(No Model.) 2 Sheets—Sheet 1.

C. H. READ.

COMBINED CHAIR AND BRACE.

No. 493,386. Patented Mar. 14, 1893.

Fig. 1.

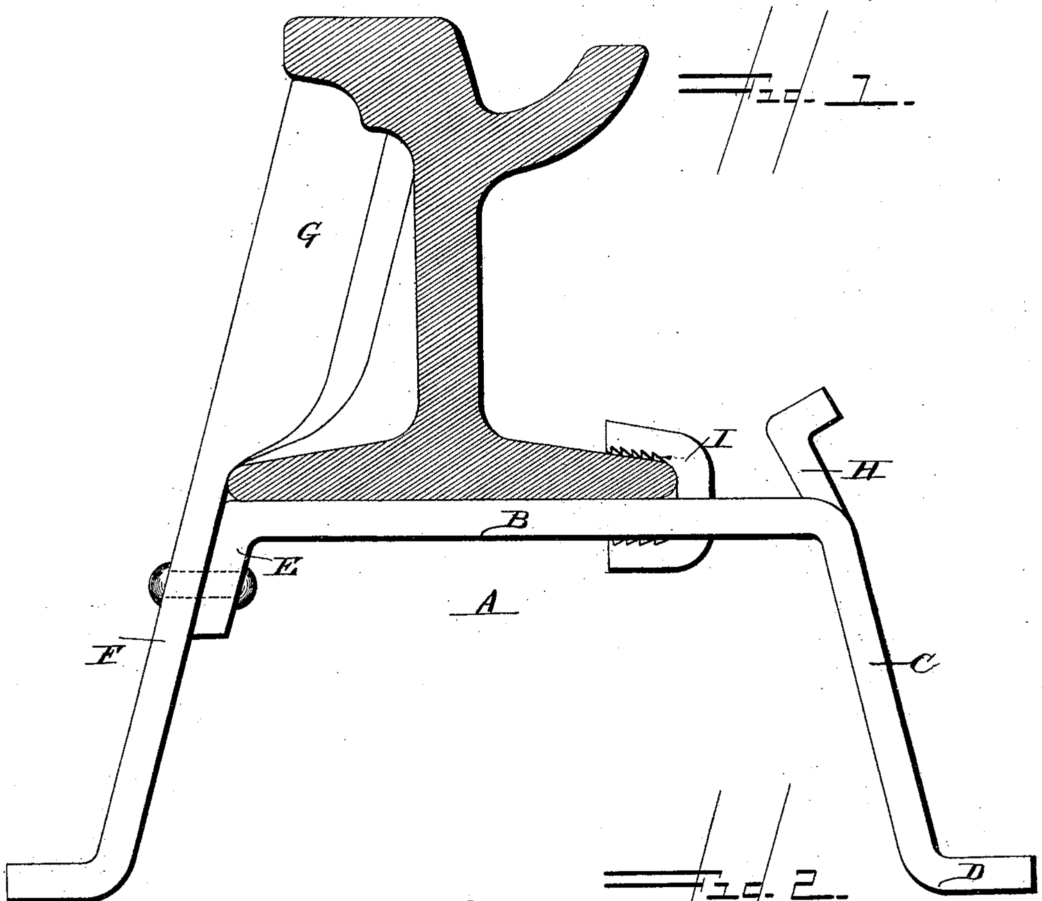
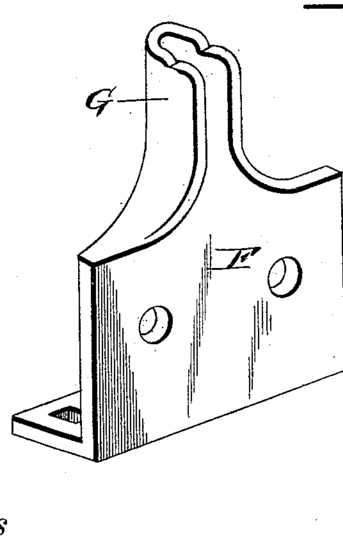


Fig. 2.



WITNESSES
F. L. Ourand
Alex Mahon

INVENTOR
Chas H. Read
by [illegible]
Attorney

(No Model.) 2 Sheets—Sheet 2.

