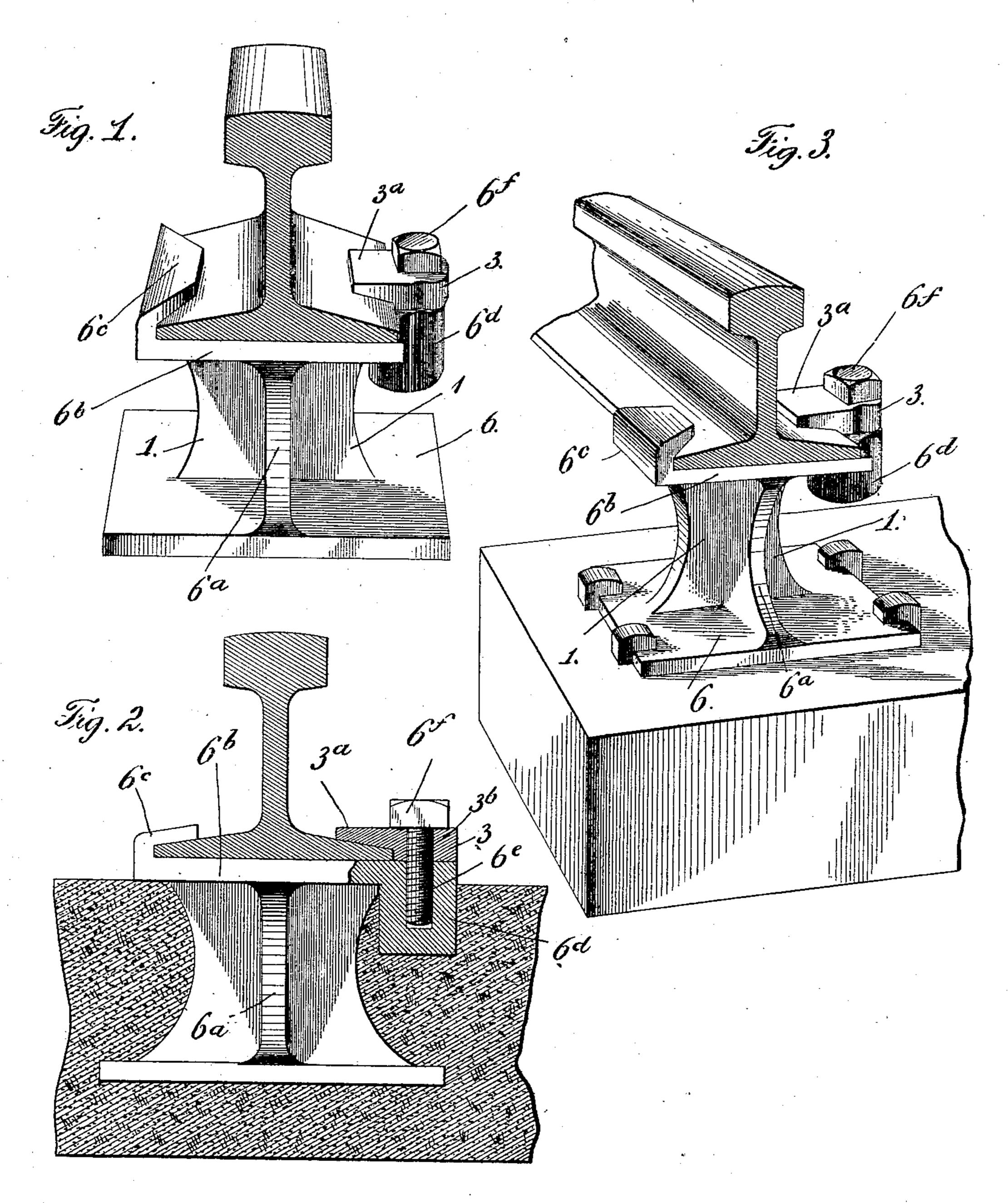
No. 863;381.

PATENTED AUG. 13, 1907.

## E. A. GILLCHRIST. RAIL CHAIR. APPLICATION FILED FEB. 25, 1907.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

EDWARD A. GILLCHRIST, OF McKEESPORT, PENNSYLVANIA.

## RAIL-CHAIR.

No. 863,381.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed February 25, 1907. Serial No. 359,045.

To all whom it may concern:

Be it known that I, Edward A. Gillchrist, a citizen of the United States of America, residing at McKeesport, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Chairs, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail chairs, and the invention has for its primary object to provide novel means for supporting a rail upon a tie or concrete roadbed or foundation.

Another object of this invention is to provide a simple and inexpensive rail chair wherein a novel fastener is employed for retaining a rail upon the chair.

A further object of this invention is to provide a rail chair which will prevent the lateral and vertical displacement of a rail mounted thereon.

A still further object of this invention is to provide a 20 rail chair which can be manufactured economically and which renders it possible to conveniently and rigidly secure and unfasten a rail during a long period of usefulness of the rail chair, made possible by the details of construction to be hereinafter described in full.

One embodiment of the invention is shown in the drawings, forming a part of this specification, but the spirit of the invention, which is not limited thereto, is set forth in the appended claims.

