

No. 863,866.

PATENTED AUG. 20, 1907.

W. B. MICHEL.

RAIL JOINT.

APPLICATION FILED APR. 27, 1907.

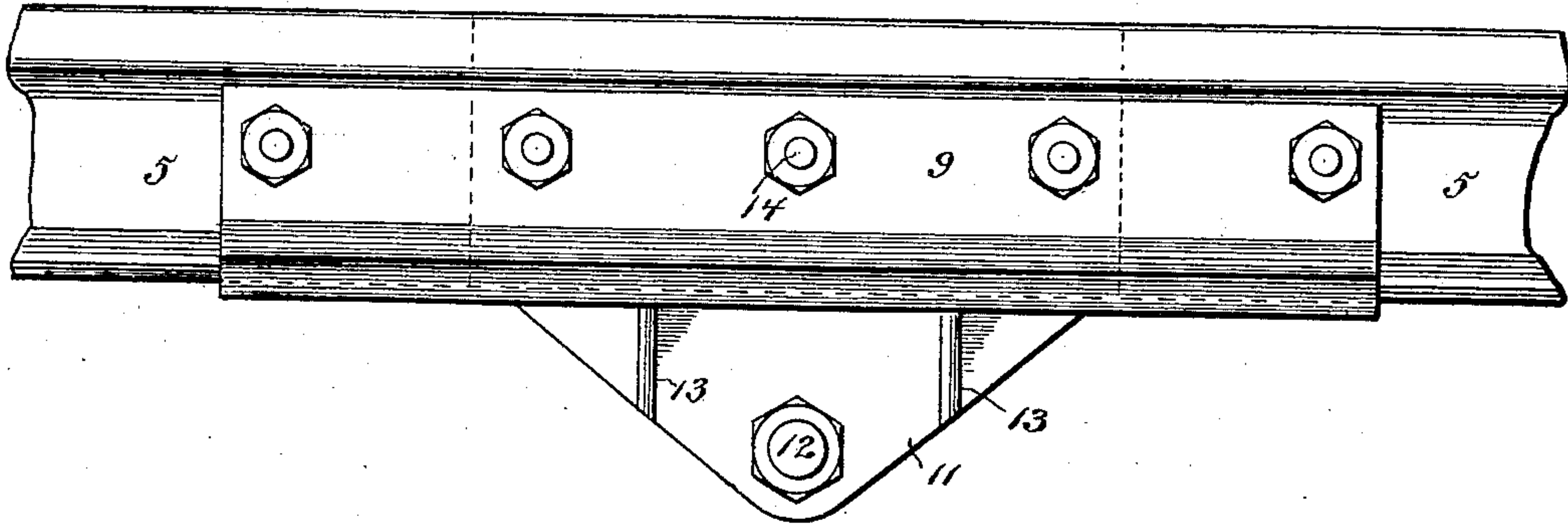


Fig. 1.

