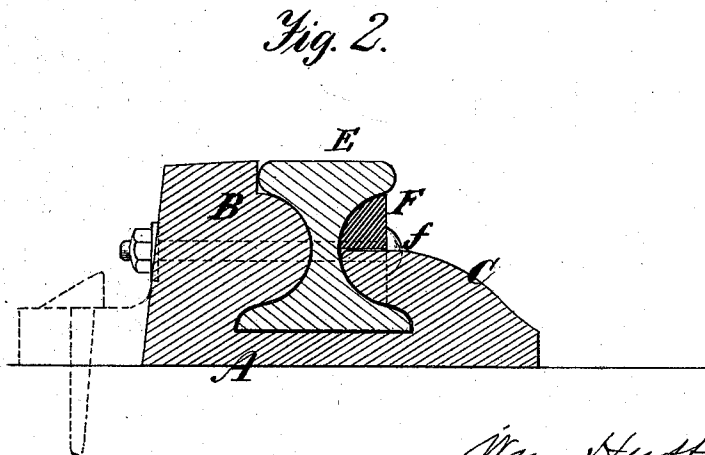
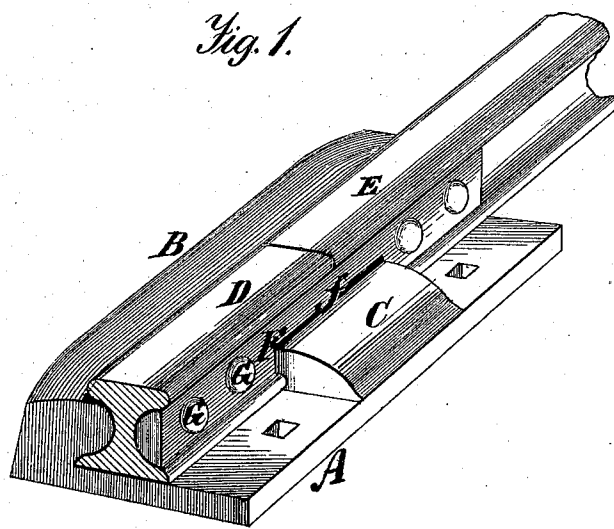


W. HUFFMAN.
Railway Rail-Chairs.

No. 142,235.

Patented August 26, 1873.



Witnesses.
A. Ruppert
Edw. J. Cile

Wm. Huffman
Inventor.
D. P. Holloway & Co
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM HUFFMAN, OF MILLGROVE, INDIANA.

IMPROVEMENT IN RAILWAY-RAIL CHAIRS.

Specification forming part of Letters Patent No. 142,235, dated August 26, 1873; application filed July 21, 1873.

To all whom it may concern:

Be it known that I, WILLIAM HUFFMAN, of Millgrove, in the county of Blackford and State of Indiana, have invented a certain Improvement in Rail-Chairs, of which the following is a specification:

The object of my invention is to provide means for preventing the "running" of the rails, as the longitudinal movement of the rails resulting from the traction of the rolling-stock is technically termed. My improvement consists in the employment of a recessed fish-plate, in combination with a chair having a lip which hooks over the base of the rails upon their inner side and fills the recess in the fish-plate.

Figure 1 is a perspective view of my improved chair sustaining the contiguous ends of two rails. Fig. 2 is a vertical transverse section thereof.

The same letters of reference are used in both figures in the designation of identical parts.

The base A of the chair is provided with the ordinary vertical flange B, formed so as to snugly fit the irregular surface of the rails D and E upon their exterior side. The top of the flange should be made flush with the top of the rails to afford additional support to the tread of the wheels in passing over the junction of the rails, and to some extent prevent the brooming of the latter. The top of the flange is curved downward at each end, which enables the wheels to run over it without be-

ing subjected to hammering shocks. Facing this flange is a lip, C, which is formed upon the base of the chair, and hooks over the base of the rails at their ends, its length being about one-third of that of the chair. The fish-plate F, which is of about the same length as the chair, is recessed at *f*, and fits snugly over the lip C of the chair when applied, as clearly shown in Fig. 1. The chair and fish-plate are secured to the rails by bolts G, in the usual manner, allowing for the contraction and expansion of the rails. The base of the chair may extend beyond the flange B, as shown in dotted lines in Fig. 2, so that it may be spiked to the cross-tie upon both sides of the rails.

It will be observed that the tendency of the rails to slide endwise under the traction of the rolling-stock will be very effectually counteracted by the positive hold the rails have upon the lip C of the chair through the recessed fish-plate.

What I claim as my invention, and desire to secure by Letters Patent, is—

A rail-chair having a lip, C, in combination with a recessed fish-plate, F *f*, all applied to the rails in the manner and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM HUFFMAN.

Witnesses:

JAMES H. ANDERSON,
WILLIAM CORETH.