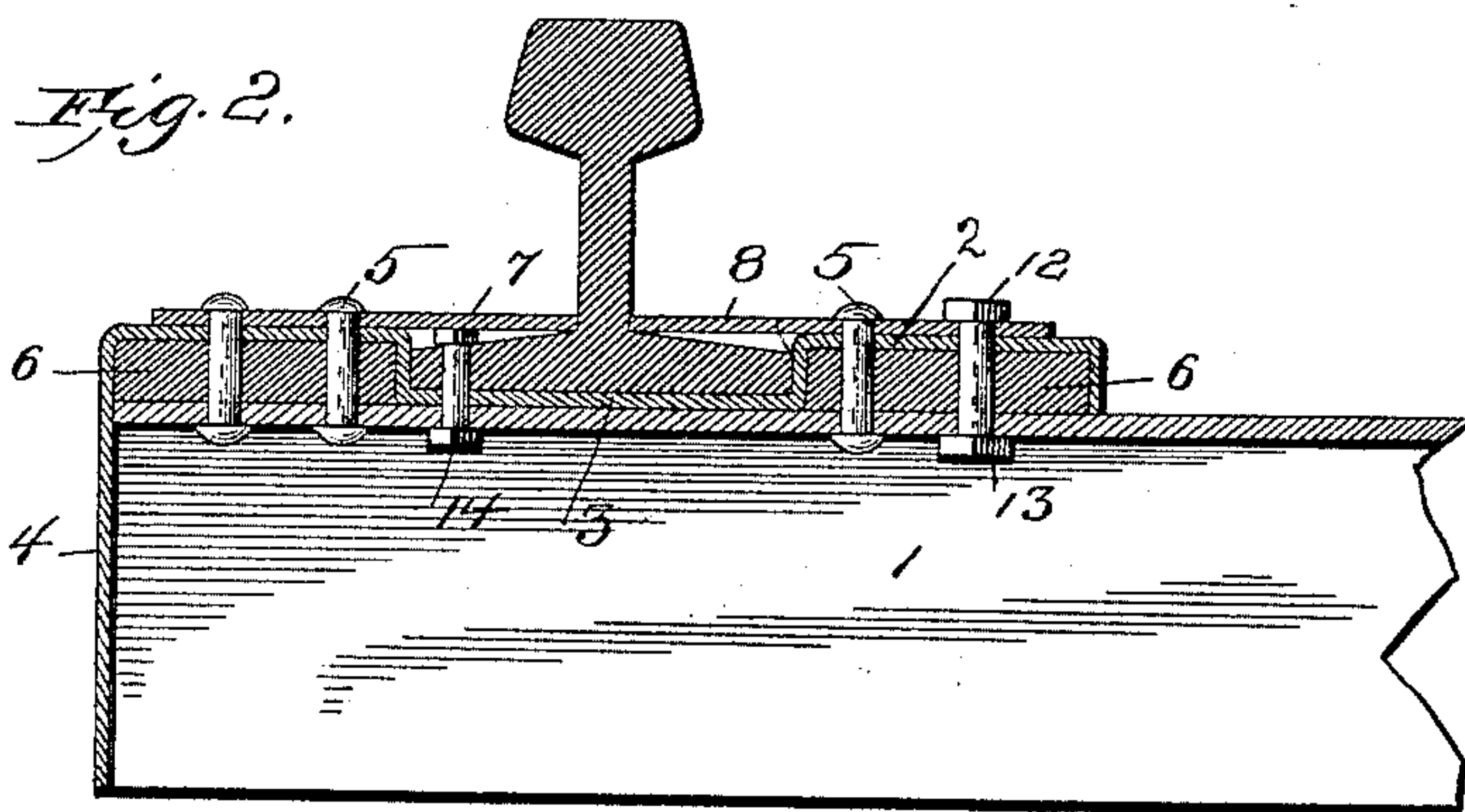
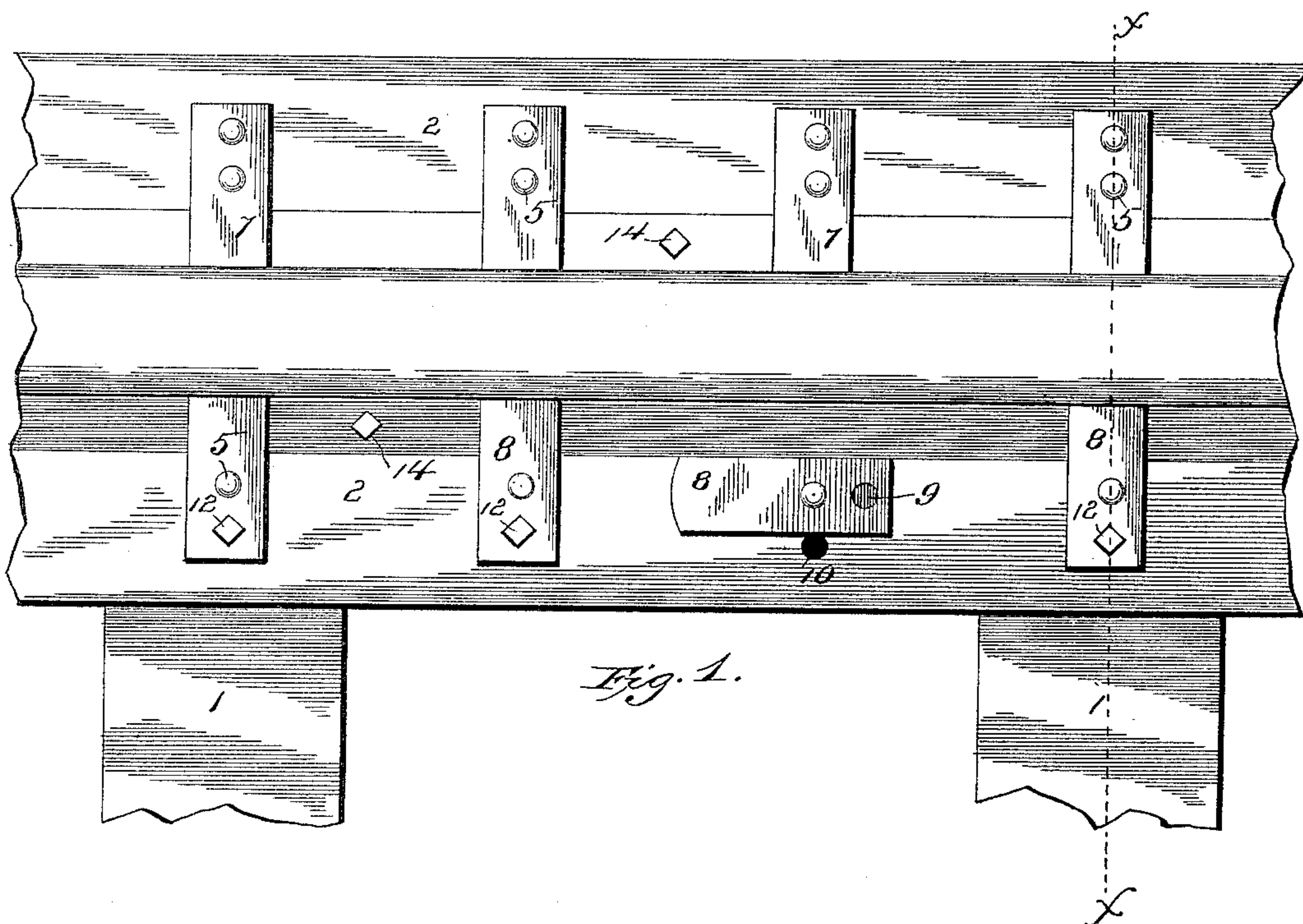


