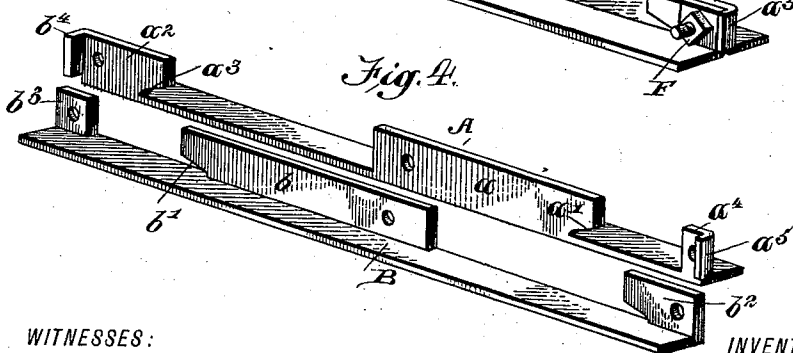
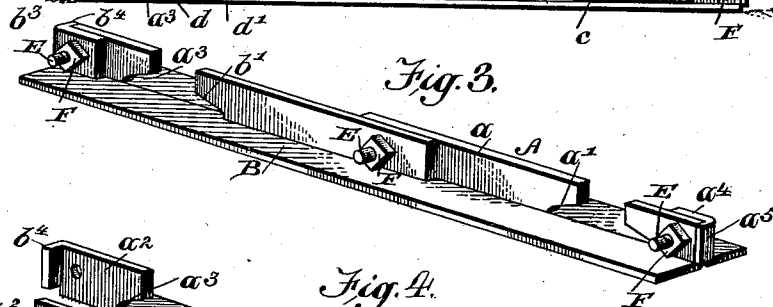
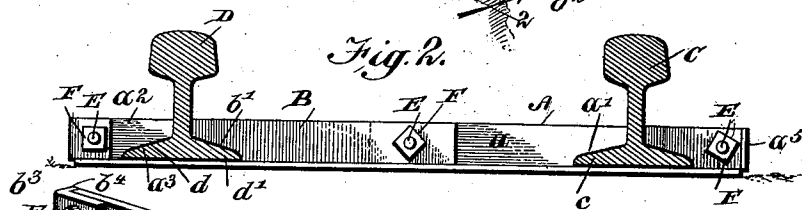
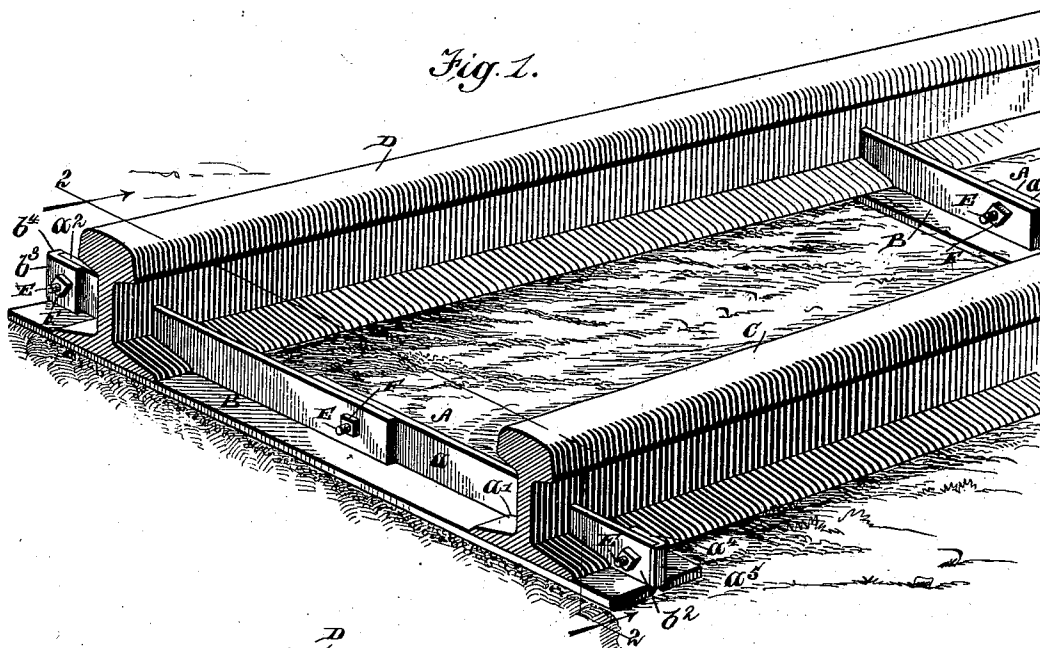


(No Model.)

