

No. 649,562.

Patented May 15, 1900.

J. G. WILLIAMS.
METALLIC RAIL TIE.

(Application filed Sept. 18, 1899.)

(No Model.)

Fig. 1.

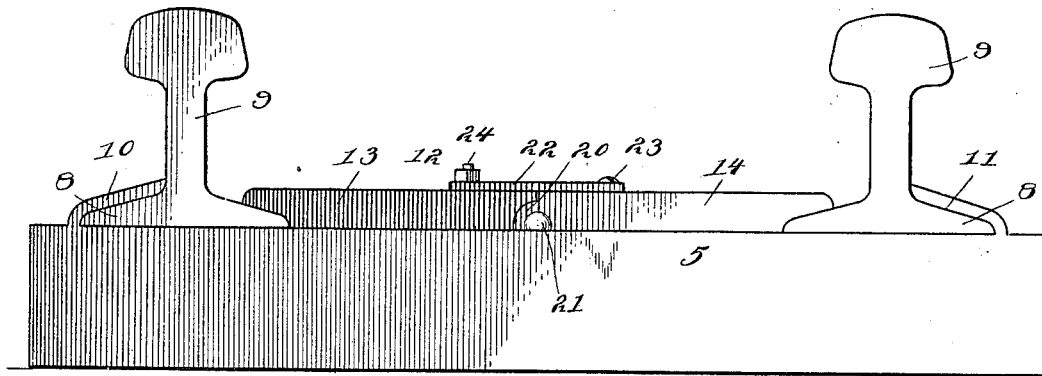


Fig. 2.

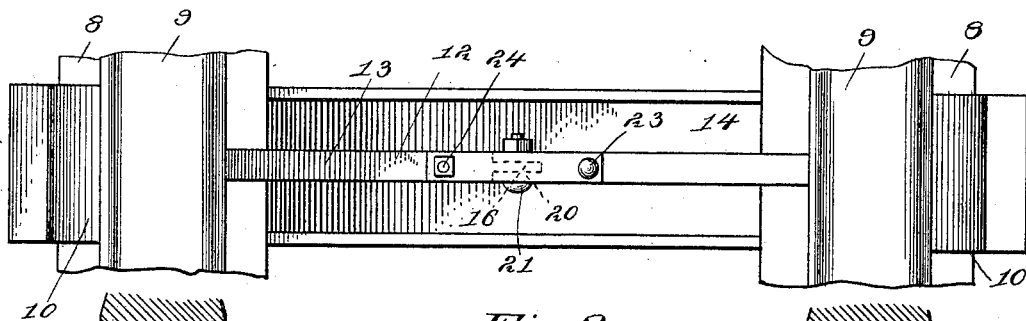
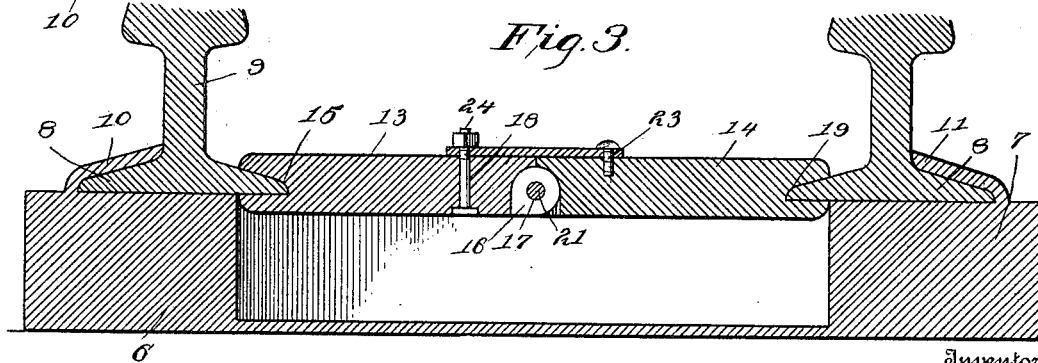


Fig. 3.



