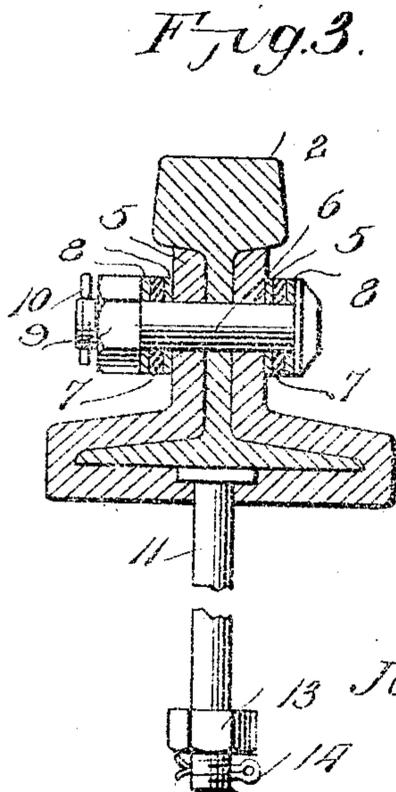
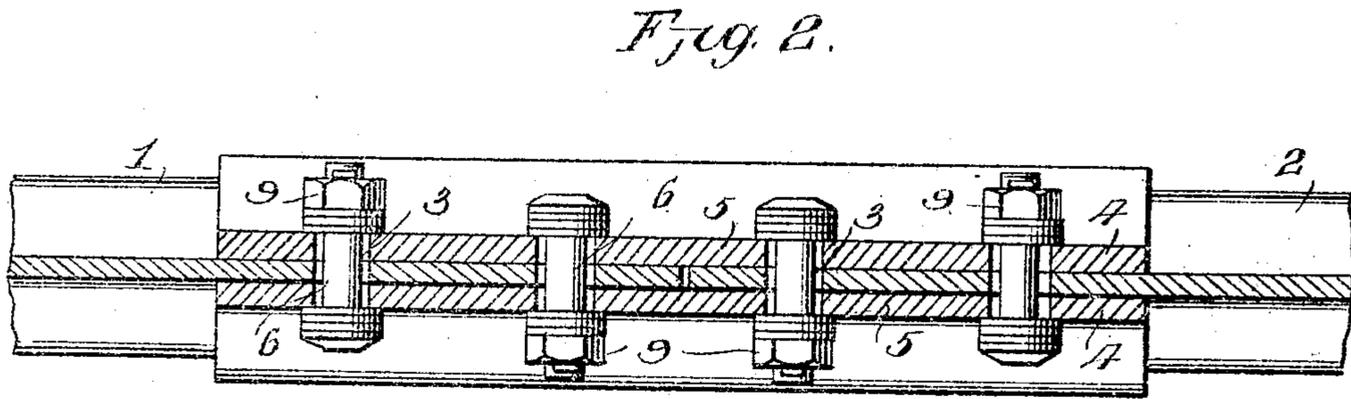
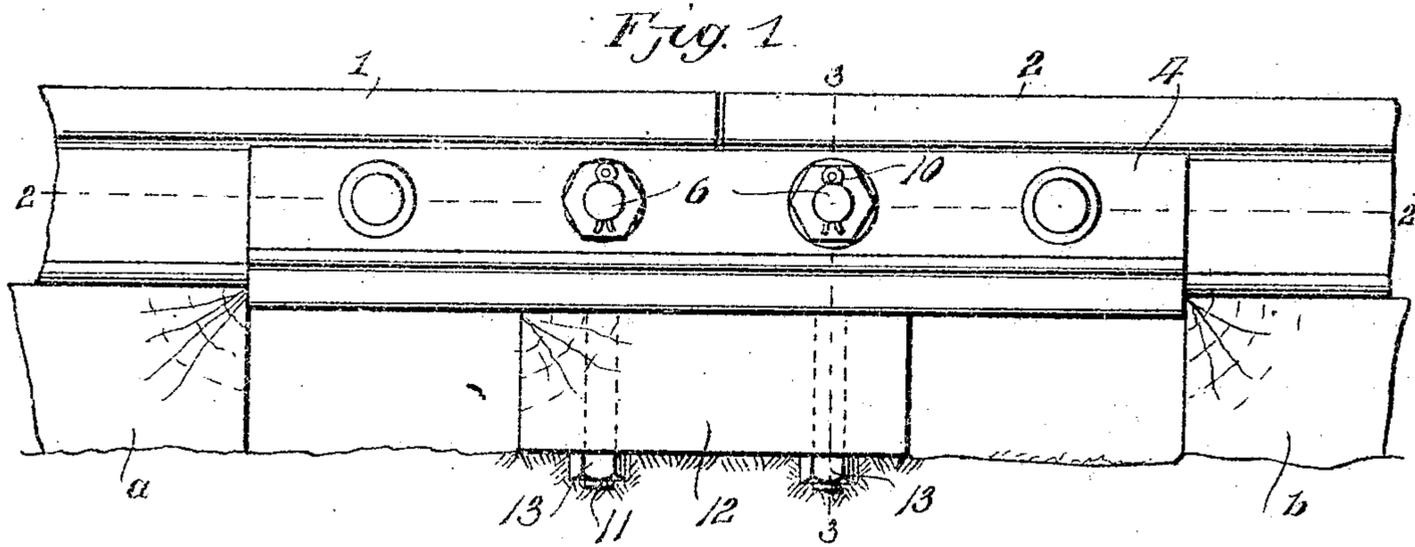


