

(No Model.)

H. B. NICKERSON.

COMBINED CHAIR AND FISH PLATE FOR RAILROAD RAIL JOINTS.

No. 453,157.

Patented May 26, 1891.

Fig. 1.

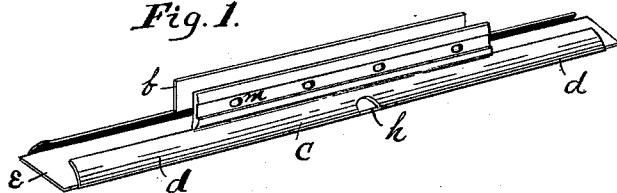


Fig. 2.

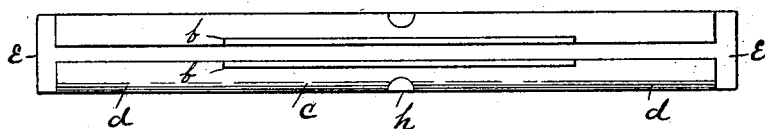


Fig. 3.

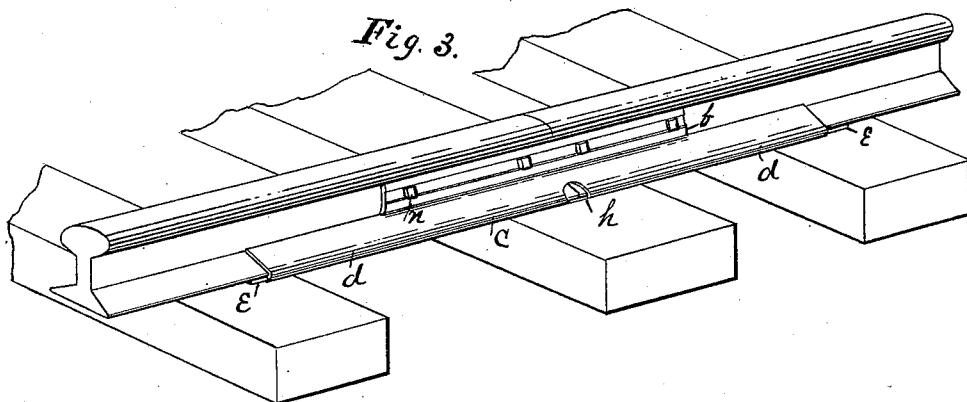


Fig. 5.

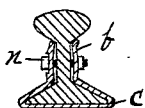
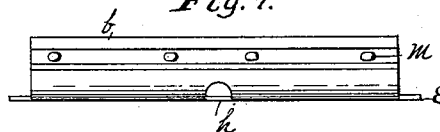


Fig. 4.



Witness
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HIRAM B. NICKERSON, OF CAMBRIDGE, ASSIGNOR OF ONE-HALF TO GEO. W. ELDRIDGE AND RODOLPHUS W. CROCKER, OF VINEYARD HAVEN, MASSACHUSETTS.

COMBINED CHAIR AND FISH-PLATE FOR RAILROAD-RAIL JOINTS.

SPECIFICATION forming part of Letters Patent No. 453,157, dated May 26, 1891.

Application filed November 21, 1890. Serial No. 372,262. (No model.)

To all whom it may concern:

Be it known that I, HIRAM B. NICKERSON, a citizen of the United States, residing at Cambridge, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in a Combined Chair and Fish-Plate for Railroad-Rail Joints, of which the following is a specification.

The object of my invention is to provide a greater support, both lateral and vertical, to the ends of the rails, and also increase the facilities for entering the rail in the chair when laying track.

In the accompanying drawings, Figure 1 is a view in perspective of my improved chair and fish-plate combined. Fig. 2 represents a plan view of the same. Fig. 3 represents a view in perspective of the same as it appears when applied to the rail. Fig. 4 represents a side view of my invention. Fig. 5 represents a view in cross-section of the rail and my invention.

Similar letters refer to similar parts throughout the several views.

b represents the fish-plates, provided with holes *m*, which bear against the upright or web of the rail.

c represents the chair, having openings *h* and provided with lips *e*, which chair closely embraces the bottom and inclined sides of the rail. The openings *h* are for the purpose of admitting the insertion of a wedge between the ends of the rails to force them apart when it is desired to remove a rail in repairing the track.

My improved chair and fish-plate combined

is preferably composed of sheet-steel cut out in blanks, the requisite holes punched, and then formed into the required shape while hot.

The operation of my invention is as follows: In laying the track the device is slipped on the end of a rail and secured there by the bolts *u*. The end of the next rail is then laid upon the lip *e*, which supports it at the proper height while it is slid into position, where it also is secured by bolts *u*. As will be observed, the chair extends beyond the fish-plate, so as to rest on three ties, and thus practically the rail is made continuous and the breaking or displacement of the ends of the rails is more fully guarded against.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A combined chair and fish-plate formed of one piece of metal, having the chair embracing the base of the rail and extending beyond the fish-plate and provided with the openings *h*, for the purpose described.

2. A combined chair and fish-plate having the chair extending beyond the fish-plate and provided with the lip *e*, as and for the purpose shown and described.

3. A combined chair and fish-plate having the chair provided with the lip *e*, extending beyond the fish-plate, and provided with the openings *h* in its sides, as and for the purpose shown and described.

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Witnesses:

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