

No. 791,396.

PATENTED MAY 30, 1905.

C. L. ANDREWS.
RAIL JOINT.
APPLICATION FILED DEC. 17, 1904.

Fig 1.

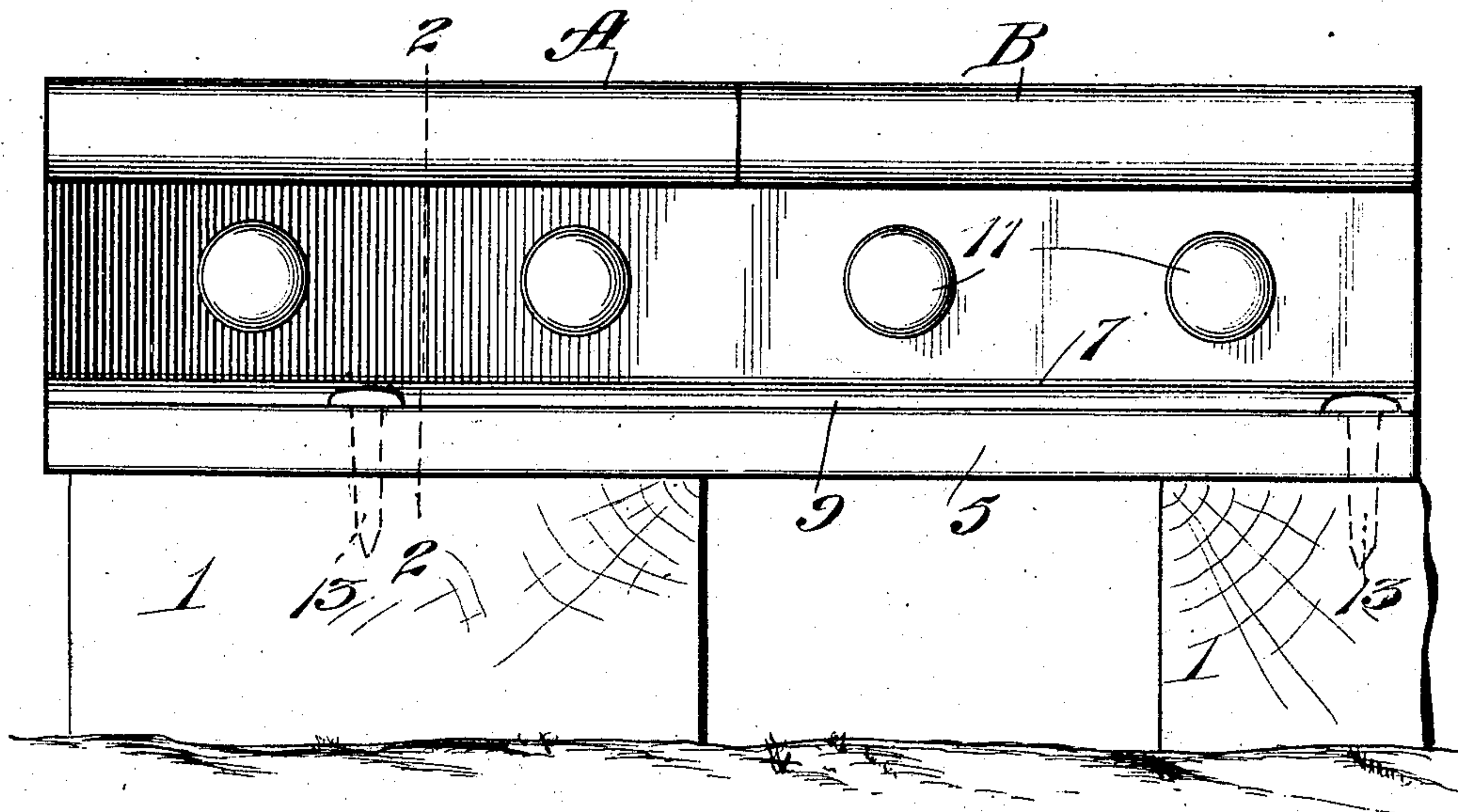
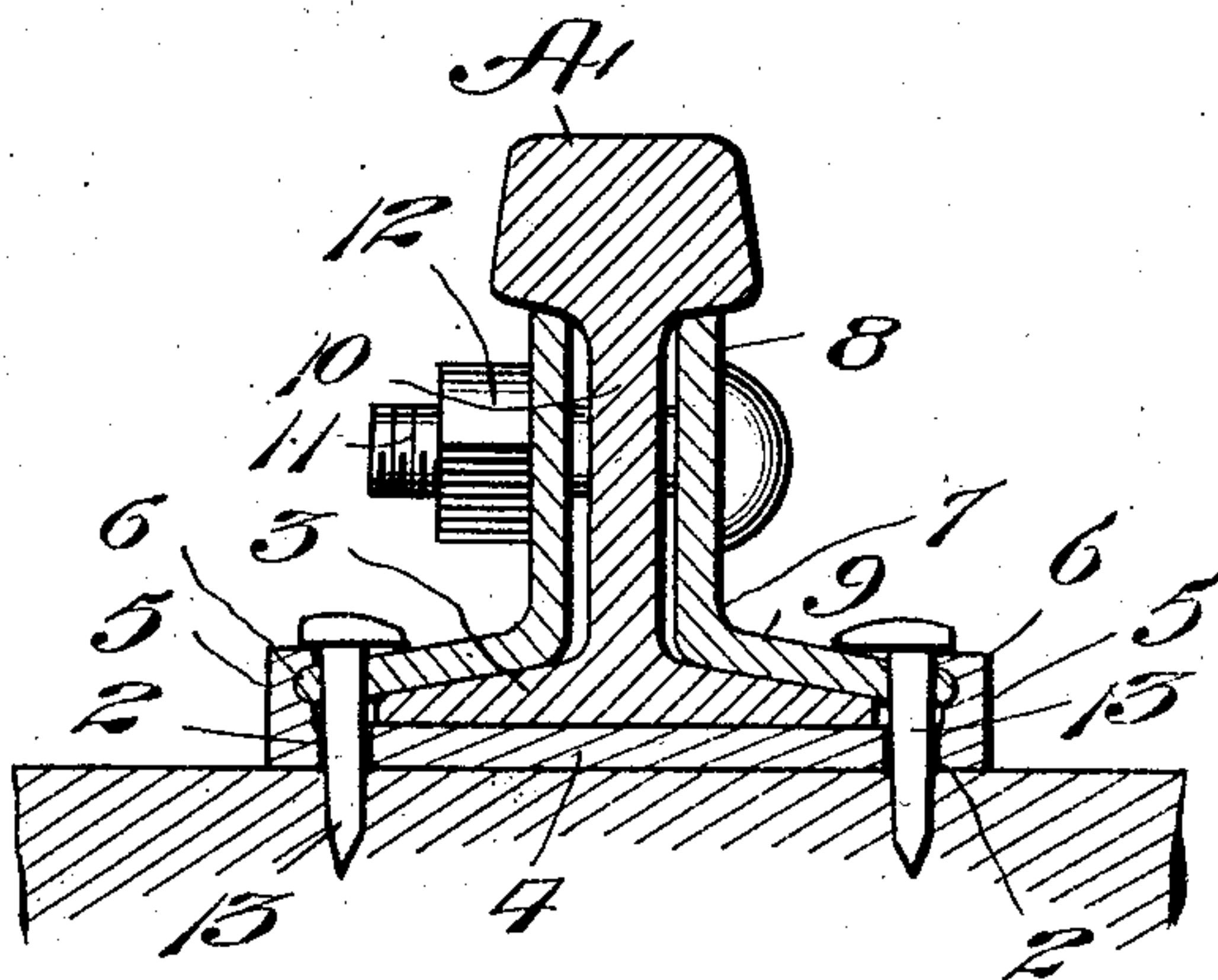


