(No Model.)

J. MOSER & E. MOECKEL.

RAILWAY TIE.

No. 371,780. Patented Oct. 18, 1887.

Fig. 1.

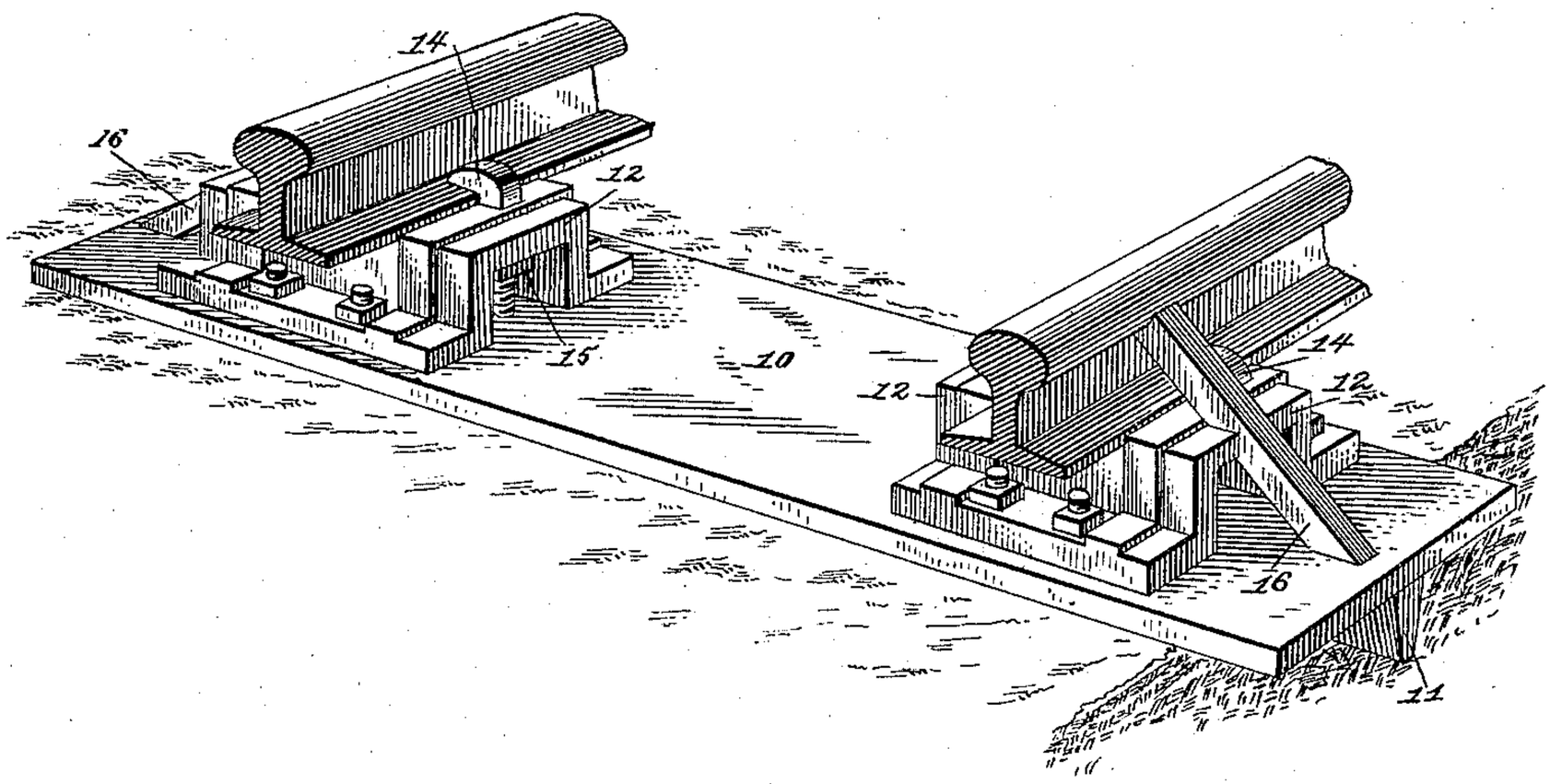
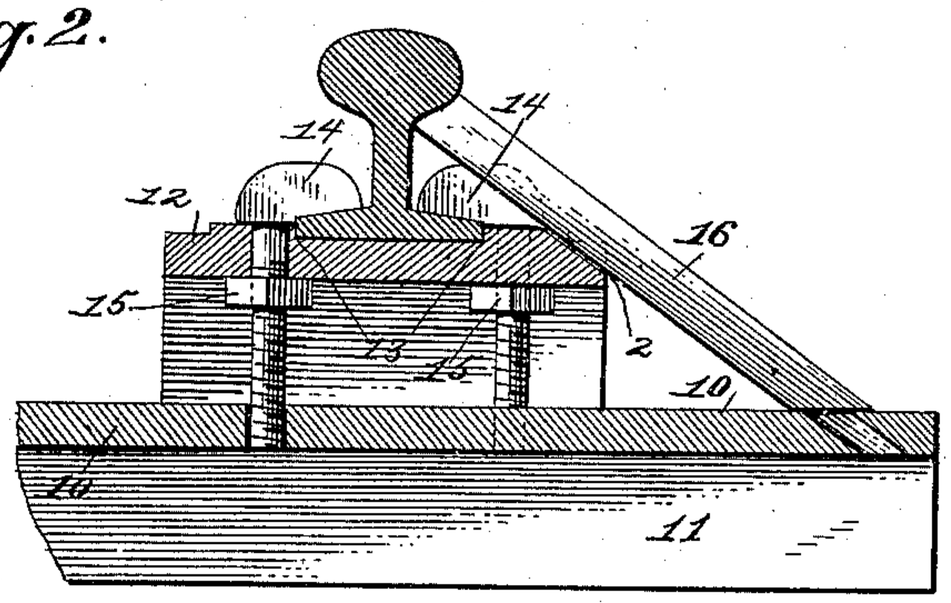


