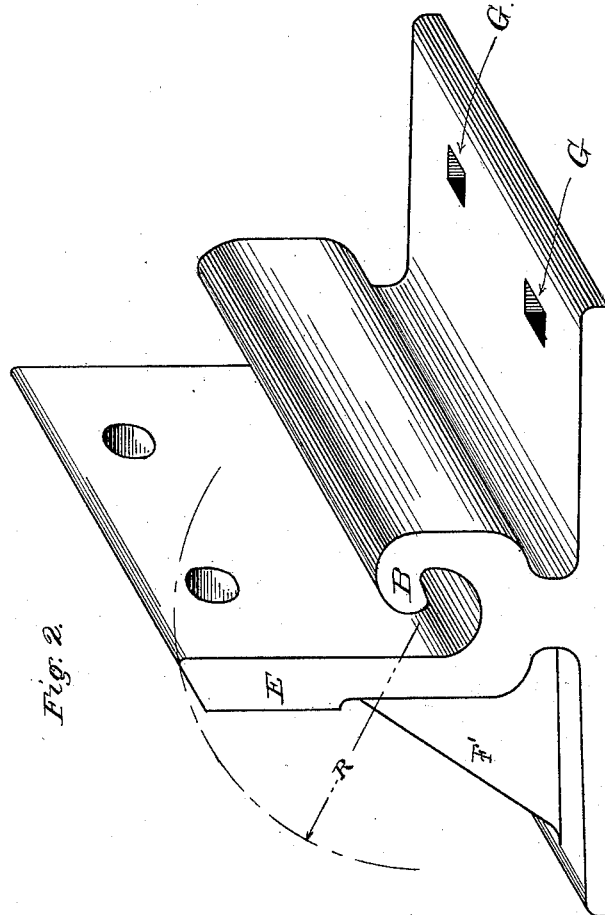
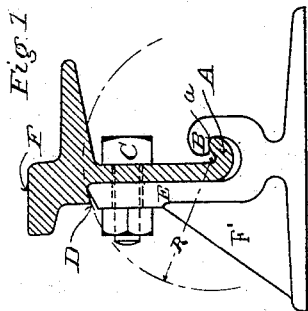


(No Model.)

A. J. MOXHAM.
RAIL CHAIR FOR STREET RAILWAYS.

No. 423,072.

Patented Mar. 11, 1890.



Witnesses:
H. C. Evans
Francis P. Kelly

Inventor:
A. J. Moxham
by P. M. Dorrhies
att'y.

UNITED STATES PATENT OFFICE.

ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

RAIL-CHAIR FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 423,072, dated March 11, 1890.

Application filed February 13, 1888. Serial No. 263,837. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR J. MOXHAM, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Rail and Chair for Street-Railways, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to provide a chair of cast-iron or other suitable metal for securing the rails of street-car tracks in place by the interlocking of a hooked lug on the chair with the filleted web of a girder-rail.

The invention will first be described in detail, and then particularly set forth in the claim.

In the accompanying drawings, Figure 1 illustrates the chair in end elevation, with the rail in cross-section seated in and secured thereto. Fig. 2 shows the chair detached and in perspective upon a larger scale.

In said figures the several parts are indicated by letters of reference as follows:

A indicates the filleted base of the web, and F the head of a girder-rail seated in a chair E, provided with a hooked lug B, the bolt C passing through said web and through one side of the chair and being set up by a screw-threaded nut, as clearly shown in Fig. 1. The chair E is provided with a brace F', and through holes G G in the bottom flanges of said chair it may be spiked to the cross-ties of the track. The chair and rail are thus secured together. The chair is entered over the filleted web of the rail by inclining said chair, so that the fillet A of the web and the lug B of the chair engage like hooked jaws, when the chair is turned back with the point of engagement *a* of said hooked parts as a center (indicated by the circle R) until the base of the chair assumes a position perpendicular to the web of the rail, and fits firmly between the shoulder D under the head of rail, Fig. 1, and the under side of the lug B of the chair at its point of contact *a* with the

lug A of the chair. The chair and rail are then secured together by the bolts C, the pressure of which firmly holds the chair to its place. The relative positions of the hooked edge A of the web of the rail and its head F are such that the brace side of the chair E comes up firmly under and supports the head of the rail F against the pressure and weight of heavy street traffic, which is greatest in that direction.

Although a side bearing-rail is shown, the chair is adapted to any form of girder-rail with bulb or fillet at the bottom of its web.

If it is desired to save weight and metal in the construction of this chair, it is evident that its hooked lug B need not be continuous, but may be divided or made in two or more lugs, as may be desired. It may be noticed that the bearing of the chair-lug B over the fillet, bulb, or hook of the web of the rail prevents upward movement of the rail, and that the bearing of the chair under the head of the rail prevents its downward movement.

It is evident that the brace F' may be on either or both sides of the chair, and that many modifications of the overhooking chair-lug and shape of fillet, bulb, or hook of the lower part of the web of the rail can be made without departing from the principle of this invention.

I am aware that chairs with exterior bearings against the web of the rail and also having braces for supporting the same have been used, and such I do not claim; but

I claim as of my invention—

A rail, as F, provided with a web having a one-sided bulb or fillet, as A, in combination with a rail-chair provided with a hook-lug and a side brace locking the rail between the points D *a*, substantially as and for the purposes set forth.

ARTHUR J. MOXHAM.

Witnesses:

W. E. HOOPES,
A. J. BRYAN.