Fig 2.



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CHANCY L. ANDREWS, OF CONNEAUT, OHIO.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 791,396, dated May 30, 1905.

Application filed December 17, 1904. Serial No. 237,276.

To all whom it may concern:

Be it known that I, CHANCY L. ANDREWS, a citizen of the United States, residing at Conneaut, in the county of Ashtabula and State of Ohio, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to rail-joints; and its primary object is to provide a novel and useful device of this character by means of which the meeting ends to railroad-rails may be firmly united against sagging and accidental separation.

A further object of the invention is to provide a rail-joint which may be easily and quickly applied and removed, which comprises but few parts so arranged and constructed that all liability of their becoming loosened or injured is obviated, and which is cheap to manufacture, durable, and efficient.

The invention consists in the construction, combination, and arrangement of parts more fully hereinafter described, claimed, and illustrated in the accompanying drawings, which disclose the preferred form of my invention, and in which—

Figure 1 is a side elevation of the meeting ends of two railroad-rails, illustrating the application of my improved rail-joint; and Fig. 2 is a sectional view on the line 2 2, Fig. 1.

Referring to the drawings by reference characters, A and B designate the adjacent or meeting ends of two railroad-rails, the same being of the usual construction and form and positioned as usual upon sleepers or ties 1.

2 designates a chair adapted to be positioned under the bases 3 of the rails and is adapted to bridge the space between the ties to which the chair is secured. The chair comprises a base-plate 4, provided with edge flanges 5, which extend throughout the entire length of said base, said flanges being provided on their inner face with grooves 6, which also extend throughout the entire length of the flanges and which are positioned a little above the sides of the base 3.

7 7 designate angle fish-plates, the vertical portions 8 and the horizontal portions 9 thereof being adapted to be positioned

within parallel arrangement with the web 10 and base 3, respectively, of the rails A and B. The edges of the horizontal portions 9 of the fish-plates are adapted to be received by the grooves 6, and the horizontal portions 8 thereof are of a width a little greater than the width of the web 10, so as to cause the edges of the horizontal portions 9 to be forced into frictional engagement with the walls of the grooves 6, this being accomplished by means of bolts and nuts 11 and 12.

The application of my improved rail-joint may be described in the following manner: The chair 2 is positioned upon two adjacent ties and then the bases 3 of the rails A and B are placed thereon between the flanges 5. After the rails have been thus placed the longitudinal edges of the portions 9 of the fish-plates are then inserted in the grooves 6, after which the fish-plates are swung to throw the portions 8 thereof into alinement with the webs 10 of the rails. The bolts 11 are then passed through the horizontal portions of the fish-plates, and the web 10 and nuts 12 are mounted upon the ends of the bolts to cause the portions 8 of the fish-plates to approach the web 10, thereby forcing the edges of the portions 9 into frictional engagement with the grooves 6. After my improved rail-joint is applied spikes 13 are driven through the portions 9 of the fish-plate and the bases 3 and 4 of the rails and chair, respectively, into the ties 1, thereby not only securing the rails from spreading, but also assisting to secure the members of the joint in relative position.

From the foregoing description, taken in connection with the accompanying drawings, the construction and advantages of my improved rail-joint will be readily apparent without requiring any further extended description. It will be seen that the device is simple of construction, that said construction permits of its manufacture at small cost, and that it is exceedingly well adapted for the purpose for which it is designed.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of my invention.

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

5 A rail-joint comprising a chair with vertical longitudinal edge flanges having semicy-
lindrical recesses therein, the flanged sections
of the meeting ends of the rails being mount-
ed on the base of the chair, the flanged fish-
plates extending downwardly from the un-
10 der sides of the tread of the rails and out of
contact with the opposite sides of the webs of
the rails, the flanges of said plates being
mounted on the upper surfaces of the flanges
of the rail-sections and projecting beyond the
15 edges of the same, the edges of the flanged
portions of the fish-plates being rounded to

fit into the semicircular recesses of the verti-
cal flanges of the chair, securing-bolts passing
through openings in the fish-plates and webs
of the rail, and spikes passing through open-
ings of the flanges of the fish-plates and also 20
through openings in the base of the chair and
into the ties of the road-bed, substantially as
specified.

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

CHANCY L. ANDREWS.

Witnesses:

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