

No. 837,129.

PATENTED NOV. 27, 1906.

C. E. SCHREFFLER.

RAIL JOINT.

APPLICATION FILED MAR. 16, 1906.

Fig. 1.

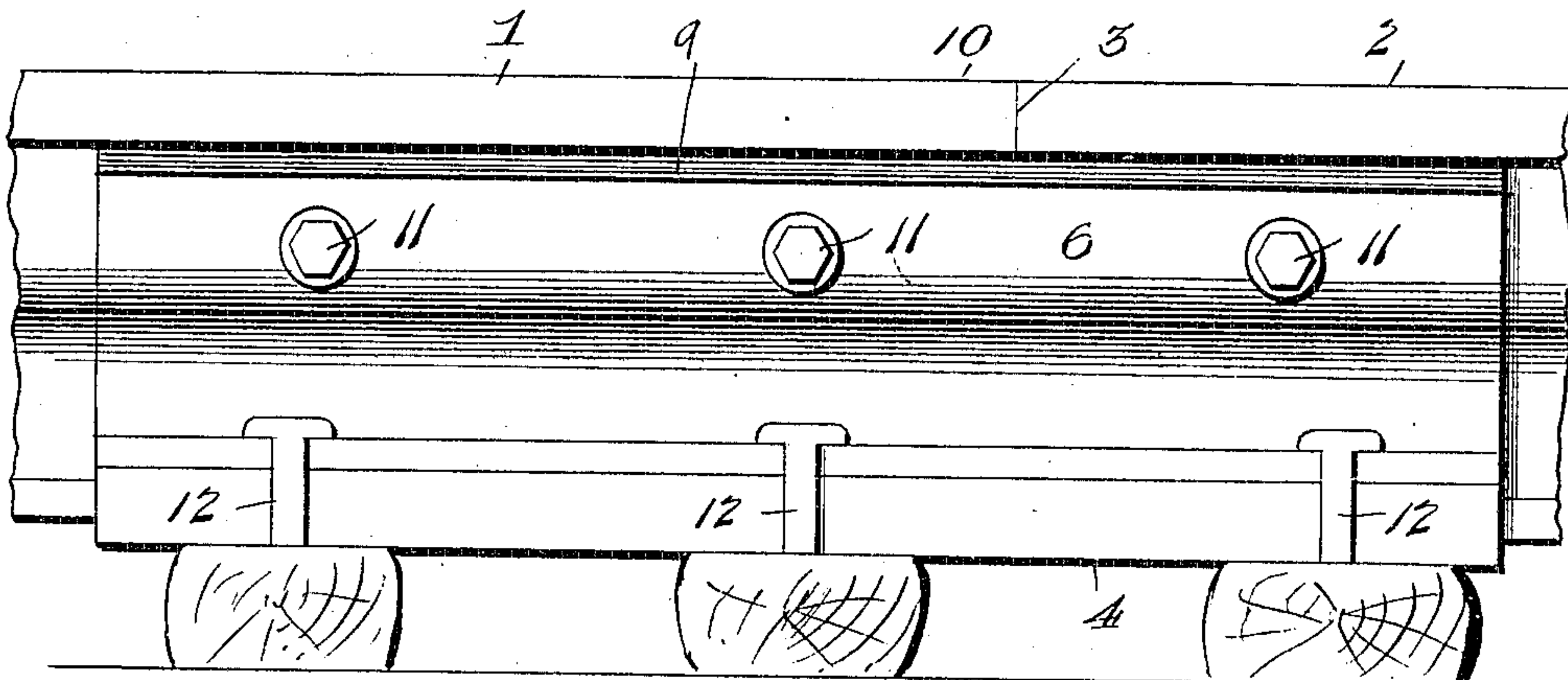


Fig. 2.