C. H. READ.

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Fig. 3.

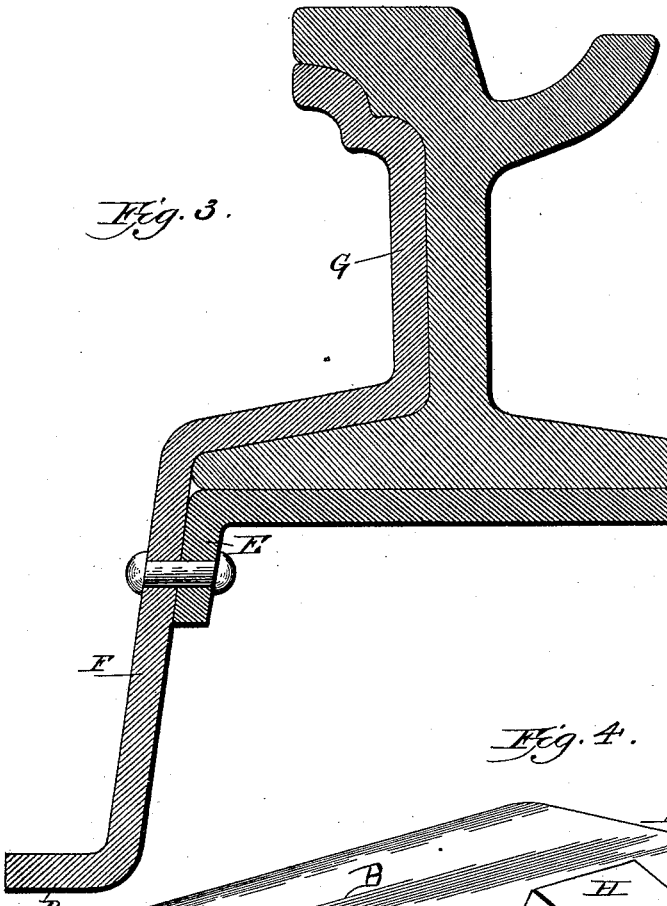

Fig. 4.

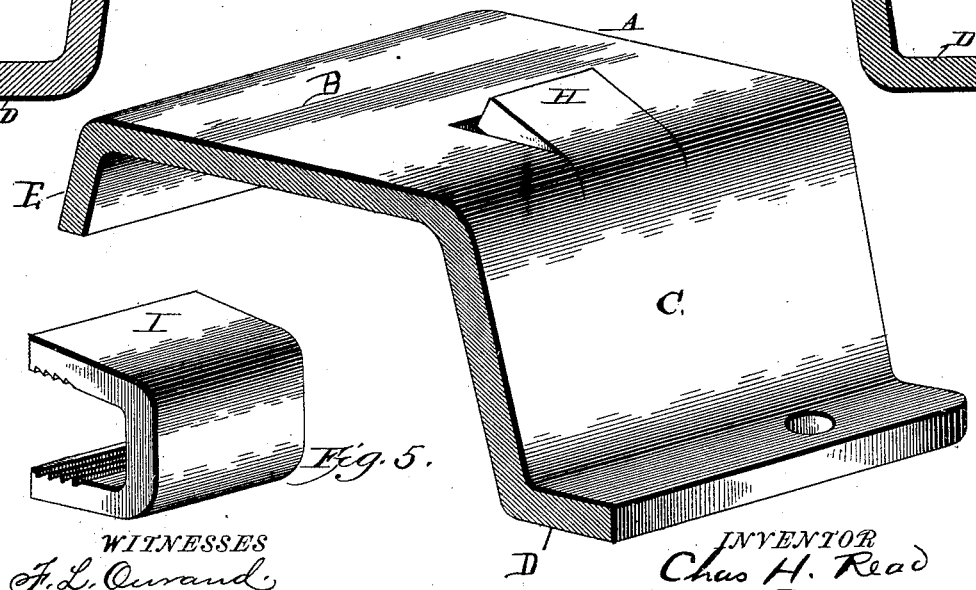

Fig. 5.

WITNESSES
F. L. Durand
Alex Mahon

INVENTOR
Chas H. Read
by D. P. Simsabaugh
Attorney

UNITED STATES PATENT OFFICE.

