(No Model.)

R. W. WELCH.

RAIL CHAIR FOR GIRDER RAILS.

No. 388,097. Patented Aug. 21, 1888.

Fig. 5

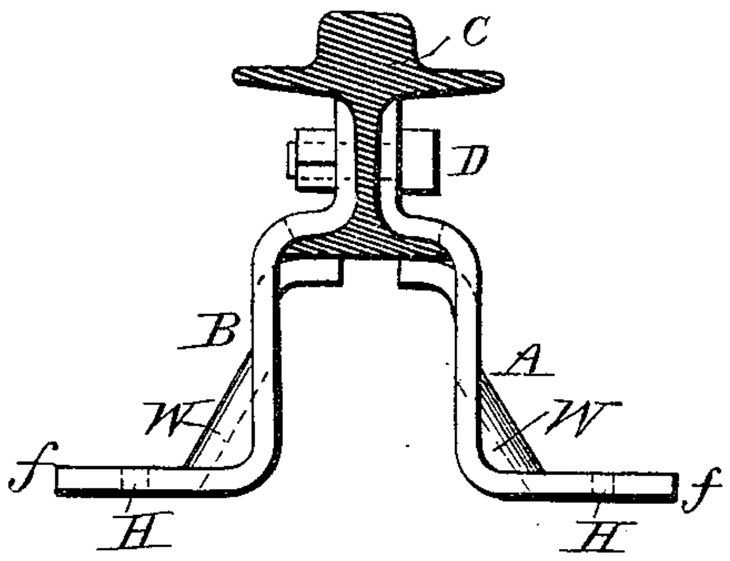


Fig. 1

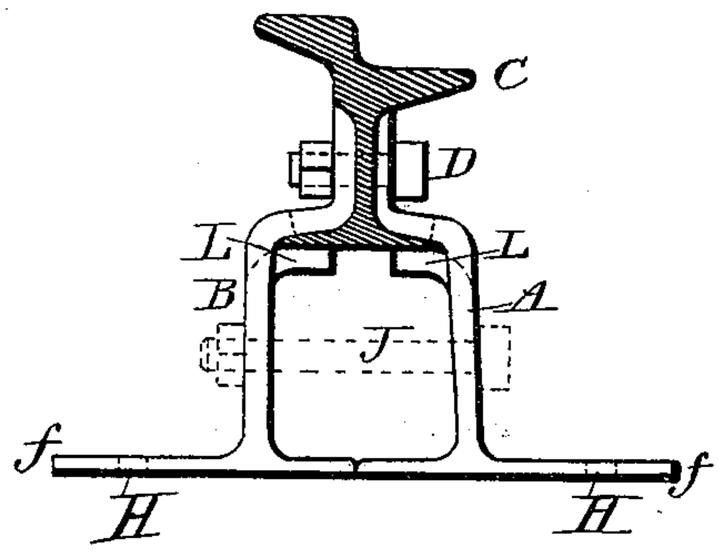


Fig. 6

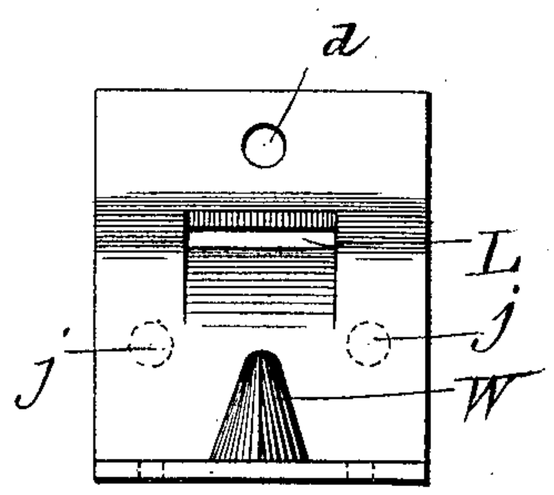


Fig. 2.

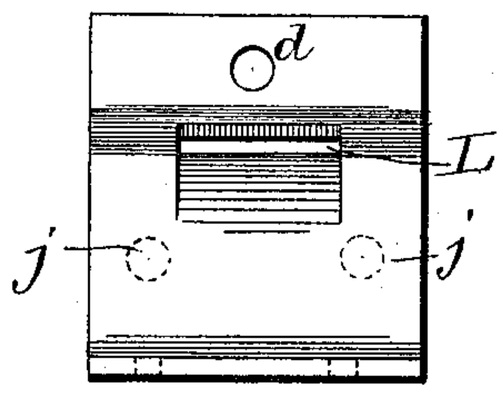


Fig 3.