W. H. LARIMER.
METALLIC RAILWAY TIE.

No. 568,359.

Patented Sept. 29, 1896.



WITNESSES:

H. E. Dieterich
J. Edw. Lockett

INVENTOR

William H. Larimer

BY

O'Meara & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM H. LARIMER, OF TERRE HAUTE, INDIANA, ASSIGNOR OF ONE-HALF TO MRS. CLINTON M. THOMPSON, OF SAME PLACE.

METALLIC RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 568,359, dated September 29, 1896.

Application filed December 17, 1895. Serial No. 572,450. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LARIMER, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved Metallic Railway-Tie, of which the following is a specification.

My invention relates to improvements in metallic railway-ties; and it primarily has for its object to provide a tie of this character of a simple and inexpensive but durable construction, which will not require spikes.

My invention also has for its object to provide a metallic tie formed of sections so joined and braced that the rails cannot lift or spread, and which obviates the necessity of the common and present necessary habit of gaging.

With other objects in view, which hereinafter will appear, the invention consists in the peculiar combination and novel arrangement of parts, such as will be first described in detail, and then specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view illustrating my invention as applied for use. Fig. 2 is a transverse section taken practically on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the tie, and Fig. 4 is a view of the parts constituting my improved tie detached.

In its construction my improved tie comprises practically but two parts or half-sections, designated by A and B in the drawings, which are formed substantially alike, the section A having a central vertical or angle member a , having at one edge an undercut portion a' , adapted to fit over the inner tread-flange c of the rail C. Such section A at one end has an angle member a^2 , having an undercut portion a^3 , adapted to fit over the outer flange d of the rail D, and at the other end it has a vertical member a^4 , provided with a right-angle flange a^5 for a purpose presently explained, the several members a , a^2 , and a^4 being apertured, as shown.

The section B has members b , b^2 , and b^3 , constructed precisely like the members a , a^2 , and a^4 , except that they are arranged alternately or reverse to such members a , a^2 , and a^4 —that is, the member b has its undercut portion b' projected to fit over the inner tread-flange d' of the rail D, the member b^2

has its undercut portion arranged to fit over the outer tread-flange of the rail C, while the member b^3 is arranged to have its angle-flange held to lap the other edge of the member a^2 of the section A, the member a^4 of such section correspondingly lapping the member b^2 of the section B when the parts are clamped together, as shown in Fig. 2. The members b , b^2 , and b^3 have apertures which register with the apertures in the members a , a^2 , and a^4 , and through these apertures the fastening-bolts E are passed and held secure by the nuts F, as shown.

Instead of arranging the end flanges a^5 and b^4 as shown in Figs. 1 and 2 they may be arranged as indicated in Fig. 4.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the advantages of my invention will be readily apparent. The sections A and B are formed in any suitable manner with their angle members integral. It is manifest that after the rails are placed in position and the sections A and B are bolted together the rail cannot lift or spread. Furthermore, as the tie-sections are constructed to the standard gage it follows that the common and present practice of gaging the rails is entirely avoided. Thus it will be apparent that after once laid and joined by my metallic tie the track will not need to be repaired as long as the tie lasts. Such advantages in construction will reduce the expense of section-hands at least one-fourth, as there will be nothing to repair or restore but ties or grade.

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

1. A metallic tie composed of two sections having each a central and an end angle member having undercut portions and an end member not undercut and formed with an inverted flange, the said members of one section being arranged reverse to the similar members on the other section and means for clamping the said sections together all arranged substantially as shown and described.

2. The combination with the rails C and D, of the tie-sections A and B, the section A, having a central member a , undercut to project over the inner flange of the rail C, and

a member a^2 , undercut to project over the outer flange of the rail D, and a member a^3 , the section B, having undercut members b and b^2 adapted to project over the inner
5 flange of the rail D, and the outer flange of rail C, respectively and provided with a member b^3 , one or both of the members a^2 b^3 having a right-angled flange and means for securing the sections A and B, together all arranged substantially as shown and for the
10 purposes described.

3. As an improvement in metallic rail-ties, the combination of the sectional members A

and B, each having integral vertical apertured members, means for bolting such members together, said members having undercut portions, the undercut on one section being in a direction opposite to that in the opposite section said members having flange portions, projected over the outer edge of the end apertured members all arranged substantially as shown and for the purposes specified.

WILLIAM H. LARIMER.

Witnesses:

FRANK L. GILBERT,
CLINTON M. THOMPSON.