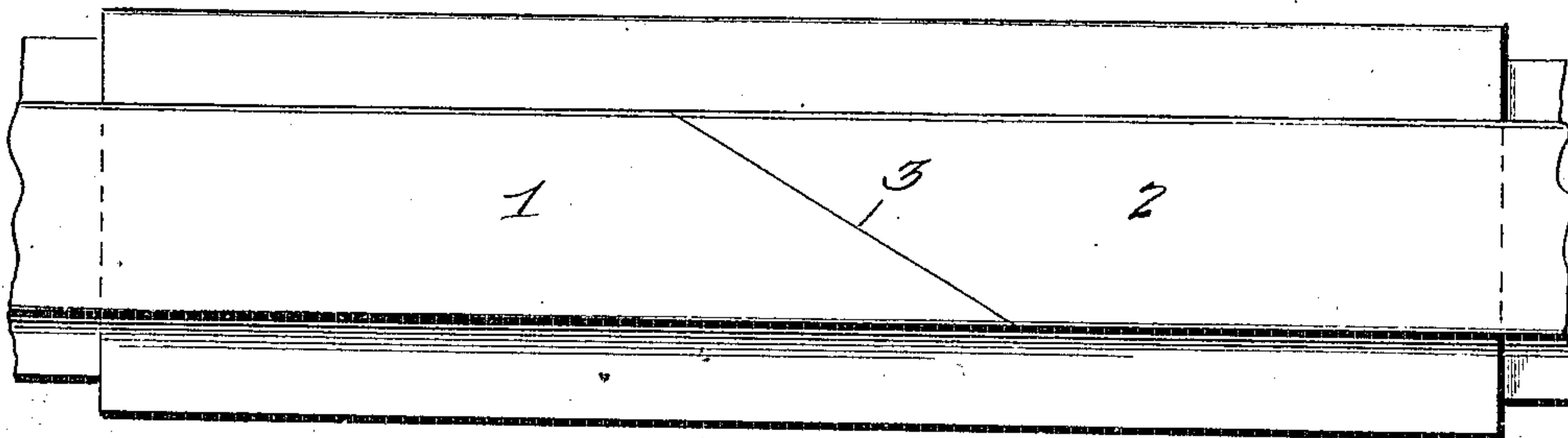


Fig. 3.

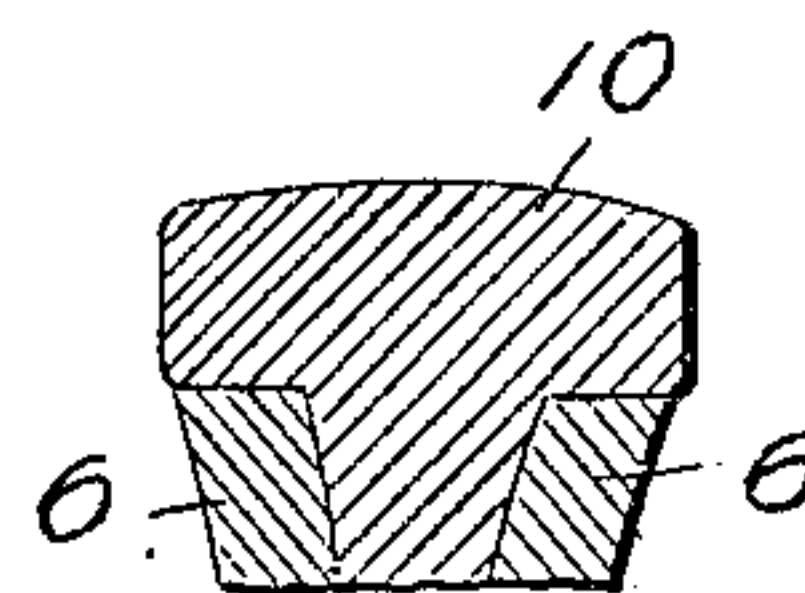
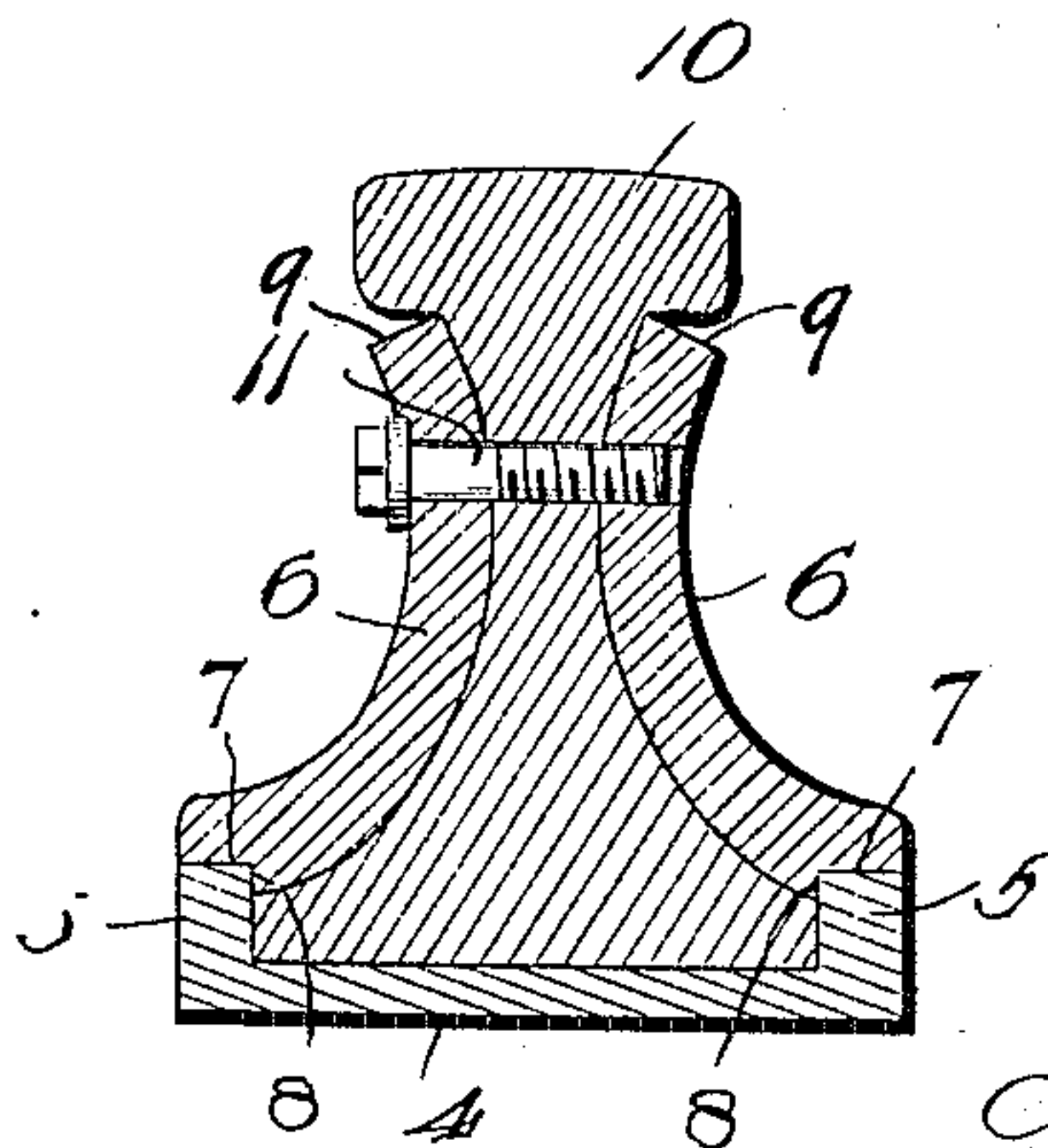


