

(No Model.)

W. B. HENNING.

RAILWAY TIE.

No. 376,884.

Patented Jan. 24, 1888.

Fig. 1.

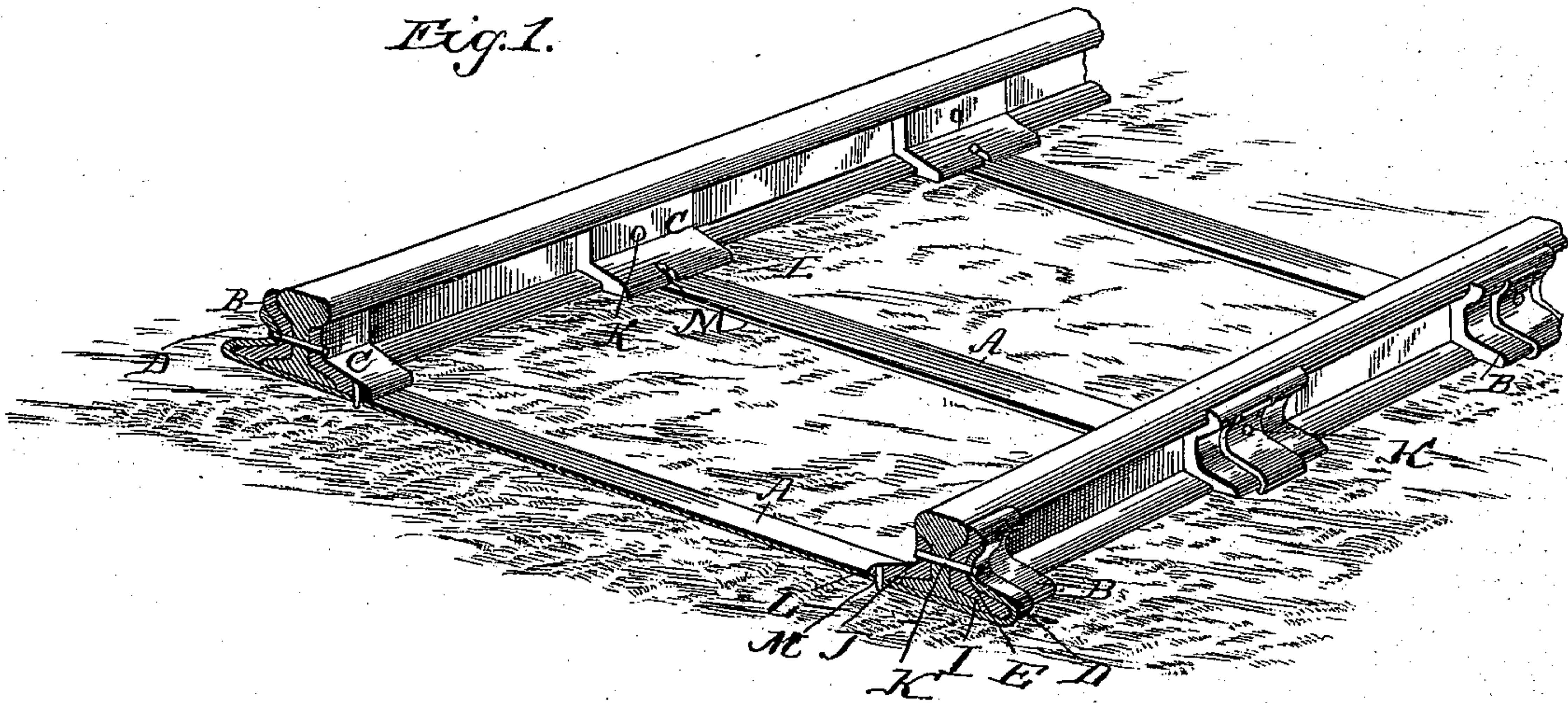


Fig. 2.

