

No. 733,814.

PATENTED JULY 14, 1903.

R. L. CONNER.
RAIL JOINT.

APPLICATION FILED APR. 9, 1903.

NO MODEL.

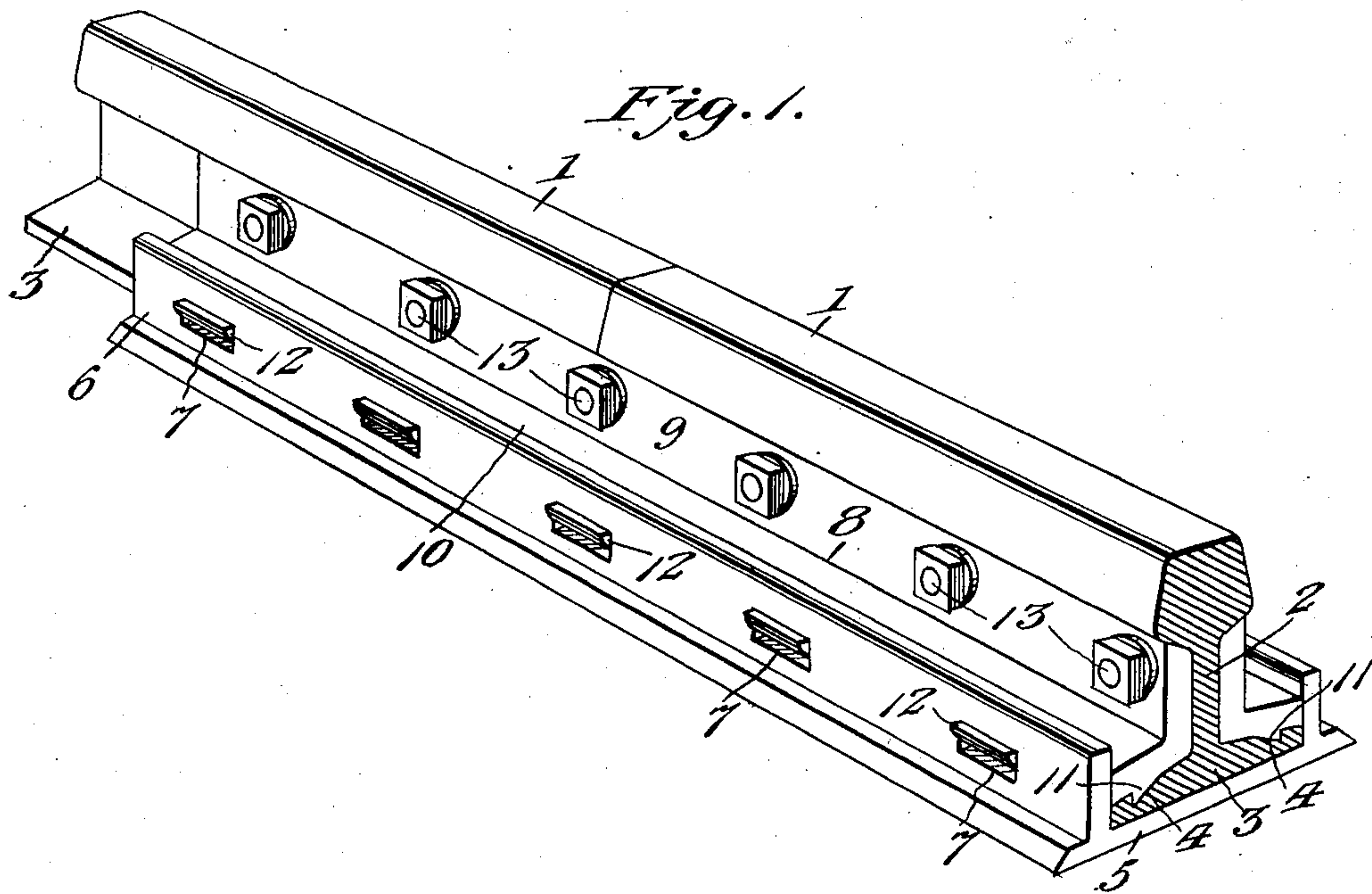
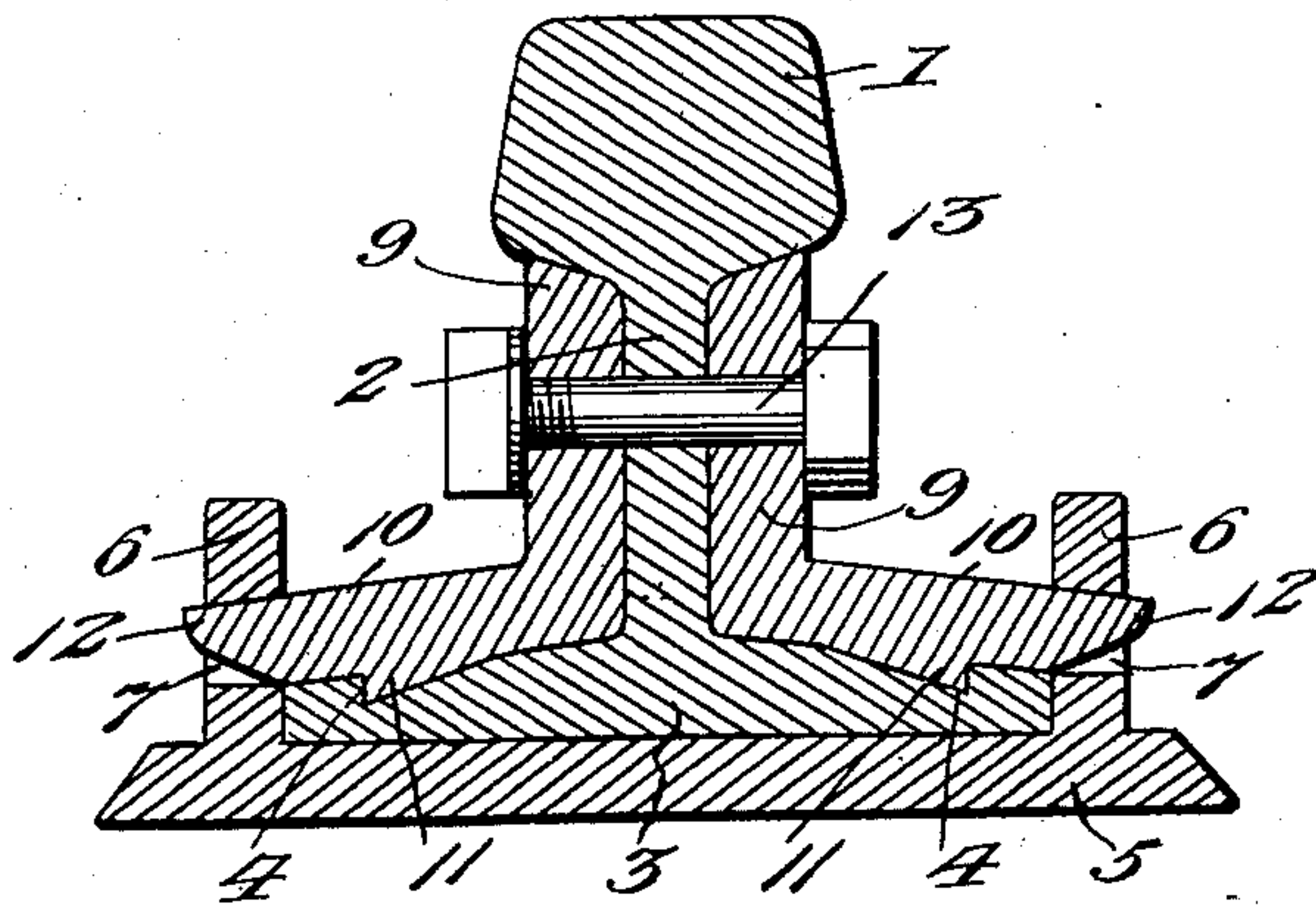


