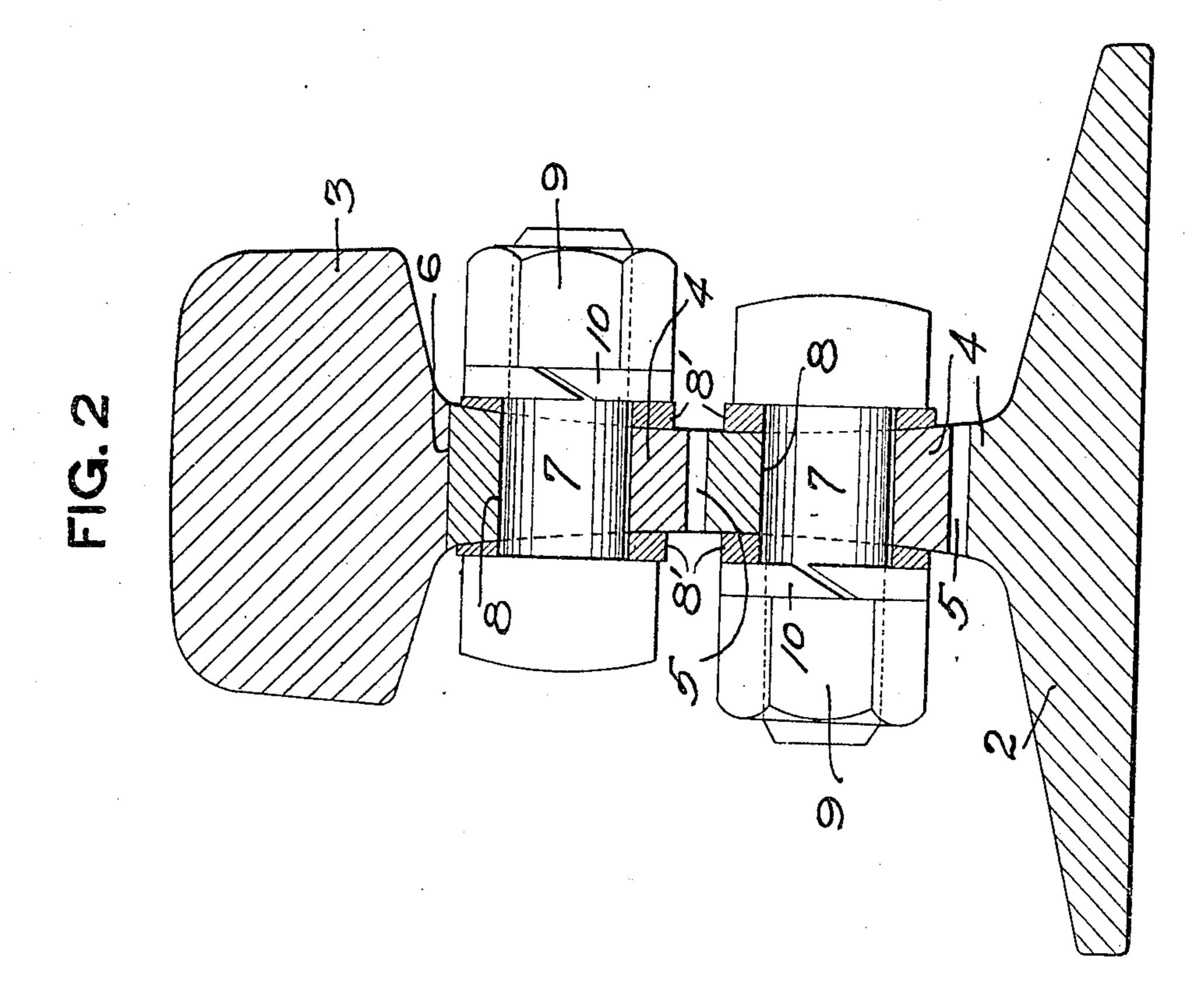
WITNESSES:

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WITNESSES

J. R. Keller John F. Will. INVENTOR

Antonio Pristuccia

## UNITED STATES PATENT OFFICE.

### ANTONIO RISTUCCIA, OF PITTSBURG, PENNSYLVANIA.

#### TIE-JOINT FOR RAILS AND BEAMS.

943,788.

Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed June 21, 1909. Serial No. 503,357.

To all whom it may concern:

Be it known that I, Antonio Ristuccia, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Tie-Joints for Rails and Beams, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to ties for connecting the meeting ends of rails and beams, its object being to dispense with the customary fish-plates or other similar connecting means, as will be hereinafter more fully set

forth.

I shall now describe my invention so that others skilled in the art to which it appertains may understand and construct the same, referring to the accompanying drawings in which I have shown my invention as applied to railway rails.

In the drawings, Figure 1 is a side elevation of the opposing ends of two rail sections showing my invention applied thereto; and Fig. 2 is a sectional view on the line

2-2 of Fig. 1.

In describing my invention, the reference numerals 2 and 3 indicate the opposing ends 30 of two rail sections. These ends are adapted to be interlocked by means of the complementary projections and recesses 4 and 5, respectively. A slight inclination of the recesses and projections prevents longitudi-35 nal separation of the rail sections, see Fig. 1. Additional strength is obtained by having the head of the rail section 3 enter or overlap the web of the section 2, resting on the top face 6 of such web. The joint is locked 40 or the tie completed by means of the tightening bolts 7 which pass through the elongated recesses 8 formed between the adjacent inclined walls of the projections and recesses 4 and 5 in the manner shown. The 45 tightening bolts are provided with suitable washers 8' having their inner face conforming to the contour of the side face of the rail web, so as to enable perfect shouldering of the bolt when tightened, by means of 50 the nut 9, against the curved faces of the

rail web. Suitable lock-nuts 10 are also provided for said nuts. These tightening bolts spline or key the interlocking ends of the rail sections together while also preventing relative lateral displacement thereof. 55 Space between the interlocking projections and recesses 4 and 5 and the elongation of the bolt apertures renders the rails free to move under the expansive and contractive forces due to temperature changes.

The simplicity and durability of my device will be appreciated by those skilled in

the art.

It will be apparent that many changes may suggest themselves to the mechanic 65 which would not be a departure from my invention and I do not therefore desire to limit myself to the specific construction shown.

Having thus described my invention what 70 I claim and desire to secure by Letters Patent is:—

1. In tie joints for rails and beams, the combination of the abutting ends of the members to be secured, the opposing faces 75 of which are provided with a plurality of tongues adapted to interlock with one another; the opposing horizontal face of the respective tongues being provided with notches or recesses adapted to receive a key 80 member, substantially as shown and described.

2. In tie joints for rails and beams, the combination of the abutting ends of the members to be secured, the opposing faces 85 of which are provided with angularly disposed tongues, the tongues of one face being adapted to interlock with the tongues of the opposing face, recesses formed in the opposing top and bottom faces of the tongues, the 90 recess in one face registering with the recess of the next adjacent face, and binding members adapted to be received by the recesses.

Signed at Pittsburg, Pa., this 18th day 95 of June 1909.

ANTONIO RISTUCCIA.

Witnesses:

J. R. Keller, M. A. Baret.