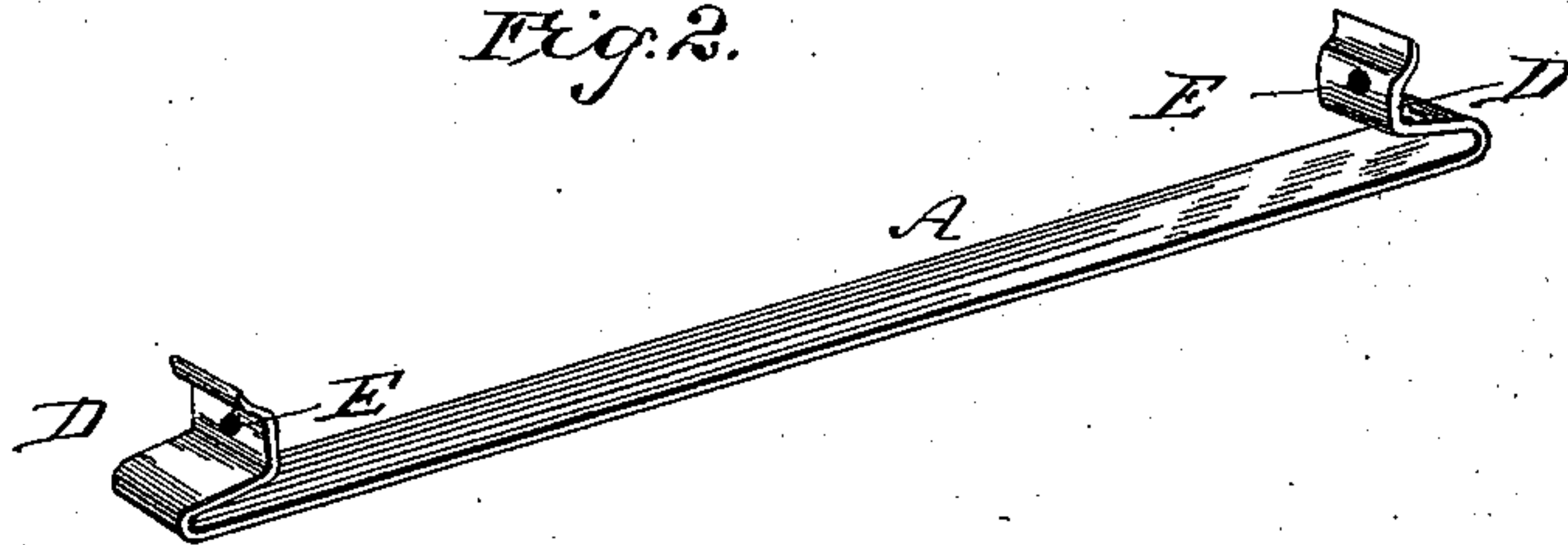


Fig. 4.

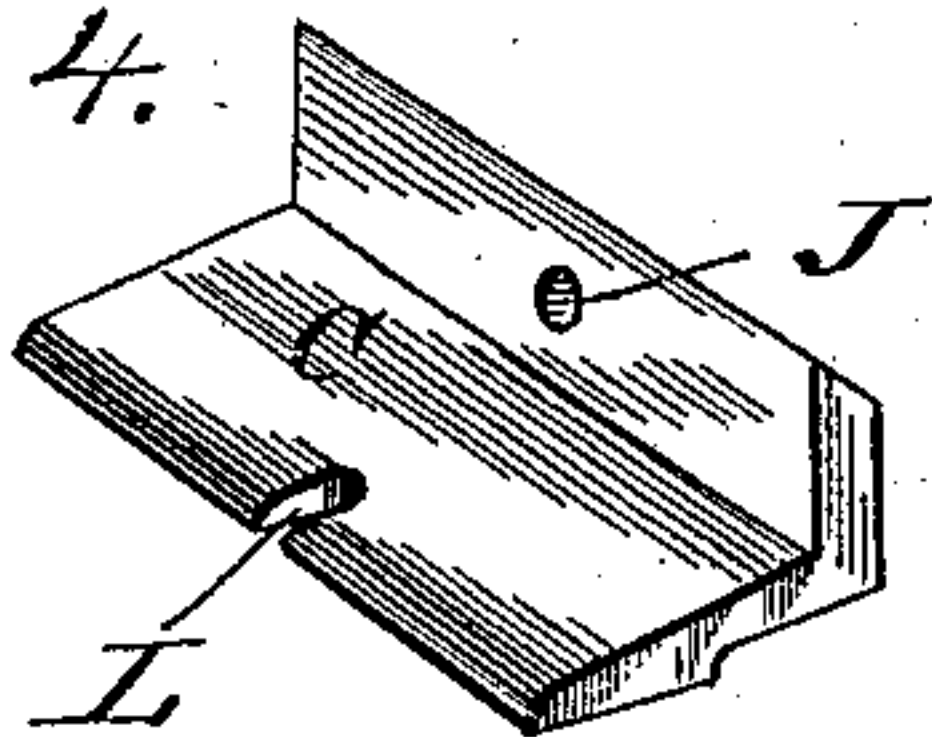
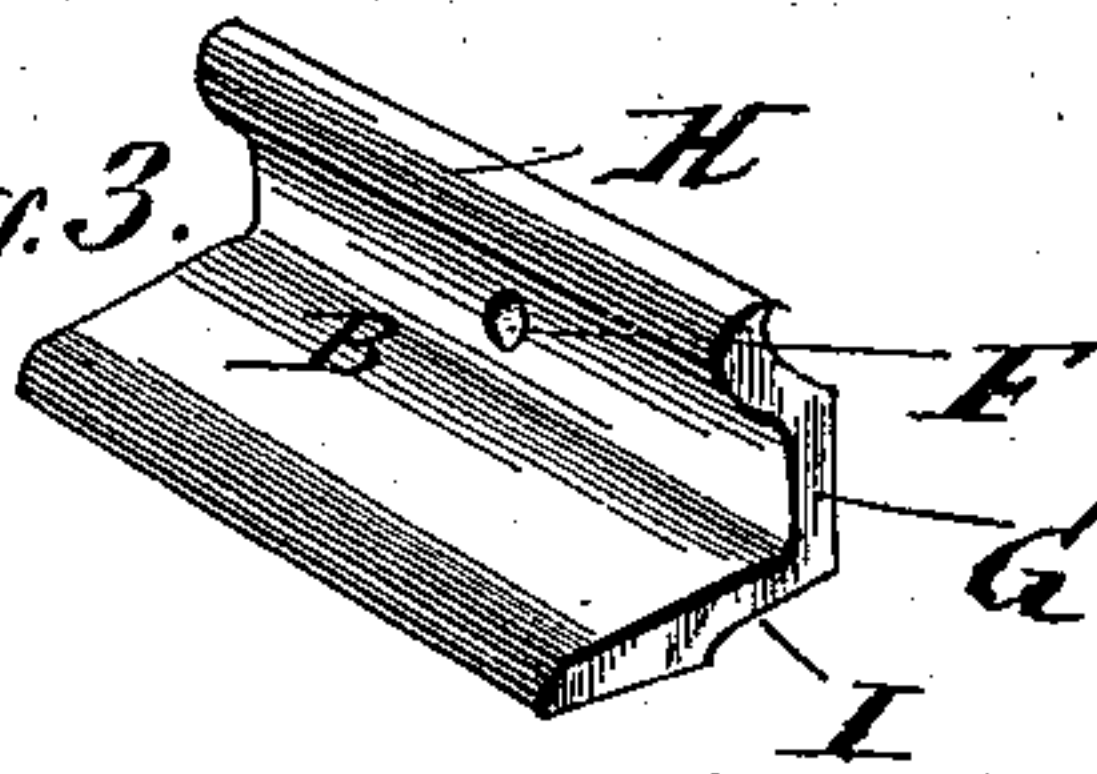