Fig. 2.



Witnesses

Edwin G. McKee
Hubert D. Lawson.

Inventor
Russell L. Conner.

By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

RUSSEL L. CONNER, OF MOUNT GILEAD, OHIO.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 733,814, dated July 14, 1903.

Application filed April 9, 1903. Serial No. 151,854. (No model.)

To all whom it may concern:

Be it known that I, RUSSEL L. CONNER, a citizen of the United States, residing at Mount Gilead, in the county of Morrow and State of Ohio, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to new and useful improvements in rail-joints; and its object is to provide a joint of novel construction whereby the ends of the rails may be securely fastened together and prevented from sagging.

A further object is to provide fish-plates having means for securely locking them to the bases and webs of the rails.

With the above and other objects in view the invention consists in providing a chair having parallel flanges adjacent to the edges thereof within which are formed series of apertures. Angle-plates are arranged at opposite sides of the adjoining ends of rails, and these plates have tongues extending therefrom and engaging apertures in the flanges of the chair. Ribs are also arranged on the under surface of the angle-plates and engage the bases of the rails and prevent lateral strain upon the flanges.

The invention also consists in the further novel construction, combination, and arrangement of the several parts, which will be more fully hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved rail-joint, and Fig. 2 is a section there-through.

Referring to the figures by numerals of reference, 1 1 are the heads, 2 2 the webs, and 3 3 the bases, of railway-rails of ordinary construction. Grooves 4 are formed longitudinally within the bases at opposite sides of the webs, and the outer walls of these grooves are preferably substantially perpendicular, for the purpose hereinafter more fully described. The abutting ends of the rails are adapted to be placed upon a chair 5, having parallel flanges 6 adjacent to the sides thereof and extending longitudinally along the edges of the bases 3. Within each flange is formed a series of apertures 7. Angle-plates 8 are

arranged upon each side of the bases 3 and comprise upright portions 9, which fit snugly upon the sides of the webs 2 and the bottoms of the heads 1, and laterally-extending portions 10, which fit upon the bases 3 and are provided with longitudinally-extending angular beads 11, which rest within the grooves 4. Tongues 12 project laterally from the portions 10 of the angle-plates and fit within the apertures 7, before referred to. Bolts 13 or other suitable securing devices extend through the upright portions 9 of the angle-plates and through webs 2 of the rails and serve to bind the angle-plates securely to the rails and also to securely fasten said angle-plates to the chair by preventing the withdrawal of tongues 12 from engagement therewith. It will be understood that downward pressure upon the angle-plates will not cause said plates to move laterally because the beads 11 fit snugly within grooves 4 and are held by tongues 12. These beads serve to relieve the side flanges 6 of the chair of all lateral strain.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

In a rail-joint, the combination with rails, the bases of which have longitudinally-extending grooves therein; of a chair under said bases, flanges at the sides of the chair and at opposite sides of the bases, said flanges having apertures therein, angle-plates secured to opposite sides of the rails, beads upon the angle-plates engaging the grooves in the rails, and tongues to the angle-plates projecting into the apertures.

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

RUSSEL L. CONNER.

Witnesses:

T. B. MATEER,

G. A. LE FEVER.