

(No Model.)

W. J. HOOPER.

COMBINED HEAD CHAIR AND CONNECTING ROD.

No. 396,487.

Patented Jan. 22, 1889.

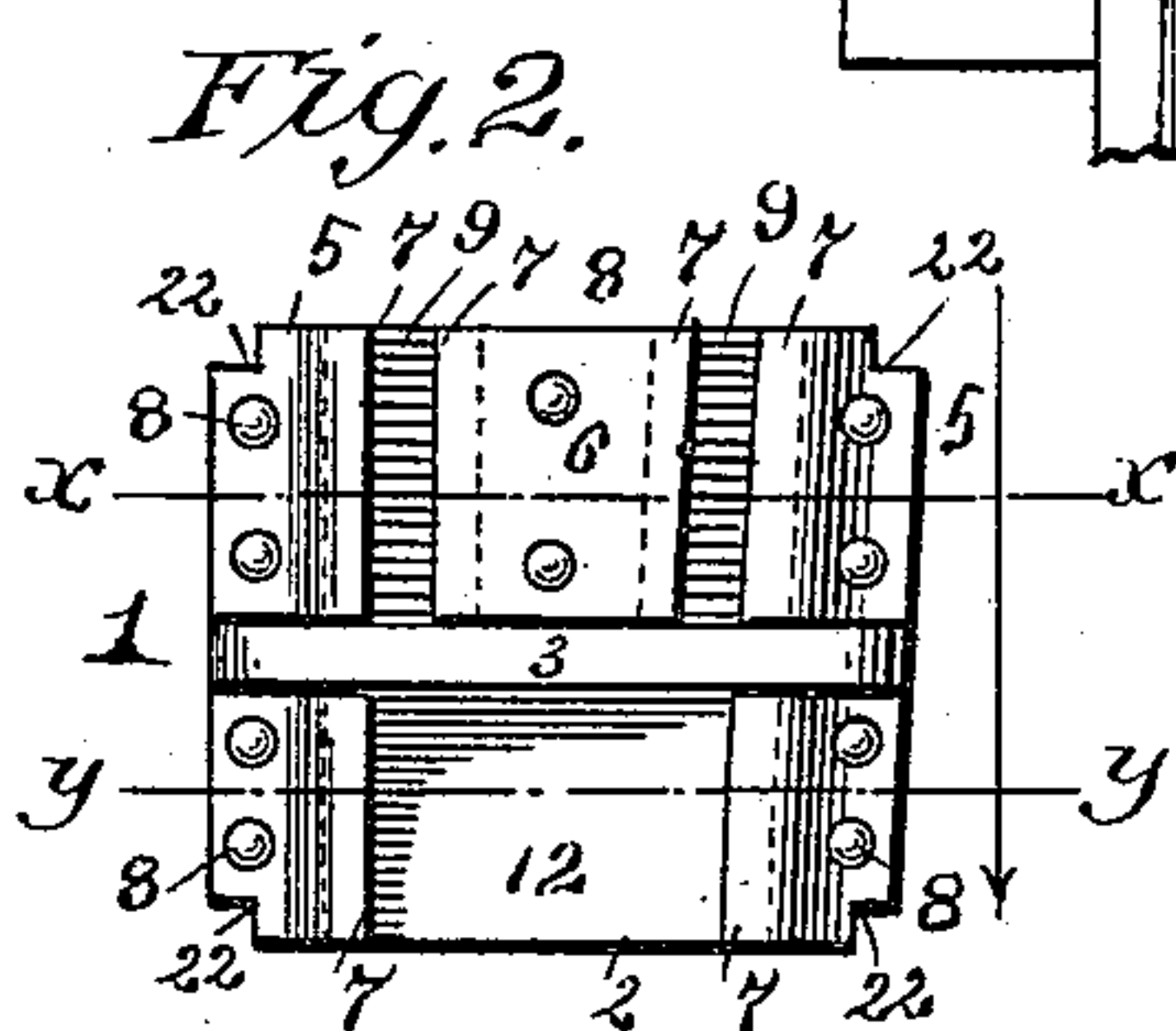
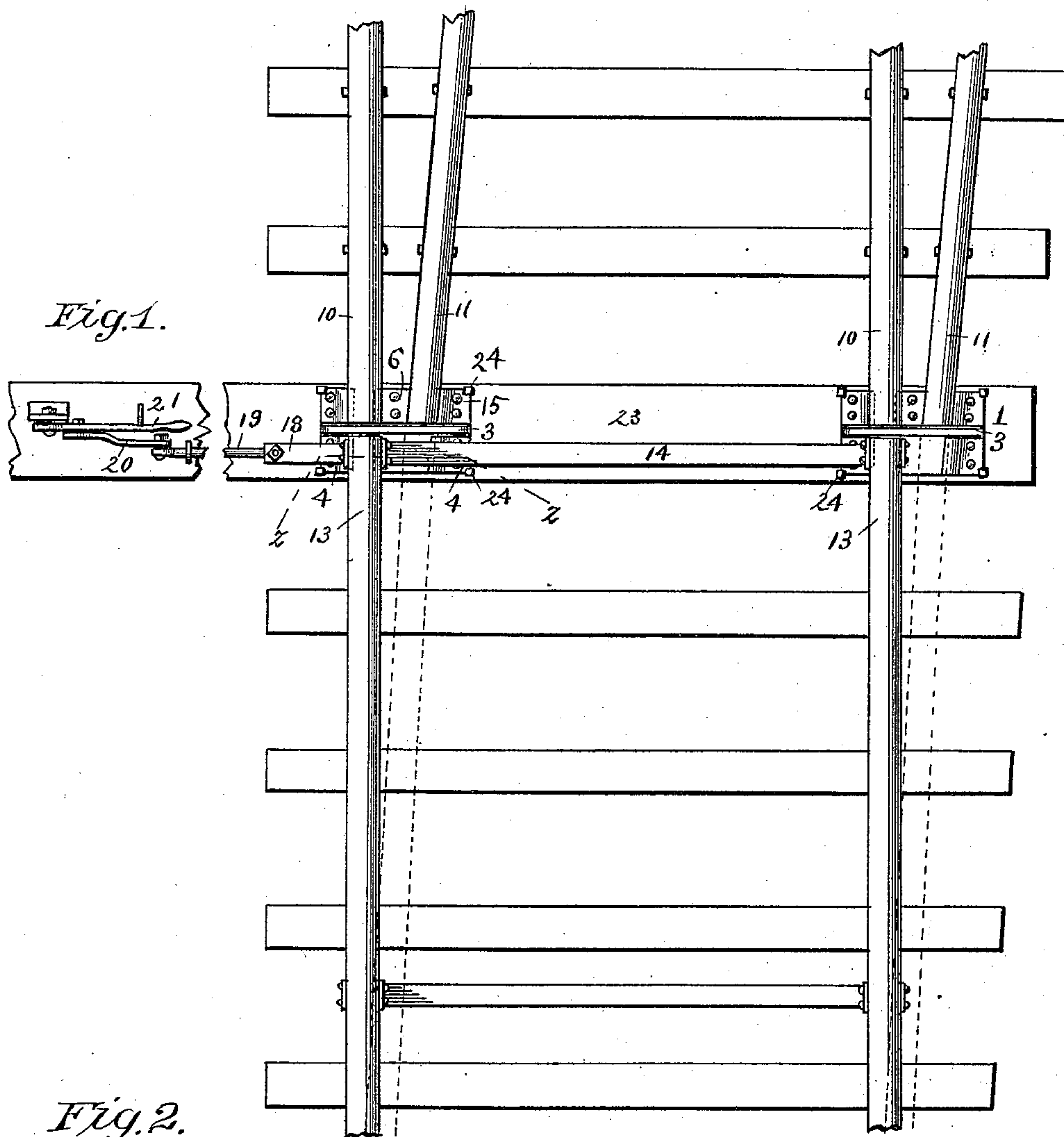


