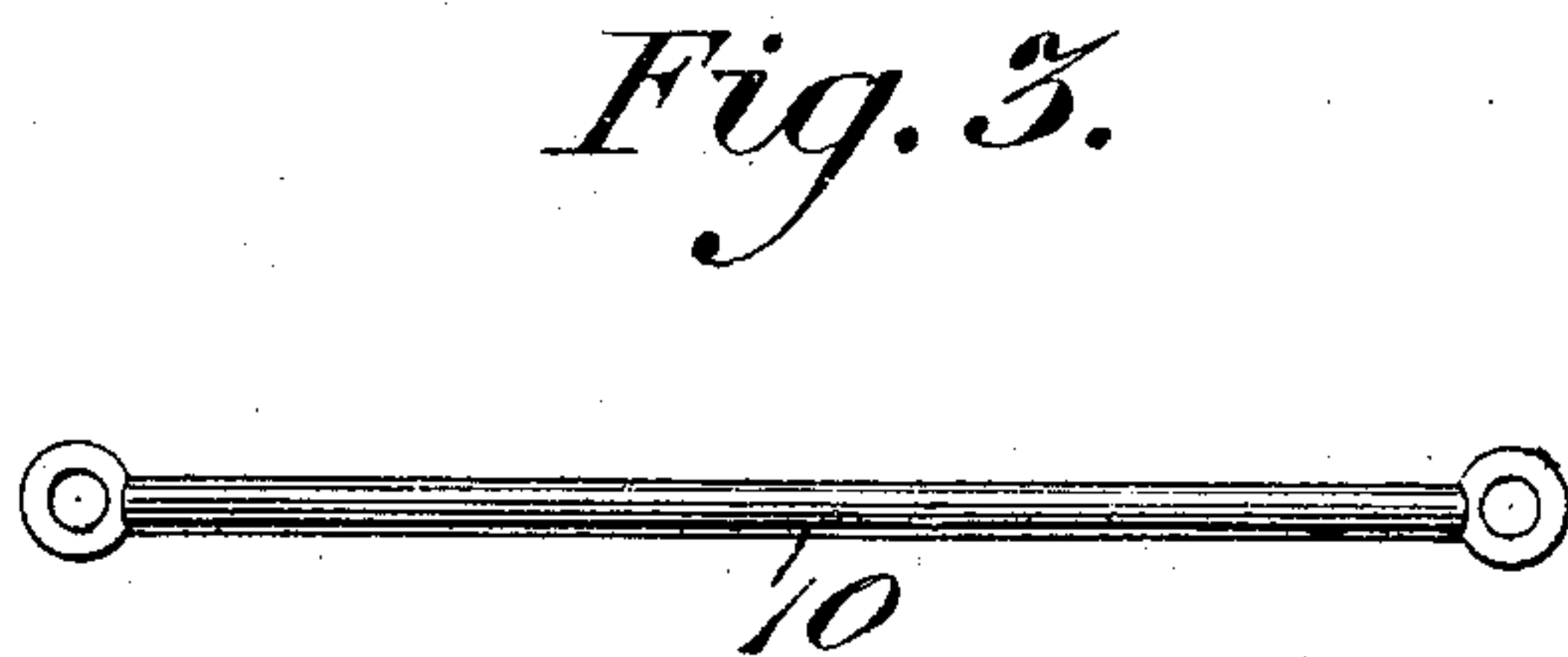
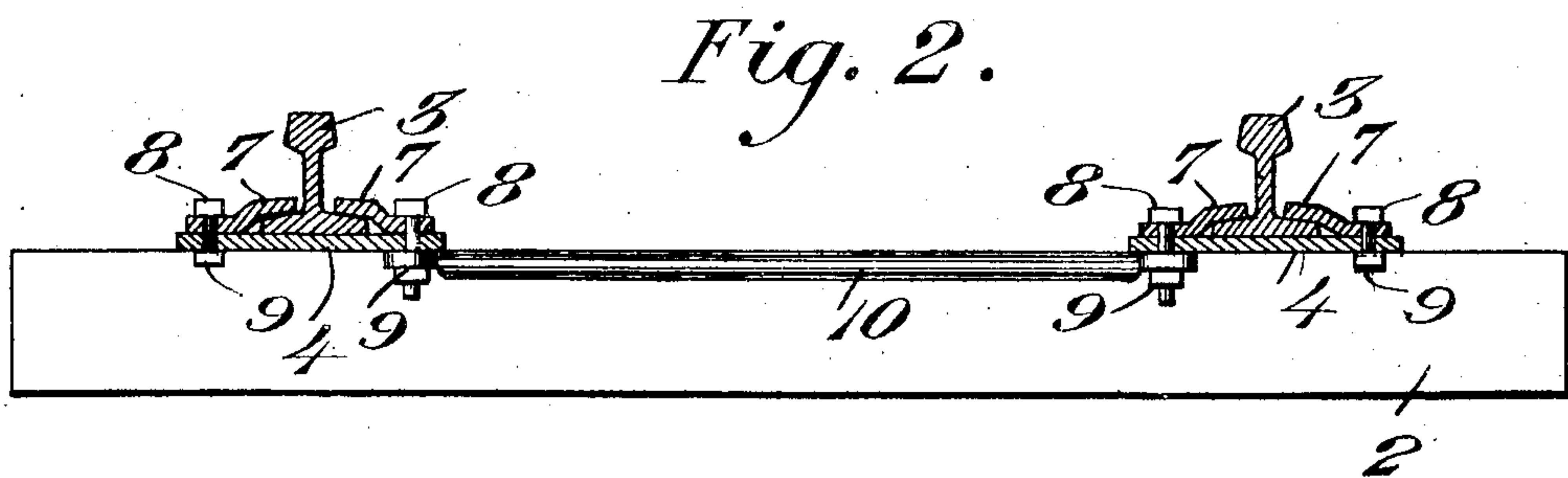