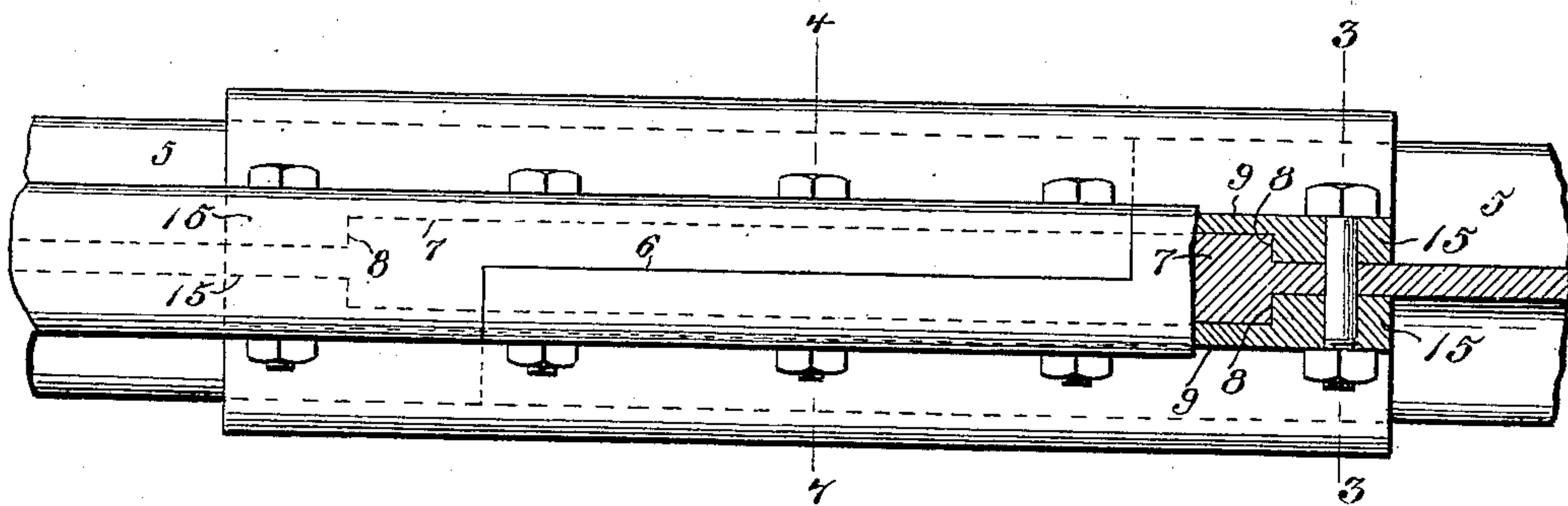


Fig. 2.