No. 868,505.

PATENTED OCT. 15, 1907.

J. W. TROTTER.  
RAIL CHAIR.

APPLICATION FILED JAN. 19 1907.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOSEPH W. TROTTER, OF DORA, ALABAMA.

## RAIL-CHAIR.

No. 868,505.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed January 19, 1907. Serial No. 353,164.

*To all whom it may concern:*

Be it known that I, JOSEPH W. TROTTER, a citizen of the United States of America, residing at Dora, in the county of Walker and State of Alabama, have invented 5 new and useful Improvements in Rail-Chairs, of which the following is a specification.

This invention relates to rail chairs, and one of the principal objects of the same is to provide efficient and reliable means for joining the meeting ends of a pair of 10 railway rails and to permit the same to expand and contract without interfering with the efficiency of the joint.

Another object is to provide means for anchoring the rail chair to a tie extending across the rails at the joint.

Still another object of the invention is to provide 15 yielding washers for the bolts to permit a slight yielding action to the rail and chair.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which:

20 Figure 1 is a side elevation of a rail joint made in accordance with my invention. Fig. 2 is a longitudinal section on the line 2—2, Fig. 1. Fig. 3 is a vertical section on the line 3—3; Fig. 1.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates one 25 end of a rail, and 2 is the end of the other rail forming the joint, said rails being provided with bolt holes 3 in the web portions thereof, said bolt holes being slightly larger than the diameter of the bolts to be passed 30 through the same. A rail chair 4 surrounds the base flange of the rail and is provided with side flanges 5 which take the place of the ordinary fish plates. The bolts 6 which pass through the openings 3 in the web of

the rail, and through the flanges 5 of the rail chair are provided with yielding washers 7 preferably of rubber 35 disposed intermediate metal washers 8, and a nut 9 is fitted to the bolt 6, and said nut being held in place by an ordinary cotter pin 10 extending through the bolt. Seated in the base portion of the rail chair are a pair of 40 bolts 11, the heads of said bolts being countersunk in the inner wall of the chair, and said bolts extending through a tie 12 and being fitted with nuts 13 and provided with a cotter pin 14.

From the foregoing it will be obvious when the chair is secured to the tie 12 by means of the bolts 11, and the 45 ends of said chair abutting against contiguous ties *a, b*, said chair will be held rigidly in place, and that owing to the size of the bolt openings 3 and the arrangement of resilient washers 7, there will be a slight yielding action to the joint which will permit the required expansion 50 and contraction of the rail ends, while at the same time, the rails will be held against creeping or spreading.

Having thus described the invention, what I claim is:

The herein described rail chair constructed to fit the base flanges, and webs of abutting rails, bolts passed 55 through openings in the chair and in the web portions of the rails, yielding washers fitted to said bolts, nuts upon said bolts, cotter pins for holding said nuts in position, and countersunk bolts passing through the base portion of the chair, said bolts designed to pass through a tie, and 60 nuts fitted on the ends of said bolts under said tie, substantially as described.

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

JOSEPH W. TROTTER.

Witnesses:

F. T. LANTRIP,  
W. L. HEAD.