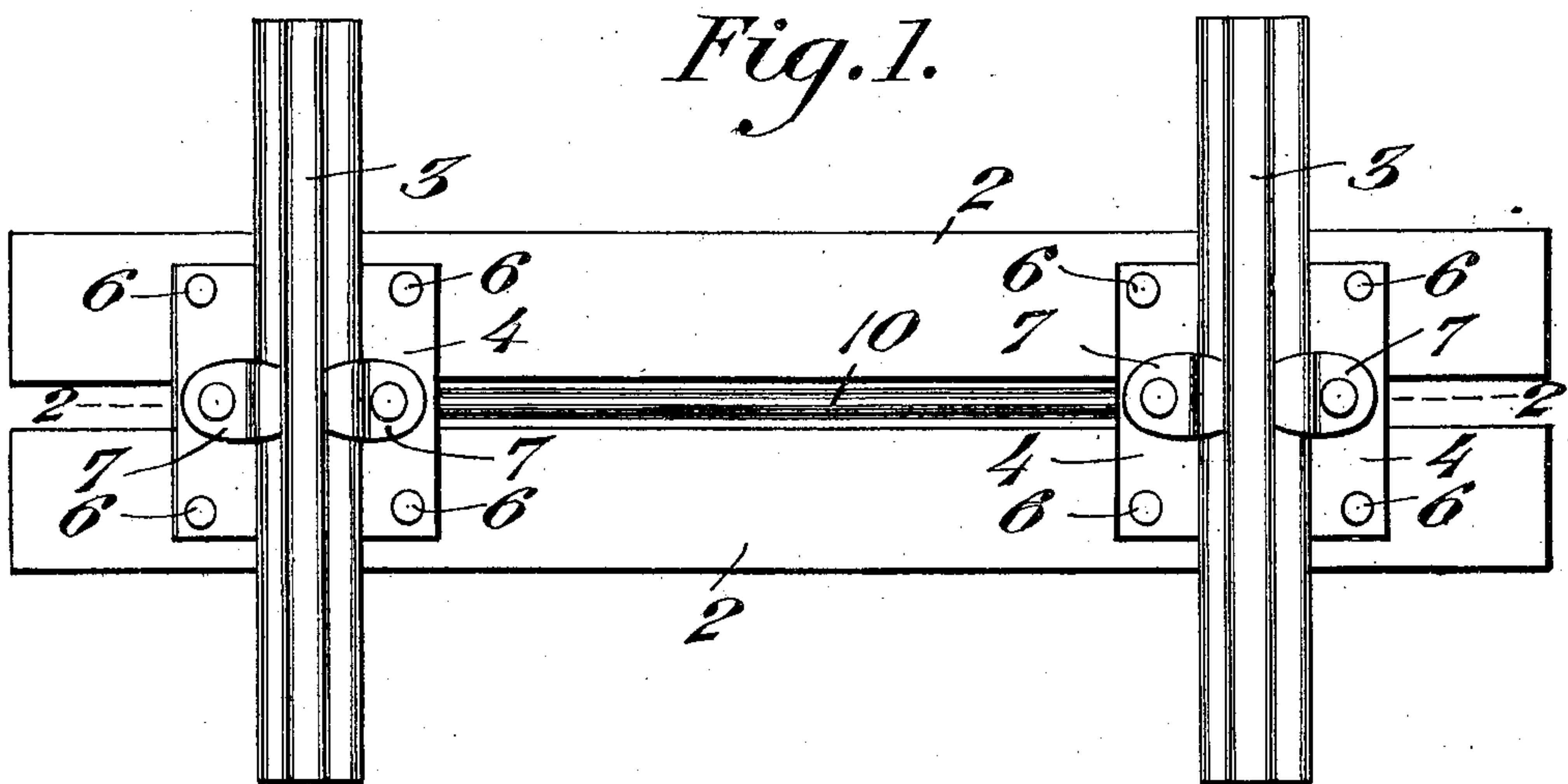


