(No Model.)

F. C. WEIR.

RAIL BRACE.

No. 377,220. Patented Jan. 31, 1888.

Fig. 1.

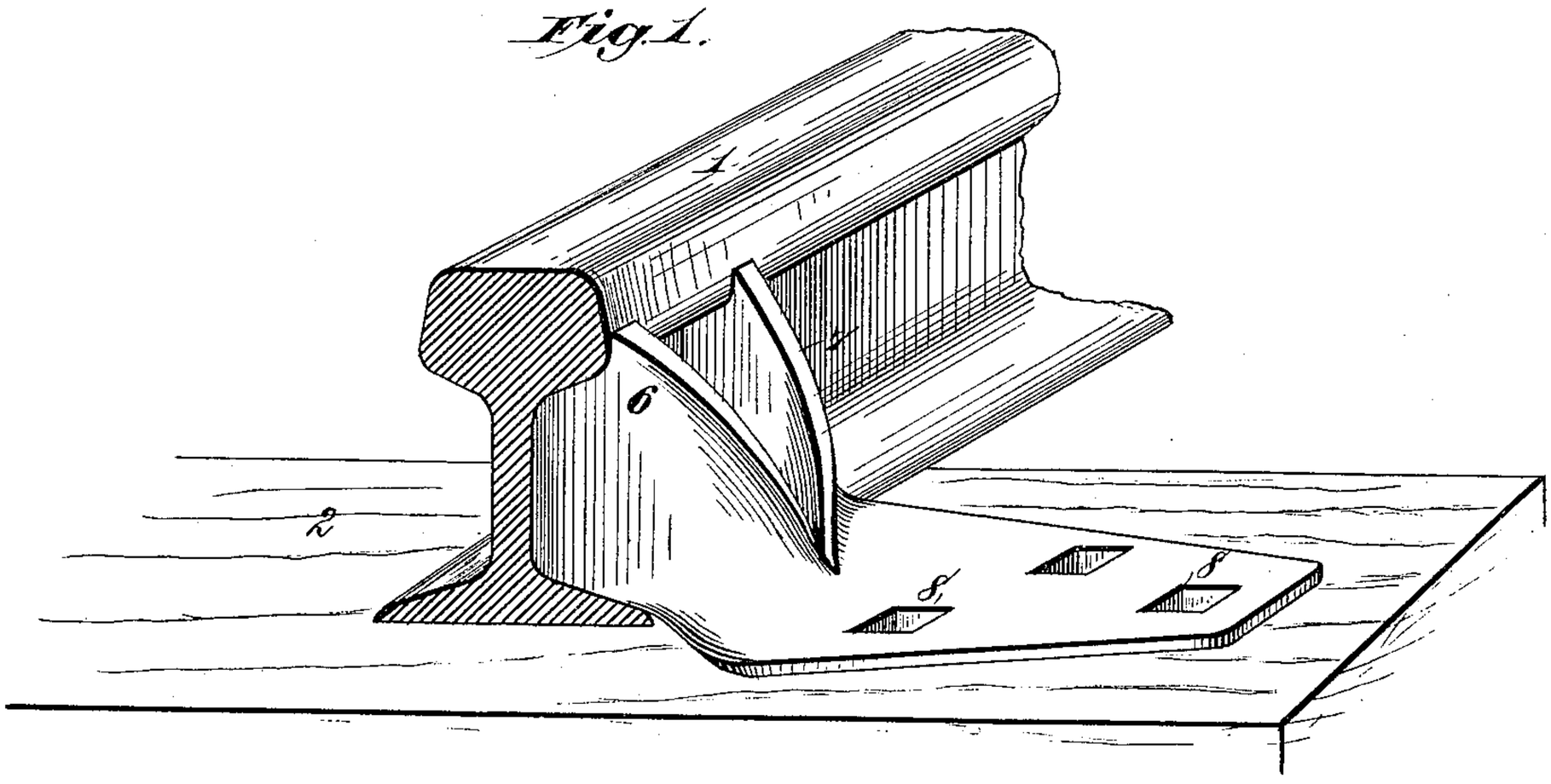


Fig. 2.

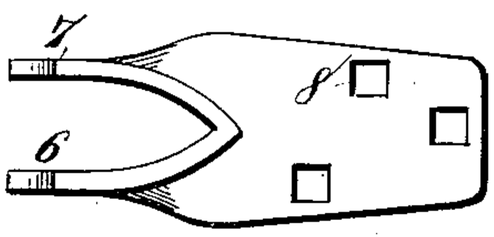


Fig. 3.