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 376,884, dated January 24, 1888.

Application filed November 6, 1885. Serial No. 182,067. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. HENNING, a citizen of the United States, residing at Waterloo, in the county of De Kalb and State of Indiana, have invented certain new and useful Improvements in Railway-Ties; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to
10 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion
15 of a railway-track provided with my improved tie. Fig. 2 is a similar view of the tie-bar. Fig. 3 is a similar view of the outer clamping-block, and Fig. 4 is a similar view of the inner clamping-block.

20 The same letters of reference indicate the same or corresponding parts in all the figures.

My invention has relation to that class of metallic ties for railways in which clamping-blocks are secured at both sides of the rails
25 and at both ends of the tie, clamping and holding the rails at their proper distances; and it consists in the improved construction and combination of parts of such a tie, as hereinafter more fully described and claimed.

30 In the accompanying drawings, the letter A indicates a flat bar, having its ends D bent upward and curved inward to partly correspond to the outlines of the outer sides of the rails, the said flat tie forming the tie proper. The
35 outer clamping-blocks, B, consist of central vertical portions, G, fitting against the outer sides of the web of the rails, upwardly and slightly inwardly curved lips H at the upper edges, and of foot portions having recesses
40 I in the under sides fitting upon the foot portions of the rails. The inner clamping-blocks, C, consist of vertical portions fitting against the web of the rails and foot portions fitting against the foot portions of the rails, and the
45 vertical portions of the clamping-blocks and the ends of the ties are respectively formed with perforations F, J, and E, through which bolts K are inserted, uniting the blocks to the ties and to the rails, the bolts passing through
50 perforations in the web of the rails.

The clamping-blocks will serve as fish-plates for rail-joints as well as for securing the rails to the ties, and the curved lips H upon the outer blocks will serve to carry the wheels
55 over the joints without any jar, the rim of the wheels of the rolling-stock traveling over the lips at the joints.

The foot portion of the inner clamping-blocks is formed with a notch, L, into which bolts M are inserted and driven, or otherwise
60 secured in the flat bar of the tie, the said bolts securing the inner blocks and forcing them against the rails.

The bent and curved ends of the tie-bar will fit perfectly around the outer clamping-blocks, 65 and the rails will be securely clamped between the blocks at the ends of the tie-bars and be held at the proper relative distance from each other, the tie-bars serving as track-gages as well as in the capacity of ties, admitting of the rails
70 being simply secured within the ends of the bars without any further gaging.

The ends of the ties are preferably placed to rest upon longitudinal stringers or similar supports, which are not shown in the draw-
75 ings, but which, on account of the narrowness of the ties, will be necessary in most cases for supporting the track and preventing its sinking into the ground.

Having thus described my invention, I claim 80 and desire to secure by Letters Patent of the United States—

The combination of the tie-bar having the upwardly-bent and outwardly and inwardly bulged ends, the outer clamping-blocks hav-
85 ing the curved lips at the upper edges and having the recessed foot portions, the inner clamping-block having the notches in the foot portions, the rails, the bolts passing through the clamping-blocks and through the ends of
90 the tie-bar and through the webs of the rails, and the bolts passing into the tie-bar and fitted into the notches of the foot portions of the inner clamping-blocks, as shown and set forth.

WM. B. HENNING.

Witnesses:

HIRAM LEIB,

FRANK W. WILLIS.