Fig. 2.



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JOHN MOSER AND ERNST MOECKEL, OF CROOKSTON, MINNESOTA.

RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 371,780, dated October 18, 1887.

Application filed May 3, 1887. Serial No. 236,955. (No model.)

To all whom it may concern:

Be it known that we, JOHN MOSER and ERNST MOECKEL, of Crookston, in the county of Polk and State of Minnesota, have invented a new and Improved Railway-Tie, of which the following is a full, clear, and exact description.

This invention relates to a novel form of railway-tie; and it consists, essentially, of a metallic bed-plate provided with raised rail-supporting chairs and with diagonal braces that are fitted to the bed-plate and arranged to abut against the under side of the outer bulge of the tread of the rail, the object of the invention being to provide a strong, permanent, and durable tie, one whereby the rail may be supported slightly above the general level of the road-bed, all as will be hereinafter more fully described, and specifically pointed out in the claims.

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 both the views.

Figure 1 is a perspective view of our improved form of tie, two rail-sections being shown in connection with the tie; and Fig. 2 is a longitudinal sectional view of a portion of the tie, the rail-section shown in connection with the tie being represented in cross-section.

In the drawings above referred to, 10 represents a metallic plate that is formed with a downwardly-projecting longitudinal flange or rib, 11, said flange being provided as a strengthening or stiffening piece for the plate 10, and also as a means for holding the tie against lateral displacement. To the upper face of the plate 10 there are bolted or riveted two chairs, 12, said chairs being preferably made from plate metal that is rolled so as to form a central channel, 13, within which the rail rests, as illustrated, the plates being bent downward at right angles to the upper central section, and then outward to form feet, which rest against the plate 10. In applying the chairs 12 they are so spaced that when the rails are seated within their channels 13 they will be at the required distance the one from the other.

The rails are held to the chairs by hook-headed bolts 14, the shanks of said bolts passing downward through apertures formed in the chairs 12 to engage with nuts 15, the lower ends of the shanks entering apertures that are formed in the plate 10, as illustrated. In order that the rails may be rigidly braced and held from spreading, we arrange diagonal braces 16, which are stepped in the plate 10 and rest in recesses 2, that are formed in the chairs 12, the upper ends of the braces 16 being of proper shape to fit snugly against the under side of the rail-treads.

With such a tie as the one above described, the rail is supported above the mud, dust, and ice of the road-bed, and the height of the chairs may be varied in order to change the height of the rail-treads at curves and other portions of the road where it is necessary that one rail should be higher than the other.

A tie constructed in accordance with the above description will be found to be exceedingly durable and efficient in operation.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the flat tie 10, having apertures near its ends, of the chairs formed of angular plates 12, bolted at their ends to the tie 10, and having transverse channels 13 on their upper faces, and the hook-headed bolts 14, passed down through the U portion of the chairs into the tie 10, and provided with nuts 15, bearing against the under faces of the chairs, substantially as set forth.

2. The combination, with the tie 10 and the chair 12, notched at 2, of the brace 16, stepped in the tie and resting in the notch 2, between its ends, the upper end of the brace being adapted to bear against the under side of the rail-tread, substantially as set forth.

3. The combination, with a bed-plate, 10, formed with a downwardly-extending flange, 11, of chairs 12, having channels 13, hook-bolts 14, and diagonal braces 16, substantially as described.

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Witnesses:
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