

D. C. MILLER.  
RAILWAY JOINT CHAIR.  
APPLICATION FILED JUNE 27, 1906.

914,593.

Patented Mar. 9, 1909.

2 SHEETS—SHEET 1.

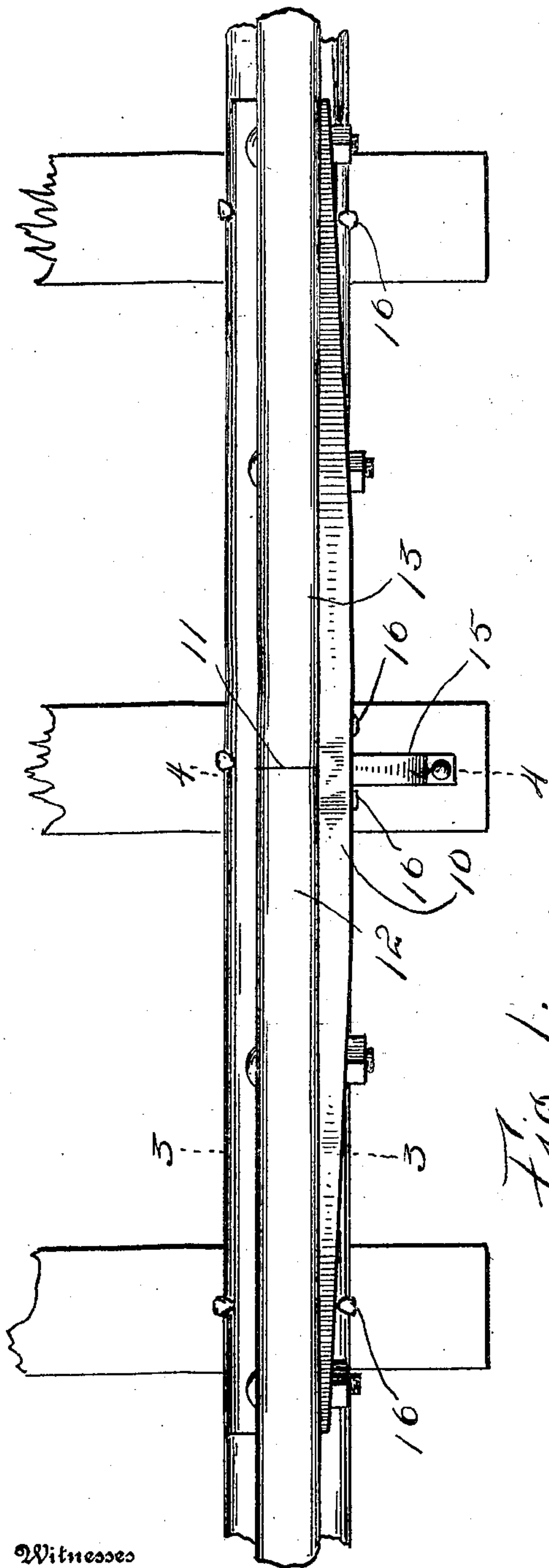


Fig. 1.