Witnesses

T. P. Britt
C. Shaw.

Inventor

J.G. Williams

by *J. Mearns & Co.*
Attorneys

UNITED STATES PATENT OFFICE

JAMES G. WILLIAMS, OF CORAL HILL, KENTUCKY, ASSIGNOR OF TWO-THIRDS
TO JAMES P. DEPP AND J. N. SMITH, OF GLASGOW, KENTUCKY.

METALLIC RAIL-TIE.

SPECIFICATION forming part of Letters Patent No. 649,562, dated May 15, 1900.

Application filed September 18, 1899. Serial No. 730,920. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. WILLIAMS, a citizen of the United States, residing at Coral Hill, in the county of Barren and State of Kentucky, have invented a new and useful Metallic Rail-Tie, of which the following is a specification.

My invention relates to rail or track fastenings, and has for its object to provide a durable and efficient form of cross-tie and means for effectually and quickly securing the rails thereto without the use of spikes, as is now commonly done.

With this object in view my invention consists in providing a metallic cross-tie having a central longitudinal hollow portion and solid ends, the ends being provided with an inwardly-projecting hook and an intermediately-pivoted bar provided with bifurcated ends to engage the rail and retain the same in engagement with said hooks.

My invention further consists in certain details of construction and combinations of parts, as will be more fully set forth in the following description, recited in the claims, and illustrated in the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of a cross-tie constructed in accordance with my invention, showing the rails attached thereto. Fig. 2 is a top plan view of the same, and Fig. 3 is a vertical longitudinal section of the same.

Referring to the drawings by reference-numerals, 5 indicates a hollow cross-tie having solid ends 6 and 7, on which the flanges 8 of rails 9 rest. Projecting upwardly from the solid end of the tie are two hooks 10 and 11, which are about the same shape as the outside flange of the rail and extend entirely across the top of said tie.

12 is a centrally-pivoted member comprising the sections 13 and 14. The section 13 is bifurcated at 15 at one end and has a reduced extension 16 at the other provided with a transverse perforation 17, and vertical perforation 18 is provided in this member intermediate its respective ends. The member 14 is also provided with a bifurcated end 19, similar to that on the member 13, and the other end thereof is bifurcated, as at 20, to receive the reduced extension 16 thereof and has per-

forations registering with the one 17 in said extension, so that when a bolt 21 is secured in said perforations the two parts are hinged together.

A plate 22 is secured to the two sections 13 and 14 and extends across the top of the hinged joint, thereby preventing the securing member from becoming detached after the parts are placed in proper position.

23 is a swivel-pin for the plate, and 24 is a removable bolt adapted to be secured in the perforation 18 and designed to hold the plate 22 in place.

In laying a track the ties are first arranged in the usual manner, properly spaced apart, and the rails placed thereon, the outside flange extending underneath hooks and the inside flange projecting over the solid end of the tie. The bifurcated ends of the hinged securing member are then made to engage the inside flanges of the rails, pressure is applied at the hinge-joint, and said member is forced in position. The plate 22 is then securely fastened by means of the bolt 24 and the track is rigidly fastened to the tie. Should it be found necessary to remove the rails, the bolt 24 can be withdrawn, when the securing member can be removed and the desired results obtained.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a track-securing device, the combination with a hollow tie, of hooks projecting from the ends thereof and adapted to engage the outer flanges of the rails, and intermediately-hinged securing device designed to engage the inner flanges of the respective rails, and a lock for the hinge of said member, substantially as described.

2. In a track-fastening, the combination with a tie having hooks at its ends, designed to engage the outer flanges of the rail, a hinge securing member having bifurcated ends adapted to engage the inner flanges of the rails and a swivel locking-plate extending across the hinged joint of said member, substantially as described.

JAMES G. WILLIAMS.

Witnesses:

JOHN W. LAIN,
P. E. SATTERFIELD.