No. 861,086.

PATENTED JULY 23, 1907.

J. CARR.
RAILWAY TIE.
APPLICATION FILED FEB. 14, 1907.



Witnesses
Phil C. Barnes
John F. Byrnes

By

Inventor
Judson Carr.
Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

JUDSON CARR, OF LONGBEACH, CALIFORNIA.

RAILWAY-TIE.

No. 861,086.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed February 14, 1907. Serial No. 357,290.

To all whom it may concern:

Be it known that I, JUDSON CARR, a citizen of the United States, residing at Longbeach, in the county of Los Angeles and State of California, have invented
5 new and useful Improvements in Railway-Ties, of which the following is a specification.

My invention relates to railway ties, and its primary object is to produce tie plates which will provide broader bearing surfaces for the rails than are provided
10 by the usual ties.

A further object of the invention is to provide means adapted to prevent the separation of the rails.

With the above and other objects in view, the invention consists in the construction, combination and
15 arrangement of parts hereinafter fully described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a top plan view, illustrating the application of my improved tie plates. Fig. 2 is a section
20 taken on the line 2—2 of Fig. 1, and Fig. 3 is a detail plan view of the bearing which is adapted to prevent the separation of the rails.

Referring to the drawings by reference numerals, 2 designates ties and 3 rails of the usual construction.
25 My improved tie plates 4 are secured to the ties 2 beneath the rails 3, and are wider than the usual ties to provide comparatively broad bearing surfaces for the rails. The tie plates are arranged in alined pairs, each pair being supported by two ties relatively spaced
30 to permit the application of the means adapted to prevent the separation of the rails, and are secured in applied position by spikes 6 which pass through the plates and engage the ties. The rails are secured to

the tie plates by hook plates 7, which are held in applied position by bolts 8 and nuts 9 passing there- 35 through and through the tie plates. The hook plates 7 are arranged on opposite sides of the rails to overhang and engage the flanges thereof. In order to prevent the rails from separating, the tie plates are connected by a rod 10, which is secured to the under side 40 of the plates by the bolts and nuts that secure the inner hook plates 7 in position, and which is positioned between the ties.

From the foregoing description taken in connection with the accompanying drawings, the construction 45 and mode of operation of the invention should be understood without an extended description.

Changes in the form, proportions and minor details of construction may be made within the scope of the claims without departing from the spirit or sacrificing 50 any of the advantages of the invention.

Having fully described and illustrated my invention, what I claim is:

The combination with two relatively spaced ties, of flat tie plates secured to the ties, said tie plates preventing 55 the ties from relative movement and providing comparatively broad bearing surfaces for rails, hook plates, bolts adapted to secure the hook plates to the tie plates, and a rod adapted to connect the tie plates, said rod being located between the ties and secured to each of the tie 60 plates by one of the bolts adapted to secure the hook plates in applied position.

In testimony whereof, I affix my signature in presence of two witnesses.

JUDSON CARR.

Witnesses:

L. V. STEWART,
G. M. FOOTE.