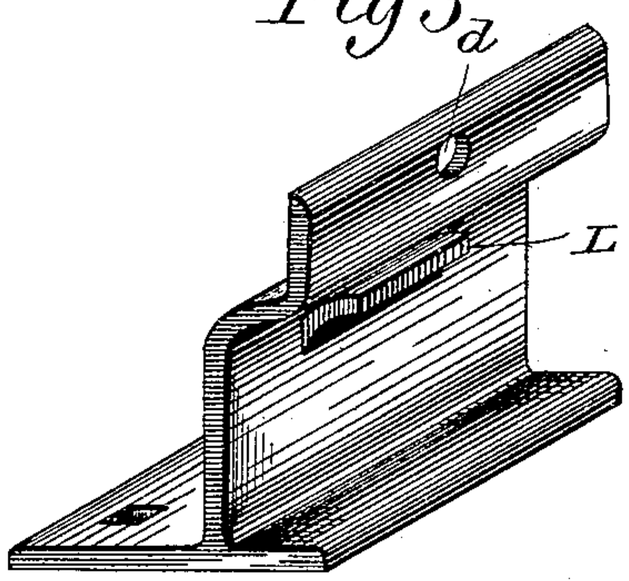
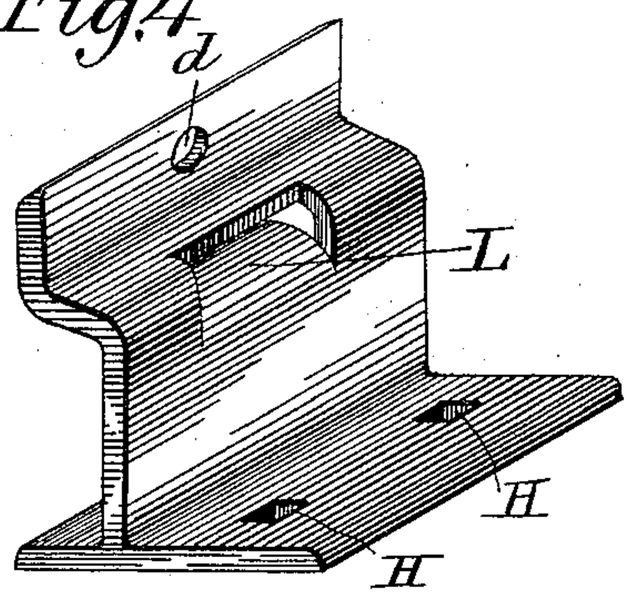


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT W. WELCH, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE JOHNSON STEEL STREET RAIL COMPANY, OF KENTUCKY.

RAIL-CHAIR FOR GIRDER-RAILS.

SPECIFICATION forming part of Letters Patent No. 388,097, dated August 21, 1888.

Application filed February 15, 1888. Serial No. 264,123. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. WELCH, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Rail-Chair for Girder-Rails, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to provide a two-part chair which shall be strong, light, and cheap.

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

In the accompanying drawings, Figure 1 illustrates the chair in end elevation, showing the rail secured thereto in cross-section. Fig. 2 shows the right half of the chair detached, in side elevation, looking from the right. Figs. 3 and 4 show, respectively, the two halves of the chair in perspective. Fig. 5 is a view similar to that of Fig, 1, showing a modified form of chair having a center bearing-rail (shown in cross-section) mounted thereon. Fig. 6 shows in side elevation the right half of the chair shown in Fig. 5, looking from the right, detached.

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

The letter A indicates one half or part of the chair; B, the other part of the chair; C, the rail mounted on the chair; and D, the bolt which, through holes *d*, clamps the two parts of the chair together with a splice-bar fit to the rail through its web, the flanges of the rail resting on the lugs L as bearings. One of said lugs is formed on each part of the chair. Said lugs are cut out of the metal itself, as shown in the several figures, by suitably bending the lug, its location being fixed by the cutting of its exterior lines through the metal.

In Figs. 1, 2, 3, and 4 each half of the chair is first rolled as a blank like a T-plate, with one flange somewhat wider than the other, if preferred, as shown in said figures. The blank can then be given its necessary shape or form by drop-forging or otherwise, as may be preferred.

In Figs. 5 and 6 each half as a blank may be formed from a flat plate sheared or cut to size. Then said blank may be drop-forged, pressed, or otherwise formed to shape the hollow brace *w* integral with the metal simultaneously with the bending or shaping of the other parts.

In Figs. 1 and 6 provision is shown for an additional bolt, J, through the two parts of the chair below the base of the rail, the bolt J being shown in Fig. 1, and holes *j* therefor in Figs. 2 and 6. Said bolt, instead of being additional to, may be substituted for the bolt D, dispensing with the latter, so that either or both of said bolts may be used, as preferred. The lower flanges, *f*, of these chairs are provided with holes H, through which the chairs may be spiked or otherwise secured to the cross-ties of the track.

Having thus fully described my said improvement, as of my invention I claim—

1. A two-part chair for girder-rails, shaped to fit against and support the webs of the same, and provided with lugs, as L, stamped out to support the lower flanges of the rails, substantially as and for the purposes set forth.

2. A two-part chair for girder-rails, provided with lugs for clamping the flanges of the rails and with hollow side braces, both lugs and braces formed integral with the metal of the chair, substantially as and for the purposes set forth.

ROBT. W. WELCH.

Witnesses:
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