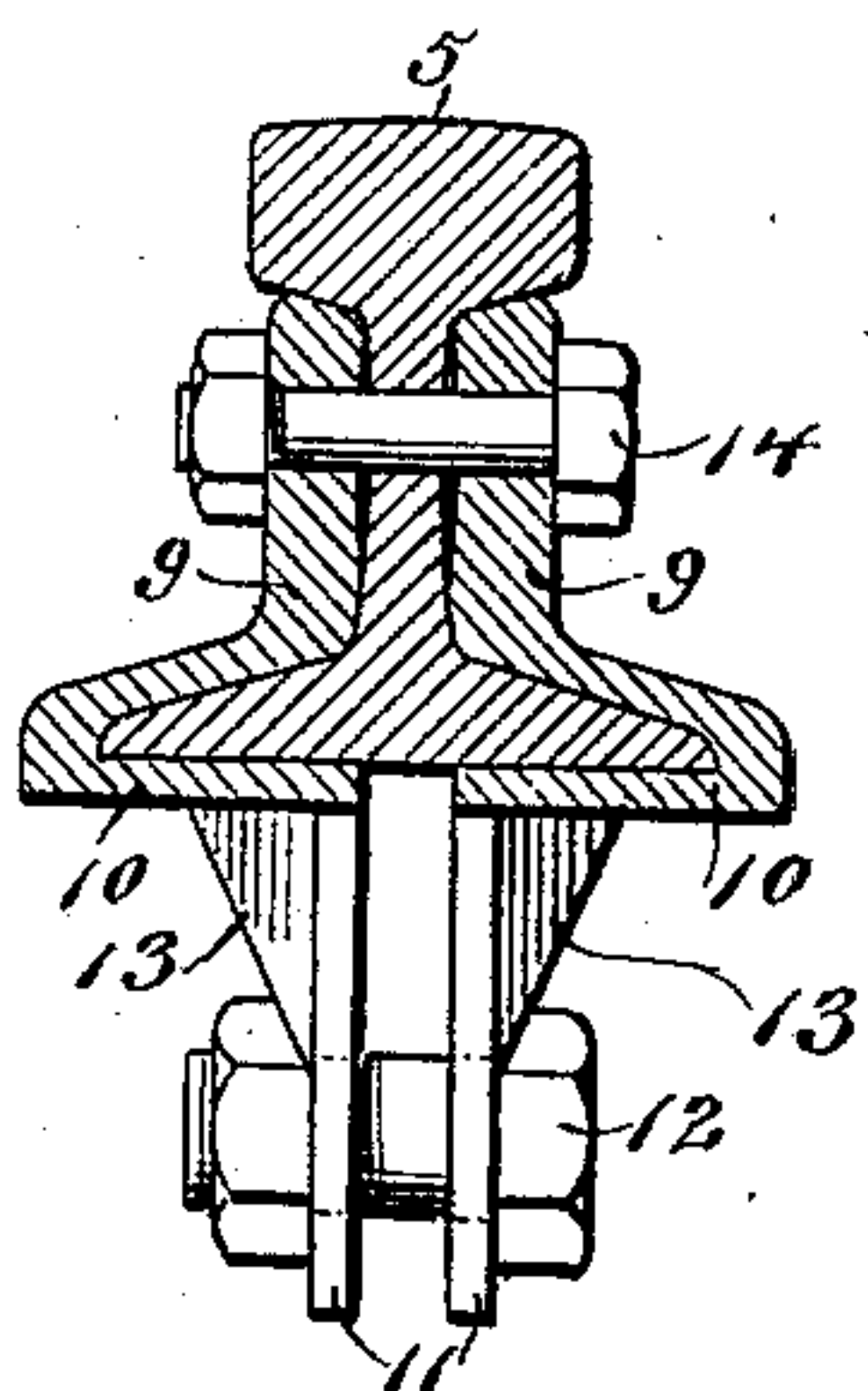


Fig. 3.

