

(No Model.)

A. J. MOXHAM.
RAILROAD RAIL CHAIR.

No. 500,931.

Patented July 4, 1893.

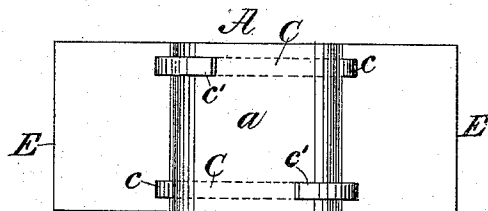
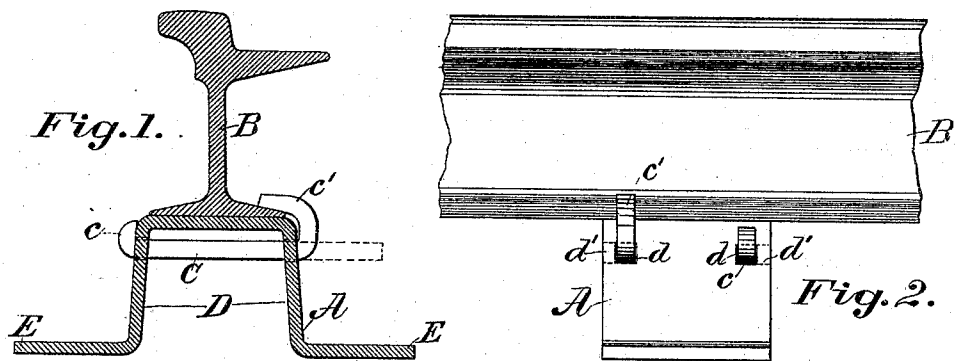
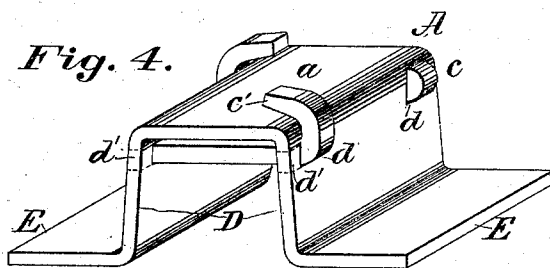


Fig. 3.



WITNESSES:

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ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

RAILROAD-RAIL CHAIR.

SPECIFICATION forming part of Letters Patent No. 500,931, dated July 4, 1893.

Application filed April 27, 1892. Serial No. 430,926. (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 Railroad-Rail Chair, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is sufficiently indicated by its title above given.

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

In the accompanying drawings, Figure 1, shows the chair in cross-section, seating a rail also shown in cross-section, with one of the clamping-bars shown in the other figures omitted for clearness of illustration. Fig. 2 is a side-elevation of the rail and chair. Fig. 3, is a view of the chair in plan, the rail being omitted. Fig. 4, shows the chair in perspective, the rail being omitted.

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

The letter A, indicates the chair, having a rail-seat *a*, two sides D, and base flanges E, or equivalent means, for securing the chair in place. The sides D are each provided with two rectangular holes or slots *d* (Figs. 2 and 4) through which holes are passed the clamping-bars C, each of said bars having a hook-head *c* on one end which bears against the side of the chair. This hook-head may be formed by the same means and very much in the same shape as the hook-head of a rail-spike or chair-spike, the metal of the head in each case being integral with that of the body of the bar and spike respectively. It is obvious that a full head round or square may be forged on the bolt if desired, but a one-sided head is sufficient for the purpose. The bars C, are placed in position while hot and the protruding ends are then bent up so as to hook over the lower flanges of the rail B, as shown at *c'*, in the several figures, the shrinkage of the bars in cooling causing the hook-ends *c'* to rigidly clamp the rail-flanges to the chair. The hook-ends *c'* are located diagonally opposite each other, and the appearance of the bar C before its end has been bent to form

the hook *c'*, is shown in dotted lines in Fig. 1. If desired, the holes *d*, may be cut out to the edges of the sides of the chair, forming slots such as indicated by the dotted lines *d'*, Figs. 2 and 4, in which case the bars C, may be partially bent to shape at the forge, then inserted in said slots, and then bent over the foot of the rail without any appreciable loss of heat in this final bending.

The shape of the chair is shown as of box-form, but the sides of the chair need not be deeper than sufficient for the proper location of the bars C, in which event such shallow chair may be, more technically, termed a tie-plate.

While it is deemed preferable to use two bars as shown, only one bar, suitably located, may be used if desired, with or without the addition of other clamping-devices.

Having thus fully described my said invention, I claim—

1. A rail-chair of box-form, provided with a clamping-bar passing through the sides of the chair under the rail-seat, said bar having a head formed integral with the body of the bar bearing against one side of the chair, and its opposite end bent over to form a clamp for the foot of the rail.

2. A rail-chair of box-form, provided with two clamping-bars passing through the sides of the chair, each of said bars having a head formed integral therewith, bearing against one side of the chair, and its opposite end bent over to form a clamp for the foot of the rail.

3. A rail-chair provided with two clamping-bars, each of said bars having one end enlarged so as to form a head bearing against the side of the chair, and its opposite end bent over to form a clamp for the foot of the rail, said clamping-ends being located diagonally opposite each other.

4. A rail-clamping-bar, for rail-chairs, provided with a hook-head, as *c*, and a hooked-end, as *c'*, said head and end being integral with the body of the bar.

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Witnesses:

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