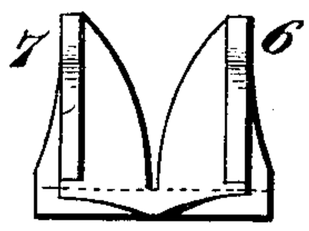


Fig. 4.

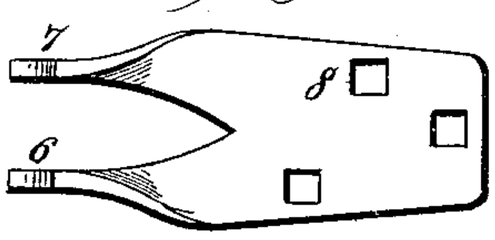


Fig. 5.

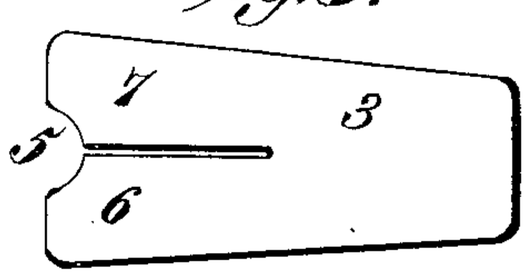
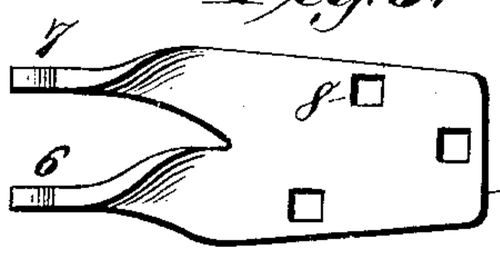


Fig. 6.



Witnesses.
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UNITED STATES PATENT OFFICE.

FREDRIC C. WEIR, OF CINCINNATI, OHIO.

RAIL-BRACE.

SPECIFICATION forming part of Letters Patent No. 377,220, dated January 31, 1888.

Application filed December 6, 1887. Serial No. 257,159. (No model.)

To all whom it may concern:

Be it known that I, FREDRIC C. WEIR, a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Rail-Braces, of which the following is a specification.

The object of my invention is to provide a switch-brace which has a forked or two-armed bearing against the rail and a flat base resting on the tie, to which it is spiked, so as to make a strong brace, to give a wider bearing-support with the least expenditure of metal, the construction of which is fully explained in the description of the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my improvement attached to the rail and tie. Fig. 2 is a top plan view of the same. Fig. 3 is an end elevation. Fig. 4 is a top plan view of a modification. Fig. 5 is a plan view of the blank from which the rail-brace shown in Figs. 1, 2, and 3 is made. Fig. 6 is a top plan view of another modification.

1 represents an ordinary railroad-rail, 2 the tie on which the same rests.

The rail-brace is formed from a blank, 3, (shown in Fig. 5,) of a single piece of metal when made from wrought-iron or steel. It is first cut in the proper shape, slitted, and notched. The notch 5 is of the proper shape to allow the forked arms 6 7 to fit the under side of the head of the rail, and the end of the forks is cut of a suitable shape to fit the web and flange of the rail. The forks 6 7 are preferably turned up in the form shown in Fig. 2—that is, by bending the inner edges of the arms 6 7 upward; but they may be bent by bending the inner edge of one of the forks, say 6, upward and the inner edge of the other fork, 7, downward, having the outer edge uppermost, as shown in Fig. 6, in which event the contour of the end of the forks would be formed accordingly; but the notching of the outer end of the forked arms would require to be changed—that is, the notch at the ends would have to be appropriately made—by making the notch now on the inner corner of the fork 7 upon the outer corner. The inner edges of the blank could likewise be bent downward instead of upward by making the notches on the outer corners instead of on the inner ones, as shown in Fig. 4.

8 represents bolt-holes pierced through the flat portion of the brace, so that it will rest firmly upon the tie and be secured thereto.

Having described my invention, what I claim as new is—

1. A rail-brace having the flat base resting on a tie, bifurcated, with curved and vertical arms 6 7 resting on a tie, with their ends abutting against the rails, substantially as specified,

2. A rail-brace formed of a single piece of metal, which is slitted and notched and the forked arms spread by bending the arms so as to bring the ends to vertical lines, substantially as specified.

In testimony whereof I have hereunto set my hand.

FREDRIC C. WEIR.

Witnesses:

ROBERT ZAHNER,

E. E. WOOD.