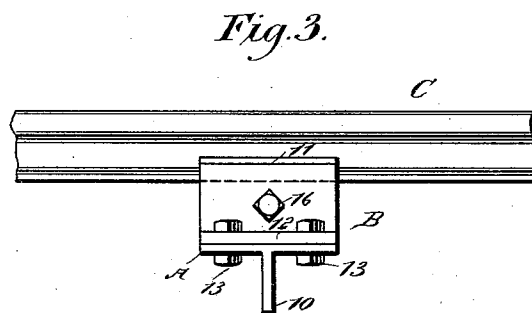
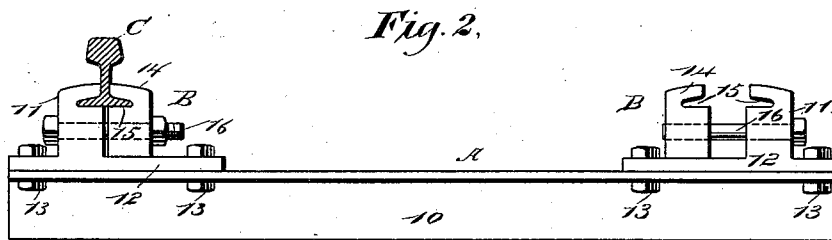
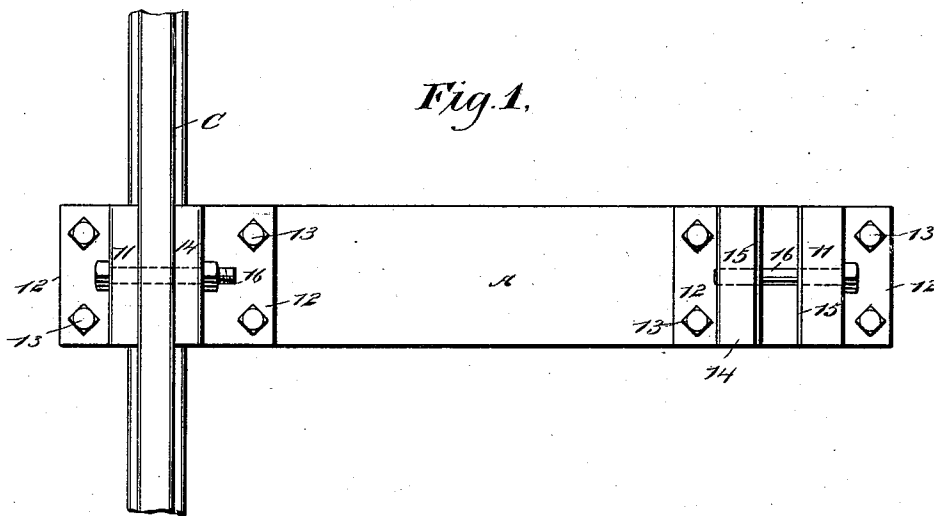


(No Model.)

R. A. MANSFIELD.
RAILROAD TIE.

No. 549,380.

Patented Nov. 5, 1895.



WITNESSES:

Edward Thorpe
J. A. Aker

INVENTOR

R. A. Mansfield

BY

Mansfield

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT ALLEN MANSFIELD, OF BEAVER, TEXAS, ASSIGNOR OF ONE-HALF
TO JOHN C. LEE AND HATTIE C. WALKUP, OF SAME PLACE.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 549,380, dated November 5, 1895.

Application filed June 1, 1895. Serial No. 551,387. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ALLEN MANSFIELD, of Beaver, in the county of Wichita and State of Texas, have invented a new and useful Improvement in Railroad-Ties, of which the following is a full, clear, and exact description.

My invention relates to an improvement in railroad-ties, and especially to an improvement in metallic crossing-ties; and it has for its object especially to improve upon the form of tie for which Letters Patent were granted to J. C. Lee January 30, 1894, No. 513,792, the improvements being such as to provide for a means of strengthening the tie, simplifying the same, and materially reducing the cost of manufacture.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a plan view of the said metallic tie and a rail clamped thereto. Fig. 2 is a side elevation of the said tie, the rail being in transverse section; and Fig. 3 is an end view of the tie, the rail being in side elevation.

In carrying out the invention the tie A is a metallic one, being of any desired width and of any necessary length, and the said tie is provided at its center with a longitudinal web 10, extending from end to end, whereby the tie is virtually T-shaped in cross-section. The tie is made to support clamping-jaws B, the jaws being adapted to receive the rails C. The jaws are placed at or near each end of the tie and rest upon its upper surface. The outer jaw 11 is provided with a base-plate 12, which is secured upon the upper face of the tie proper by means of bolts 13 or their equivalents, while the inner jaw 14 of each set is made to slide upon the base 12 of the fixed jaw. Each of these jaws is provided with horizontally-aligning undercut recesses 15, shaped to receive the flanges of a rail C, and when the jaws of a set have been brought together, so as to clamp between them the flange and the web of the rail, they are held in such position by means of a bolt 16, passed through the two jaws and fitted

with the usual lock-nut or its equivalent. Under this form of construction the tie is simplified, as are likewise the jaws, and the cost of the tie is materially reduced, while it is as strong as when constructed as shown and described in the aforesaid patent. The base of the fixed jaw is preferably of a width equal to that of the top of the tie and extends out to the ends thereof. The inner jaw 14 may serve the purpose of a nut by having threads cut in it. In fact, it will act in the capacity of a clamping-jaw, nut, and nut-lock. The base-plate 12 may be fastened to the tie proper by bolts or rivets.

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

1. A metallic railroad tie, T-shaped in cross section and provided with clamping jaws having flat abutting inner faces, one jaw of each set being secured to the tie, having a base extending beyond the inner and outer faces of the jaws, the opposing jaw of the set being held to slide upon the fixed jaw, both jaws having recesses at the upper ends of their inner faces for the reception of the flange of the rail, and bolts extending through and holding the said jaws together, as and for the purpose specified.

2. The combination, with a metallic railway tie provided with a longitudinal flange or web upon its under face, whereby the said tie is substantially T-shaped in cross section, of jaws located on the said tie near the ends thereof, each set of jaws comprising a fixed jaw having a base of substantially equal width as the width of the tie, being bolted thereto, a movable jaw sliding upon the said base, both jaws being provided with undercut horizontally aligning recesses near the upper ends of their flat abutting inner faces to receive the flange of a rail, and a locking bolt passed through the two jaws of a set, and means, substantially as shown and described, for tightening the said bolt and drawing the jaws together in a manner to cause said jaws to clamp both the flange and web portion of the rail, as and for the purpose specified.

ROBERT ALLEN MANSFIELD.

Witnesses:

J. W. WALKUP,
T. M. HOLT.