Witnesses  
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H. B. MacHal

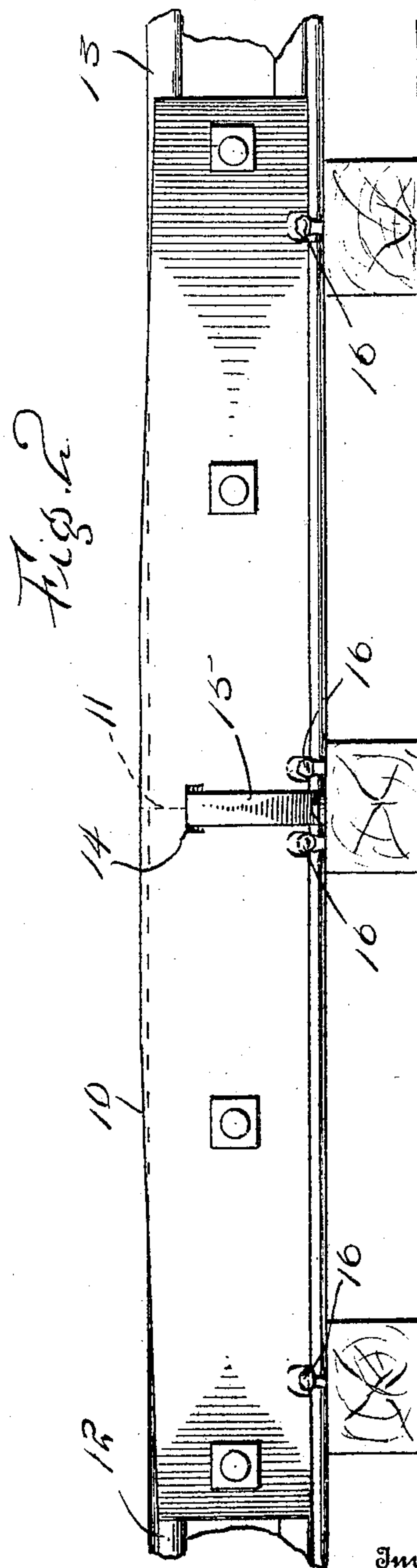