(No Model.)

W. H. POPE.
CONSTRUCTION OF RAILWAYS.

No. 435,768.

Patented Sept. 2, 1890.



WITNESSES:
F. L. Curran
W. L. Coombs

INVENTOR:
William H. Pope
J. Louis Puffer & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM HENRY POPE, OF FERNANDINA, FLORIDA.

CONSTRUCTION OF RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 435,768, dated September 2, 1890.

Application filed May 7, 1890. Serial No. 350,939. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY POPE, a citizen of the United States, and a resident of Fernandina, in the county of Nassau and State of Florida, have invented certain new and useful Improvements in Construction of Railways; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to improvements in the construction of railways or road-beds for railway-cars, the object being to provide a durable and efficient bed which is very compact and substantial and on which the rails can be securely supported and readily removed when desired.

The invention consists in the novel construction and combination of parts hereinafter fully described, and definitely pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of a portion of a railway and its rail constructed according to my invention. Fig. 2 is a section of the same on the line *xx*, Fig. 1.

My improved railway is constructed entirely of metal, so as to secure the maximum of strength with a minimum of weight, and to otherwise secure advantages which will be readily understood.

In the drawings, the reference-numeral 1 designates the cross-ties, consisting of angle-bars of suitable length to extend across the road-bed.

2 designates the stringer, consisting of metallic plates having a central depression 3, corresponding in shape and size with the web of the rail which fits and is supported therein. The sides of these stringers are bent down at an angle to the upper surface, forming the depending walls 4. These stringers rest on the ties, being secured thereto by rivets 5, and between the stringers and ties on each side of the central depression 3 are interposed elastic washers consisting of soft-metal plates 6. At suitable distances apart on the stringers at the outer sides of the rails are attached the clips 7, which are securely fixed thereto by the rivets 5. These rivets also

serve to secure the stringers and cross-tie at the points where they intersect each other. At the inner sides of the rails are pivotally secured by said rivets movable clips 8, said clips consisting of rectangular plates pivoted at their centers and adapted to rotate thereon, so as to engage over the web of the rail and hold it in place within the depression in the stringer. The other ends of these clips are provided with perforations 9, registering with corresponding perforations 10 in the stringers, they being prevented from turning on their pivots by means of bolts 12 and nuts 13. When it is desired to remove a rail for any purpose, it can readily be accomplished by withdrawing the bolts 12 and turning back the clips 8. The meeting ends of the rails may be provided with any ordinary or suitable chairs, or they may be connected by a simple metallic strap and bolts.

The advantages of my invention will be apparent to those skilled in the art to which it pertains and need not be enumerated here.

As an additional means for securing the rails and to prevent them from creeping or slipping, I form apertures in the webs of the rails which register with corresponding apertures in the stringers. Bolts 14 are passed through these apertures, thus securely holding the rails in place. When this construction is employed, the clips may be dispensed with, if desired.

Having thus described my invention, what I claim is—

The combination, with the angular metallic cross-ties, of the metallic stringers having horizontal central depressions to receive the bases of the rails and depending sides, the interposed soft-metal washers, the fixed clips on the outer sides of the rails, the pivoted clips on the inner sides thereof secured in position by bolts passing therethrough and through the stringers, and the bolts passing through the rails and the stringers, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM HENRY POPE.

Witnesses:

GEO. E. WOLFF,
J. A. EDWARDS.