In the drawing, Figure 1 is a perspective view of my improved rail chair, Fig. 2 is an elevation partly in section illustrating the rail chair as mounted in a concrete roadbed or foundation, and Fig. 3 is a perspective view of the rail chair as secured to a tie.

In Fig. 1, the base or anchor of the rail chair, as shown at 6, is of suitable width and thickness to serve the particular condition of service to which the rail chair is to be put. At a point intermediate the ends of the anchor 6, a web 6<sup>a</sup>, integral therewith, extends at right angles, said web extending to the rail chair 6<sup>b</sup>, which is at right angles to the web and integral there-

which is at right angles to the web and integral therewith. The web 6<sup>a</sup> and the rail chair 6<sup>b</sup> are braced by reinforcements or webs 1, arranged at right angles to the web 6<sup>a</sup> and the base or anchor 6.

One end of the rail chair 6<sup>b</sup> is formed to provide a hook-shaped flange 6<sup>c</sup>, which extends the length of the rail chair and is formed to fit the rail flange to secure the rail at one side. The other end of the rail chair 6<sup>b</sup> is formed into a depending anchorage flange 6<sup>d</sup> which is integral with the rail chair and which has a perpendicu-

lar cylindrical opening 6° threaded for the introduction of a screw bolt 6°. As stated, one side of the rail flange is secured to the hook-shaped flange 6°. The other side of the rail is secured by a rail clamp or hook 3, which has the flange clamp 3°, fitting the flange of the rail, and

55 a perpendicular cylindrical opening 3b, through which

the screw bolt 6t can be inserted and screwed into the depending anchorage flange 6d.

In Fig. 2 of the drawings, the rail chair is illustrated as embedded in a tie or foundation of plastic material, while in Fig. 3 of the drawings, the rail chair is suitably 60 secured to a wooden or metallic tie.

The rail chair which can be made of any material and strengthened to meet the demands of every service, is by its nature adapted to be used in concrete and other composition railroad ties, in concrete and similar floor- 65 ing, in car barns, depots, cinder pits, factories, mills, or as a rail chair with the base or anchor flange bored to permit the device to be secured to cross ties or any suitable flooring, which raises the rail from the cross tie or flooring.

What I claim and desire to secure by Letters Patent, is:—

1. A rail chair comprising an anchorage base of considerable area, a perpendicular web plate erected thereon, a rail chair on the upper end of said web plate, reinforcing webs bracing said chair, a hooked flange at one end of said rail chair, an anchorage flange depending from the other end of said rail chair and provided with a threaded opening closed at its lower end, a flanged clamp opposite to said hooked flange, and a screw bolt extending through said flange clamp and into said threaded opening in the anchoring flange to secure the flanged clamp to the said anchorage flange.

2. A rail chair comprising an anchor base of considerable area, a perpendicular web plate erected on the anchorage base intermediate its ends, a rail chair on the upper end of the web plate, reinforcing webs bracing said rail chair, a hooked flange at one end of the rail chair, which is spaced to fit the flange of a rail, an anchorage flange depending from the other end of said chair, a flanged clamp opposite said hooked flange, the flanged clamp being adapted to fit the flange of a rail and the upper face of said anchoring flange, and a bolt extending through the flange clamp and engaging in the anchoring flange to secure said clamp to said anchoring flange.

3. The combination with an embodying base and with a track rail, of a bracket stand for the support of the track rail, comprising an oblong anchorage plate, a web plate erected on the anchorage plate, a rail chair on the upper end of the web plate, said rail chair seating on the embodying base 100 with the web and anchorage plates embedded therein, a transverse hook flange on one end of the rail chair, said hook flange hooking on the base flange of the track rail along one side thereof, an anchorage flange depending from the other end of the rail chair, a transverse flange clamp 105opposite the hook flange, the said flange clamp hooking on the opposite base flange of the track rail and seated on the anchoring flange, said anchoring flange having a vertically disposed threaded opening, and a bolt passing through the flange clamp and screwing into the opening in the an- 110 chorage flange.

4. A rail chair, comprising an anchorage base and a web erected intermediate its terminals, a rail chair at the upper end of the web, the rail chair having at one end a flange hook which is adapted to fit the base flange at one side of the track rail, a depending anchorage flange at the other end of the rail chair, the said anchorage flange having a perpendicular female screw, a clamping flange opposite the hook flange, the said clamping flange being adapt-

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ed to fit the base flange of a track rail, the said clamping flange having a perpendicular hole therein adapted to register with the female screw in the anchorage flange, and a bolt to secure the clamping flange to the anchorage flange.

5 5. A rail chair comprising an anchorage base and a web erected intermediate its terminals, a rail chair at the upper end of the web, the rail chair having at one end a transverse flange hook adapted to fit the base flange of a track rail and at its other end a depending anchorage flange with a perpendicular female screw therein, a transverse clamping flange opposite the hook flange which is adapted to fit

the base flange of a track rail, the clamping flange having a perpendicular hole therein, which when it is in position to secure the track rail registers with the female screw in the anchorage flange, and a bolt which secures the clamp- 15 ing flange to the anchorage flange.

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

EDWARD A. GILLCHRIST.

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Witnesses:

MAX H. SROLOVITZ, H. C. EVERT.