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

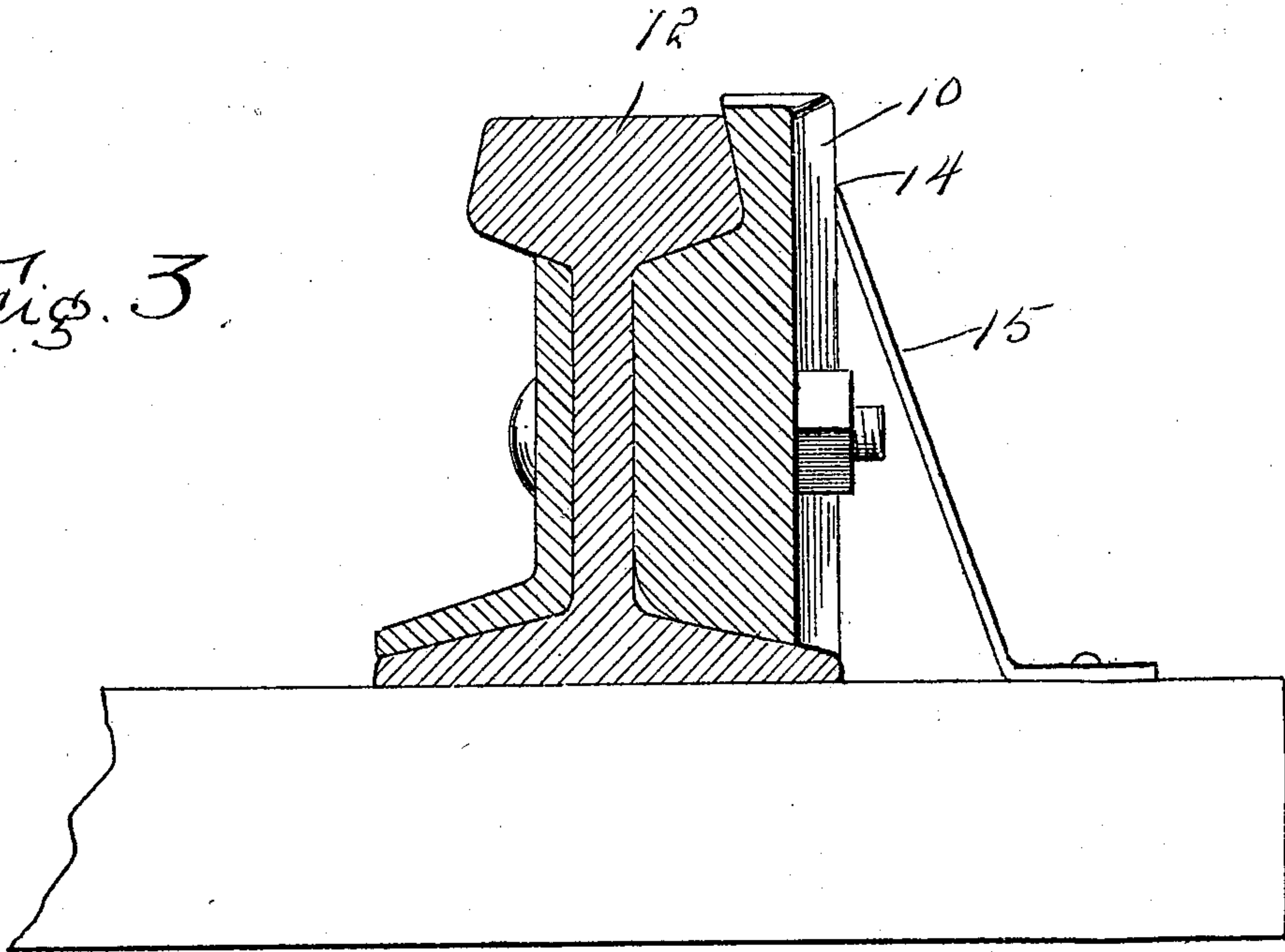
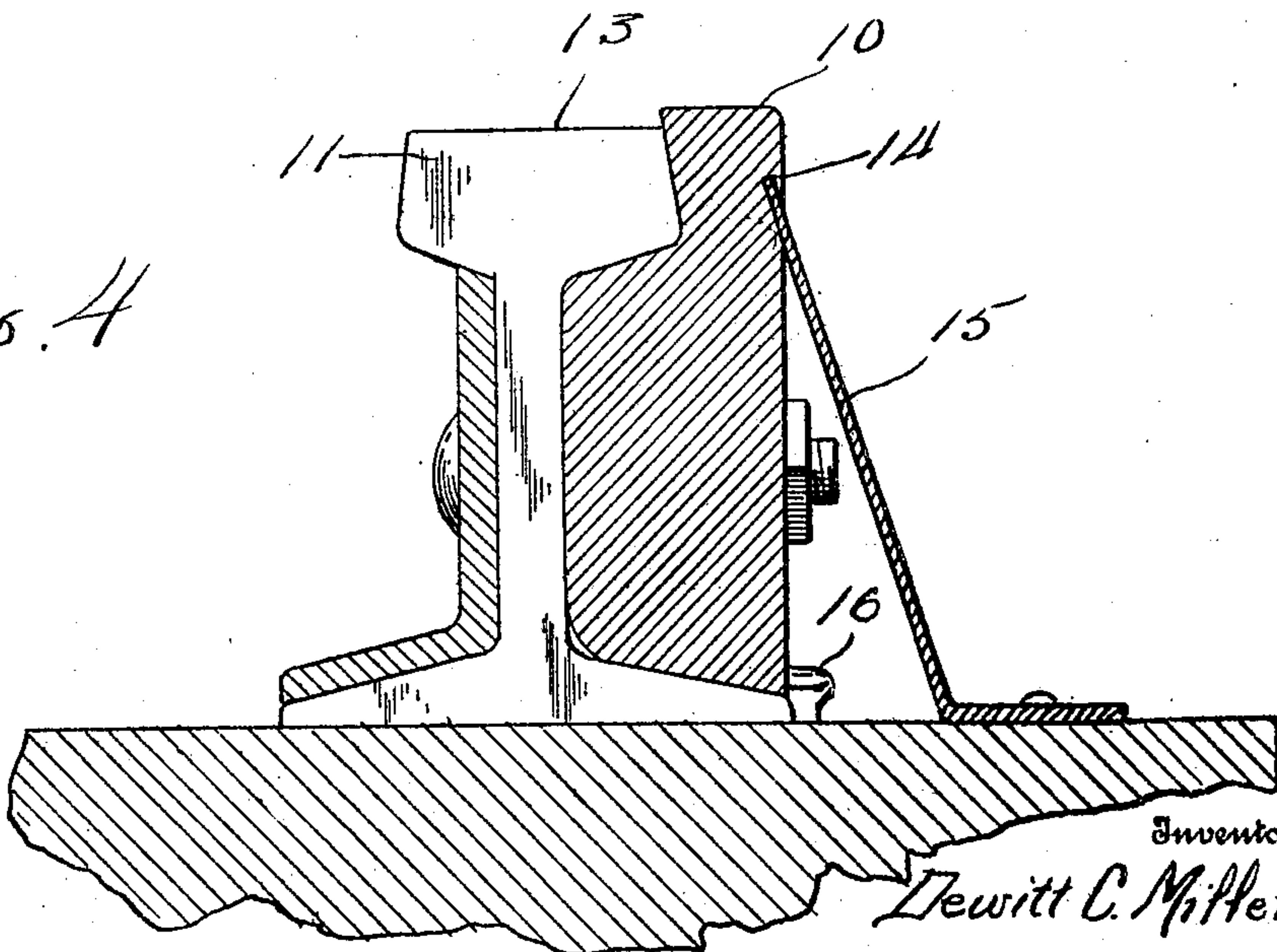


Fig. 4.