Fig. 4.

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RAIL-JOINT.

No. 837,129.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES E. SCHREFFLER, a citizen of the United States, residing at Elizabethville, in the county of Dauphin and State of Pennsylvania, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail-joints; and it consists in the construction and arrangement of the several parts, which will be more fully hereinafter described.

The primary object of the invention is to provide a rail-joint organization wherein the parts may be quickly and positively assembled and embodying particular fish-plate and chair elements or members which snugly hug the meeting ends of the rails or joint of the latter and obviate all possibility of loosening or springing of the joint.

In the drawings, Figure 1 is a side elevation of portions of rails disposed in operative relation and embodying the features of the invention. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse vertical section thereof. Fig. 4 is a detail section through the head of one of the rails and the upper extremities of the fish-plates, showing a modification.

Similar numerals of reference are employed to indicate corresponding parts throughout the several views.

The numerals 1 and 2 designate the terminals of rails, which in the present instance and by preference are cut diagonally at their ends to form an elongated joint 3, which will overcome the jar and wear on the wheels of the rolling-stock to a material extent. The meeting extremities of the rails 1 and 2 are disposed in a chair member 4, having upwardly-projecting side flanges 5. Placed against opposite sides of the webs of the rail extremities 1 and 2 are fish-plates 6 shaped to snugly bear against and conform to the contour of the opposite sides of the webs of the rails and having their lower ends longitudinally grooved, as at 7, to provide abutting shoulders 8, extending fully throughout the length thereof to snugly fit over the upper ends of the flanges 5, the shoulders 8 bearing against the inner sides of the upper portions

of the said flanges, as clearly shown by Fig. 3. The upper ends 9 of the fish-plates closely bear against the under overhanging portions of the rail heads or balls 10, and after the fish-plates are thus applied they are secured to the rail-webs by suitable bolts 11. Spikes 12 are driven into the ties on which the rails are disposed and have their heads projected over the upper portions of the lower extremities of the fish-plates to serve as a means of additional securement for said plates and also to hold the members comprised in the joint organization in proper position on the ties.

From the foregoing it will be seen that the improved rail-joint is simplified in its construction and economical in cost and that the parts thereof may be readily assembled in operative relation with material advantages in laying railroad-rails.

At any time desired the several parts of the joint may be separated by removing the bolts 11 and withdrawing the spikes 12, and as the fish-plates are of a strong and durable nature, as well as the chair member 4, they may be reused or reapplied to new rails, which may be substituted for those which have become worn and unfit for further use.

In the modified form of the construction shown by Fig. 4 the upper ends of the fish-plates 6 are horizontally straight and snugly fit under and against the portions of the head 10 on opposite sides of the web of the rail.

What I claim is—

A rail-joint comprising a chair member having upwardly-projecting side flanges and adapted to receive the bases of rail extremities, inwardly-curved fish-plates applied closely against the opposite sides of the webs of the rail extremities and snugly fitting the latter, the lower side edges of the fish-plates terminating flush with the outer surfaces of the chair-flanges and having under longitudinal groove-forming abutting shoulders, the grooves fitting over and fully covering the upper edges of the flanges and contacting with the latter and the shoulders bearing against the inner sides of the upper portions of the said flanges and also bearing on the

upper surfaces of the portions of the rail-
flanges adjacent to the chair-flanges, the
upper ends of the fish-plates contacting
closely with the under side of the heads of
5 the rails, and means for securing the fish-
plates and rails and the fish-plates and chair
member.

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

CHARLES E. SCHREFFLER.

Witnesses:

GEO. H. SWAB,
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