CHARLES H. READ, OF PITTSBURG, PENNSYLVANIA.

COMBINED CHAIR AND BRACE.

SPECIFICATION forming part of Letters Patent No. 493,386, dated March 14, 1893.

Application filed November 10, 1890. Renewed August 19, 1892. Serial No. 443,488. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. READ, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in a Combined Chair and Brace; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to new and useful improvements in railway chairs for street railways.

The object of this invention is to produce a chair of a simple but efficient construction, on which the rail can be readily secured, and which will not only provide for supporting the foot of the rail but also provides a brace to support and strengthen the outer flange of the head.

My invention consists in forming the supporting or bearing surface for the foot of the rail with an opening from which a tongue of metal is struck out to receive a clip for engaging the foot of the rail and the under portion of the chair through the opening, which clip is held in its place by the tongue which is designed to be forced down to wedge the same.

The invention also consists in certain novel features in the arrangement and construction and arrangement of parts, all as hereinafter described and explained.

In the accompanying drawings Figure 1 represents an end view of a rail supported in my improved chair and brace. Fig. 2 is a view in perspective of a portion of the device being that portion forming the leg and brace combined. Fig. 3 is a similar view as shown in Fig. 1, of a modification of the device. Fig. 4. is a perspective view of the portion forming the main supporting surface for the foot of the rail, showing the opening for the insertion of the clip formed by an angular cut and bending outward the portion thus separated. Fig. 5 is a perspective view of the clip.

Referring to the drawings by letter A, indicates the main portion of the chair, which is formed from a suitable plate of metal, and bent into the form shown, in order to form the flat bearing portion B and one leg C having the foot portion D for securing the chair to the cross ties of the road. Instead of this portion of the chair being provided on its other side with a leg, it is continued down for a short distance in order to give an attaching portion E, to the portion F, which supplies the necessary leg and also a brace G, to bear against the outer flange of the head of the rail and give additional support thereto. The two main portions, A and F as before intimated are firmly attached together, and this is preferably accomplished by means of bolts or rivets passing therethrough.

The brace portion G, which is formed integral with the separated leg, is either doubled in at its end, as shown in Figs. 1 and 2 or is bent to follow the contour of the rail as shown in Fig. 3. The first form is the preferred construction as by the doubling over of the plate forming the brace, the same is made stronger to a very marked degree, but for almost every purpose the brace following the contour of the rail will suffice. The upper portion of the brace shown in Figs. 1 and 2, is made to correspond with the shape of the under portion of the head of the rail, as is that in the modification. While the folded over portion of the brace G, performs the function of strengthening the brace, it also forms an overhanging portion which together with the supporting surface of the chair forms a recess to receive the outer flange or portion of the foot of the rail. The portion A, has a cut made therein and from which the tongue of metal H, is bent up and outward, leaving an opening through which a clip I may be inserted to engage the inner portion of the foot of the rail and the under side of the top portion of the chair. When the clip I has been inserted and made to clamp tightly the parts above mentioned the tongue of metal H, is forced down against the clip to hold it from displacement.

The tongue H, may be formed as shown in Fig. 1, in which it has a portion bent at right angles on its end, but that straight form shown in Fig. 3, is equally effective.

The clips I are serrated at the points which engage the foot of the rail and also the under portion of the top of the section A, so as to

bite on these portions and hold the same in position.

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

1. A chair for tram rails provided with a side support for the rail, and with a bearing surface for the same, a U shaped clip to engage the upper portion of the flange of the rail and the lower portion of the bearing surface, and a locking tongue formed integral with the chair to engage the clip and hold the same in place, substantially as set forth.

2. A chair for tram rails, having the supporting legs connected together, and one leg provided with a side support for the rail and the other with a base support, in combination with a clip to engage the rail and bearing or support, said clip being held and locked in position by the wedging action of the tongue, substantially as set forth.

3. A tram way consisting of the base or support, and its rail, a clip made in substantially "U" form having its engaging faces roughened or corrugated to engage the foot of the rail and the face of the chair or support in combination with the wedging tongue substantially as described, whereby the teeth of the clip imprint themselves in the engaging surfaces by the wedging action of the tongue.

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

CHARLES H. READ.

Witnesses:
L. W. SINSABAUGH,
ALEX MAHON.