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J. B. Mac Nab.

Inventor  
Dewitt C. Miller.  
By *[Signature]*

Attorney S.



# UNITED STATES PATENT OFFICE.

DEWITT C. MILLER, OF MELROSE, FLORIDA, ASSIGNOR OF ONE-THIRD TO HUGH W. HAMLYN, OF HOHOKUS, NEW JERSEY, AND ONE-THIRD TO HARRY JACKSON, OF MELROSE, FLORIDA.

## RAILWAY-JOINT CHAIR.

No. 914,593.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed June 27, 1906. Serial No. 323,618.

*To all whom it may concern:*

Be it known that I, DEWITT C. MILLER, a citizen of the United States, residing at Melrose, in the county of Alachua, State of Florida, have invented certain new and useful Improvements in Railway-Joint Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to fish-plates which constitute elements in the formation of rail-way rail joints; and it is the purpose of the improvements wrought by me to strengthen the joint, obviate any noise whatsoever on account of the joint and the passage of the train thereover. It will also prevent any sinking whatsoever at the joint, however long the device may be used.

The invention is illustrated in the annexed drawing, forming a part of this specification, in view of which drawings, the invention will be described in detail, showing its relationship to the rail and, perhaps, other old parts, finally pointing out with distinctness and particularity the newly created part or parts in the subjoined claim.

Of the said drawings, Figure 1 is a plan of the invention applied to the meeting ends of two rails. Fig. 2 is a side view. Figs. 3 and 4 are transverse sections on the lines 3—3 and 4—4, respectively, of Fig. 1.

Similar figures of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings, 10 designates my improved fish-plate which bridges the joint between the meeting ends of the two rails and 13 by being secured to their outsides and extends eight or nine inches on each side of the joint line. The tread surface or top of the fish-plate is about an inch and a half in width and extends about a quarter of an inch above the tread surface of the rail.

The inner side of the fish-plate fits the adjacent sides of the rails from end to end.

At the line of meeting of the ends of rails, the outside of the fish-plate 10 is indented, as at 14, to receive the upper end of a brace 15 which extends laterally and inclines downward, its lower end being seated in a strong fixed object, so that there will be no lateral yielding of the fish-plate at that point.

The ball or tread of the fish-plate is hardened the same as the ball of the rail in order to be as enduring as the rail.

The fish-plate is adapted to be made to suit any sizes of joints and will operate to prolong the life of the rails, since it practically relieves the rails of wear at the point where it is located.

The spikes 16 to secure the rail to the ties may be employed as usual, "nicking", if necessary, the outside lower edge of the fish-plate. It is desirable to have a spike 16 on each side of the joint line, and hence provision is made for this purpose.

A fish-plate that may be of any suitable or usual construction is arranged against the webs of the meeting ends of the rails on the opposite side to that occupied by the fish-plate 10, and the latter in addition to being inclined on its upper edge is gradually reduced in thickness from its center in the direction of both ends.

While I have stated that the tread surface of the fish-plate at the joint will be about a quarter of an inch above the tread surface of the rails, it may be more or less, as is well understood. In any event it must be high enough to take the wheels off the rail surface.

What is claimed as the invention, is:—

The combination with the meeting end portions of a pair of rails, of a fish plate bolted to said end portions of the rails, the end portions of the fish plate lying below the upper faces of the rails, the central portion of the fish plate extending above the upper faces of the rails and said fish plate having a recess in its outer face adjacent to the point of highest elevation of its upper edge at a point opposite the meeting end faces of the rails, and a brace rod having its upper end disposed in and against the upper face of said recess, the lower end of the brace rod being spaced from the face of the rail and having its extremity turned outwardly and secured against movement.

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

DEWITT C. MILLER.

Witnesses:

HARRY JACKSON,  
H. v. NOSZKY.