(No Model.)

F. C. WEIR & C. PARTINGTON.

BRACKET FOR CONNECTING TIE BARS AND SWITCH RAILS.

No. 410,056. Patented Aug. 27, 1889.

Fig. 5.

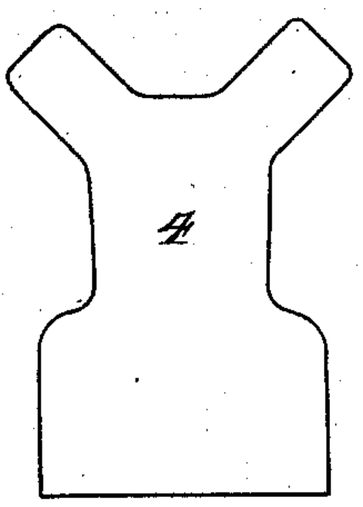


Fig. 1.

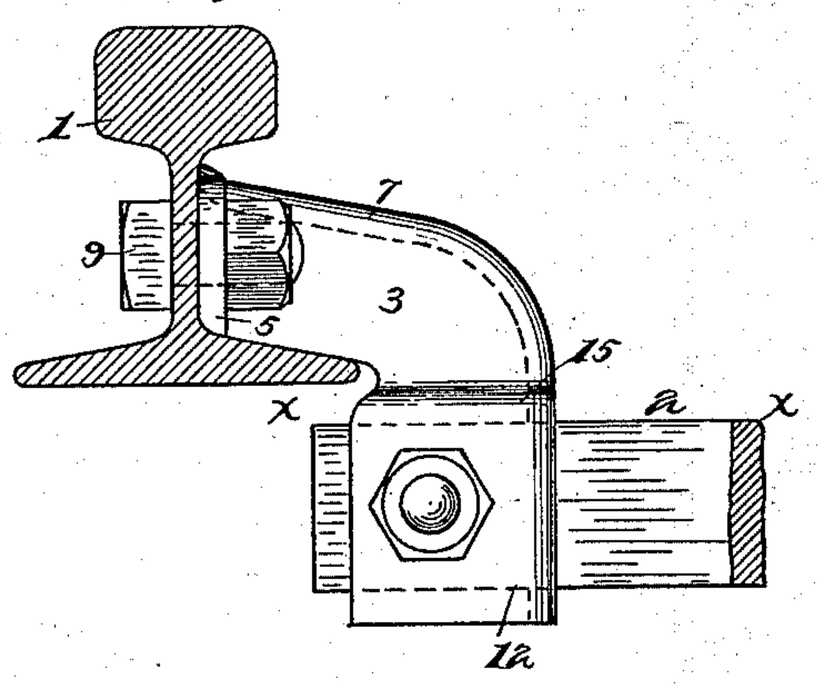


Fig. 2.

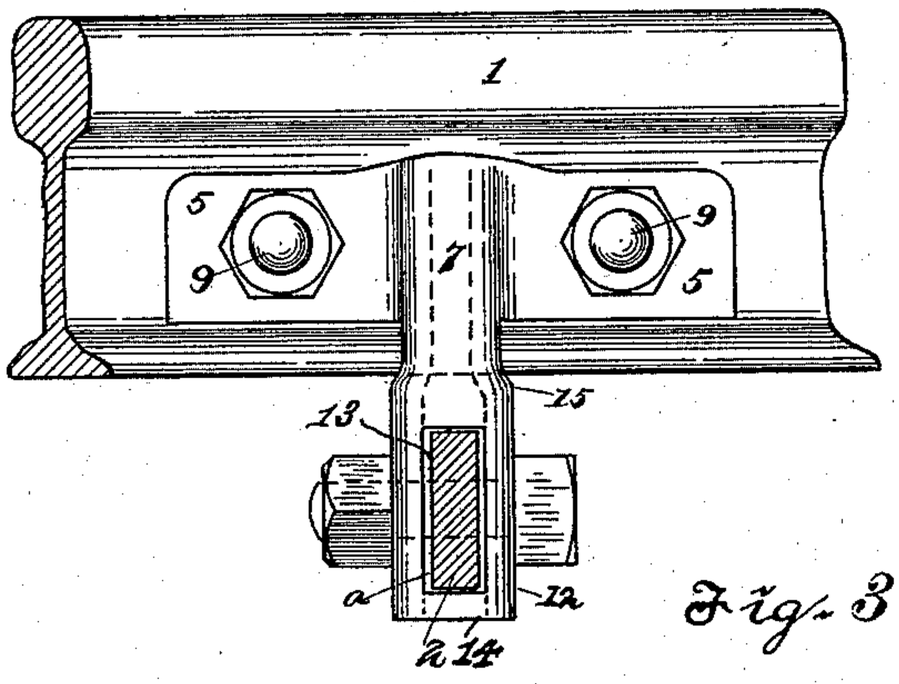


Fig. 4.