Fig. 3.

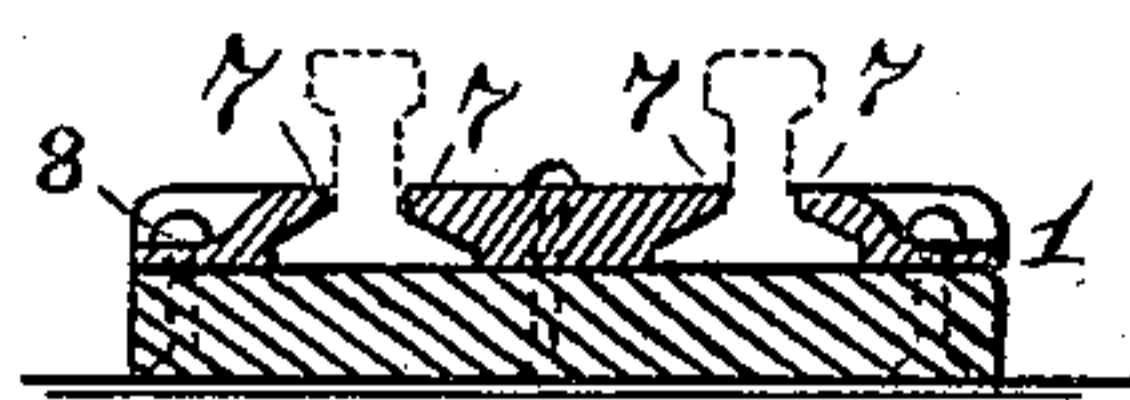


Fig. 4.

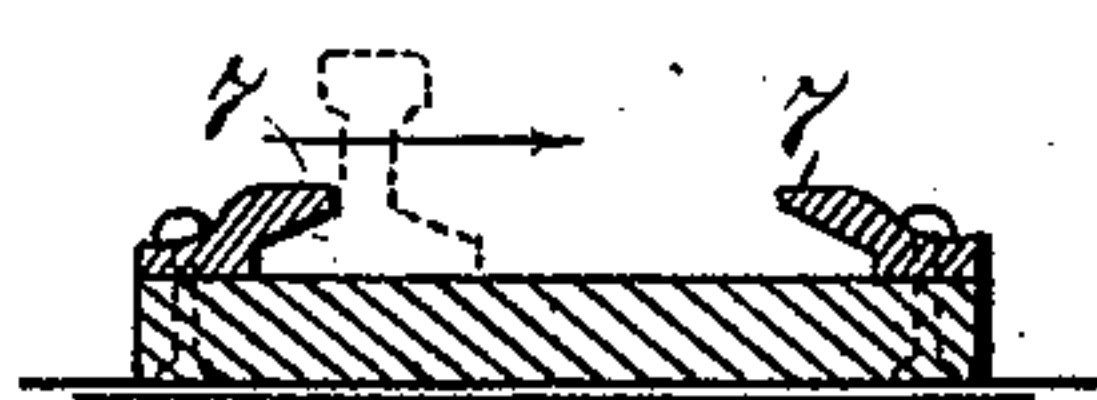
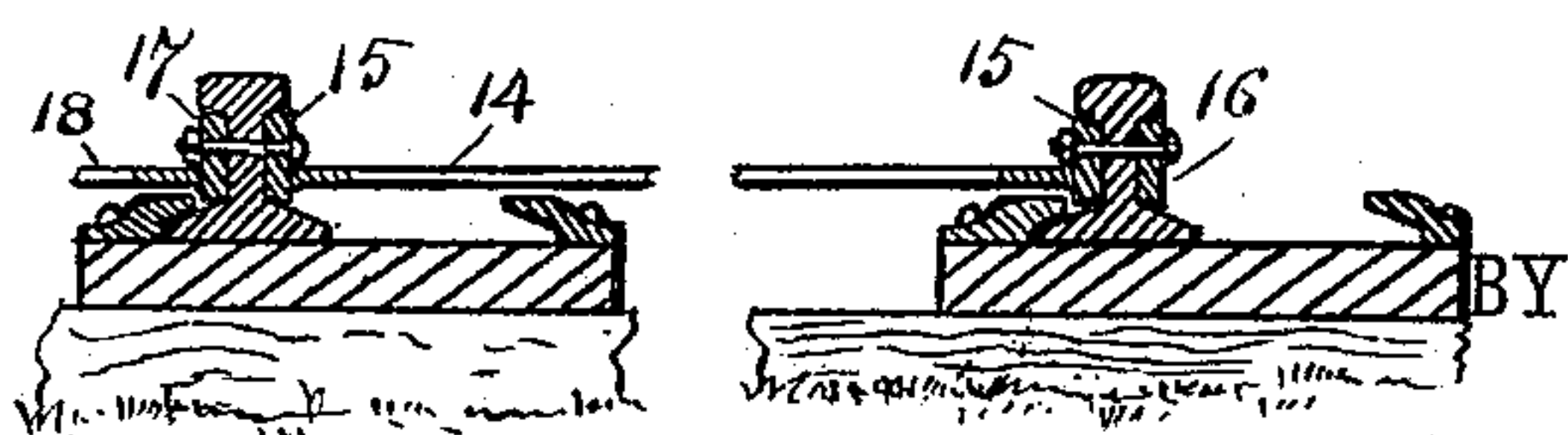