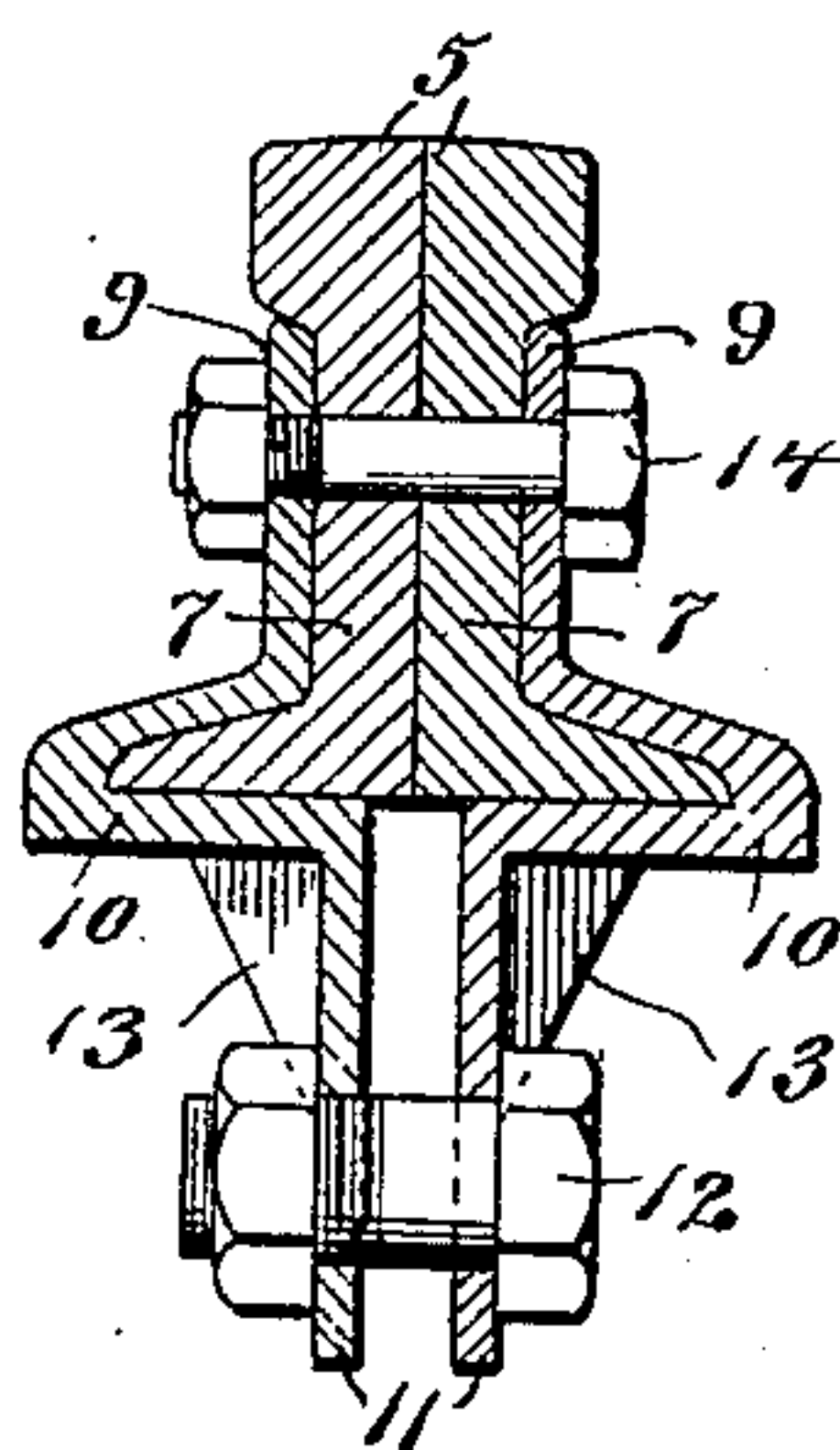


Fig. 4.

Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

No. 863,866.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed April 27, 1907. Serial No. 370,612.

*To all whom it may concern:*

Be it known that I, WILLIAM BERNARD MICHEL, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints, and has for its object an improved form of splice-bar designed to serve also as a rail-chair, and provided with means for taking up wear so that a strong and rigid joint may be maintained.

In the accompanying drawing, Figure 1 is an elevation showing the application of the invention. Fig. 2 is a plan view. Fig. 3 is a transverse section on the line 3—3 of Fig. 2. Fig. 4 is a transverse section on the line 4—4 of Fig. 2.

Referring specifically to the drawing, 5 denotes two rail-sections which are cut away at their meeting ends to form a rabbet-joint 6. For a short distance from their respective ends the rail-sections have reinforced webs as indicated at 7 which form shoulders 8 for a purpose to be hereinafter described. The splice-bars are shaped as usual to fit between the base flange and head of the rail as indicated at 9, and are also continued so as to extend around the base flange of the rail to the bottom thereof as indicated at 10 thus forming a chair in which the rail seats. At the inner edges of the portions 10 of the splice-bars are depending flanges 11. The flanges of the respective splice-bars are parallel and spaced from each other, and also have bolt-holes to receive a transverse bolt 12. On the outside the flanges 11 are stiffening ribs 13. The parts 9 are fastened to the rail-sections in the usual manner by transverse bolts 14. The flanges 11 act as a truss to support the ends of the rails and relieve excessive strain on the

splice-bars. When the bolt 12 is tightened the inner edges of the parts 10 are elevated thus taking up any space which may not have been previously taken up with the bolts 14. The joint therefore can be kept firm and rigid and pounding is prevented.

At their ends, the parts 9 of the splice-bars are thickened as indicated at 15 forming shoulders which abut against the shoulders 8 formed by the thickened portions 7 of the rail-webs heretofore referred to. This arrangement assists to prevent longitudinal displacement of the splice-bars and relieve the strain on the bolts 14.

The joint herein described is strong and durable and can be easily maintained. Pounding at the joint is prevented thus adding to the comfort of the traveling public and lessening the liability of damage to the rolling stock.

I claim:—

1. A rail-joint comprising abutting rail-sections having shouldered webs, and splice-bars having shouldered ends engageable with the shouldered webs.

2. A rail-joint comprising abutting rail-sections, having shouldered webs, splice-bars having base portions extending under the rail-base to form rail chairs, flanges depending from the inner ends of the base portions, fastening bolts passing through the flanges, and shoulders at the ends of the splice-bars engageable with the shoulders on the rail-webs.

3. A rail-joint comprising abutting rail-sections having reinforced webs to form shoulders, and splice-bars having reinforced ends forming shoulders which are engageable with the shoulders on the webs.

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

WILLIAM BERNARD MICHEL.

Witnesses:

E. H. PIERCE,  
GEO. A. SAVILLE.