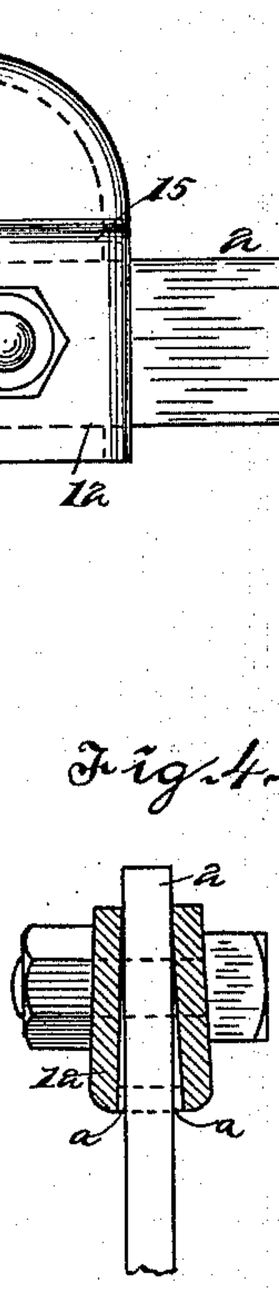
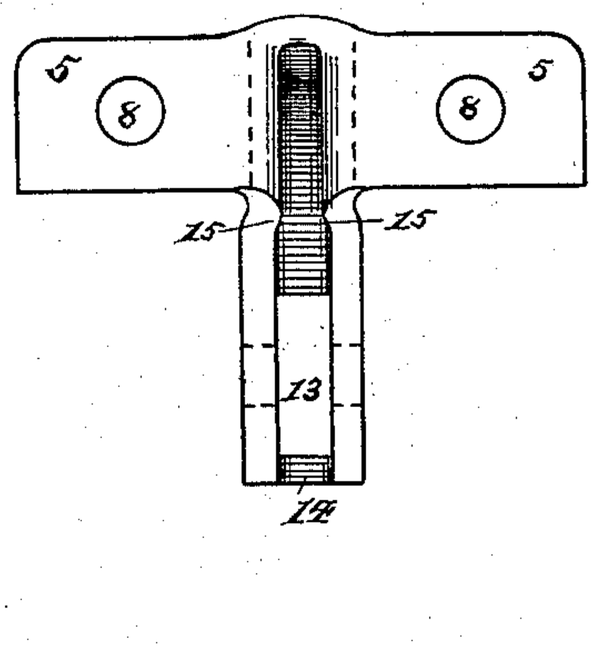


Fig. 3.



Witnesses

J. Watson Sims

Wm. F. Ross.

Inventors

Fredric C. Weir

Charles Partington

By their Attorneys

Wood & Boyd

UNITED STATES PATENT OFFICE.

FREDRIC C. WEIR AND CHARLES PARTINGTON, OF CINCINNATI, OHIO, ASSIGNORS TO THE WEIR FROG COMPANY, OF SAME PLACE.

BRACKET FOR CONNECTING TIE-BARS AND SWITCH-RAILS.

SPECIFICATION forming part of Letters Patent No. 410,056, dated August 27, 1889.

Application filed April 29, 1889. Serial No. 309,086. (No model.)

To all whom it may concern:

Be it known that we, FREDRIC C. WEIR and CHARLES PARTINGTON, citizens of the United States, and residents of Cincinnati, in the the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Brackets for Connecting Tie-Bars and Switch-Rails, of which the following is a specification.

The object of our invention is to provide a stronger, cheaper, and better bracket for supporting a tie-bar and connecting it to the switch-rail, all of which will be fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of our improvement attached to the rail and the tie-bar. Fig. 2 is a side elevation of the same. Fig. 3 is an inside elevation of our improved bracket. Fig. 4 is a section on line *x x*, Fig. 1. Fig. 5 is a plan view of the blank from which the bracket may be struck up.

1 represents a switch-rail, 2 a tie-bar, and 3 a bracket for supporting the tie-bar and connecting it to the rail. This bracket is preferably made of steel or iron plate cut in the blank form shown in Fig. 5 and struck up by a die into the finished shape. The bracket may be also made from cast metal. The bracket is provided with ears 5, which are made integral with the neck 7 and provided with holes 8 for attaching it to the switch-rail by means of bolts 9. The neck 7 is channel-shaped, and the shank 12 is mortised as at 13 to receive the tie-bar 2. The side walls of the mortised shank converge to closely hug the tie-bar at one end of the opening through the shank, while the side edges of the latter at the opposite end of the opening are separated from the tie-bar by spaces, as at *a a*, so as to permit a slight lateral play of the tie-bar. The offsets 15 and the cross-piece 14 hold the bar in a vertical position.

The preferred manner of constructing the bracket is to make it of plate-steel struck up from the blank 4.

Having described our invention, what we claim is—

1. A tie-bar bracket consisting of the channel-neck 7, having the ears 5 and the shank 12, provided with the mortise 13 for the tie-bar, substantially as described.

2. A tie-bar bracket consisting of the channel-neck 7, provided with the ears 5, and the shank 12, having a mortise 13 and converging side walls, substantially as described.

3. A tie-bar bracket consisting of the channel-neck 7, having the ears 5, the offset 15, the shank 12, having the mortise 13, and the cross-piece 14, substantially as described.

4. A tie-bar bracket consisting of the channel-neck 7, having the ears 5, the mortised shank 12, and the offset 15, connecting the shank and neck, substantially as described.

In testimony whereof we have hereunto set our hands.

FREDRIC C. WEIR.
CHARLES PARTINGTON.

Witnesses:
T. SIMMONS,
J. WATSON SIMS.