Fig. 5.



WITNESSES:

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WILLIAM J. HOOPER, OF RINCON, TERRITORY OF NEW MEXICO.

COMBINED HEAD-CHAIR AND CONNECTING-ROD.

SPECIFICATION forming part of Letters Patent No. 396,487, dated January 22, 1889.

Application filed February 15, 1888. Serial No. 264,149. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. HOOPER, of Rincon, in the county of Dona Ana and Territory of New Mexico, have invented a new and Improved Combined Head-Chair and Connecting-Rod for Railway-Switches, of which the following is a full, clear, and exact description.

This invention relates to an improvement in head-chairs and connecting-rods for railway-switches, and has for its object to provide a railway head-chair and switch connecting-rod so constructed and arranged as to render the parts strong and durable.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 illustrates in plan view the invention in position for use at a switch. Fig. 2 is a detail representing the head-chair detached. Fig. 3 is a cross-section on line *x x*, Fig. 2. Fig. 4 is a cross-section on line *y y*, Fig. 2, and Fig. 5 is a cross-section on line *z z*, Fig. 1, with parts broken away.

In the construction of this invention a head-chair, 1, of cast or wrought iron, is employed, which is formed with a base-plate, 2, and partition-bar 3, extending crosswise thereof. Metallic plates 4 4, 5 5, and 6, having flanges 7 7, are secured to base-plate 2 by bolts 8, the flanged plates 5 5 and flanged plate 6 forming recesses 9, in which rest the ends of fixed main and branch rails 10 11, and the flanged plates 4 4 forming a recess, 12, in which the end of a throw-rail, 13, is located and adapted to move freely. A head-chair constructed as above described is strong, durable, and cheap.

The partition-bar 3 prevents the fixed rails and throw-rail from coming in contact and being jammed by creeping or otherwise. To form a strong and durable connection for the throw-rails and switch-operating mechanism the following construction is employed:

The throw-rails 13 are connected by a flat

bar or rod, 14, having enlarged square ends 15, shaped to fit against the web of the rail and the head and flange, one of said ends 15 being bolted to outer throw-rail, 13, and a metallic plate, 16, shaped and fitted to said rail similarly to end 15, and the other end 15 being bolted to inner throw-rail, 13, and to a plate, 17, fitting against said rail and forming the enlarged end of a bar or rod, 18. The latter may be connected with any switch-operating mechanism, and, as here shown, is bolted to a connecting-rod, 19, having a pivoted link, 20, secured to a switch-lever, 21. The head-chair 1 is formed with notches 22 at its corners and is secured to tie 23 by bolts 24, located in said notches. By means of a throw-rail connection constructed in this manner, if any of the parts become worn or broken they may be easily and quickly replaced.

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

1. In a switch, the combination, with the throw-rails 13, of the rod or bar 14, having enlarged ends 15, which fit the web on the inner sides of the rails, outer plates, 17 18, fitting the webs of the rails and bolted through the rails to said ends 15, and the switch-bar 18, connected with said outer plate, 17, whereby the rails will be firmly connected above the plane of the top edges of the chair-sockets, substantially as set forth.

2. The combination, with throw-rails 13, of rod or bar 14, having enlarged ends 15, fitted to said rails, one of which is bolted to the outer throw-rail, 13, and a plate, 16, fitted thereto and the other to the inner throw-rail, 13, and the enlarged end 17, having a rod or bar, 18, connected with a switch-operating mechanism, substantially as described.

WILLIAM J. HOOPER.

Witnesses:

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WILLIAM McDONALD.