

Patented Sept. 22, 1908.

899,230.

FIG. I.

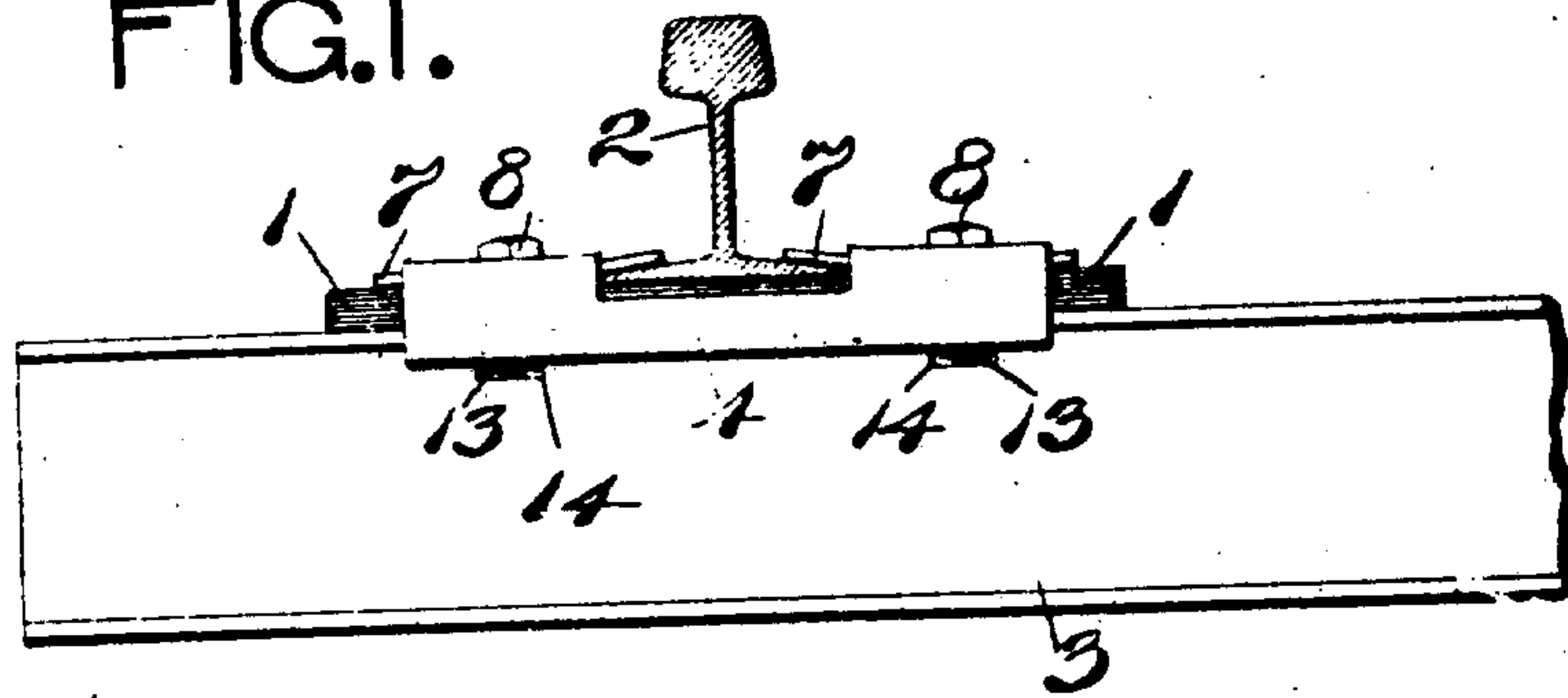


FIG. II.

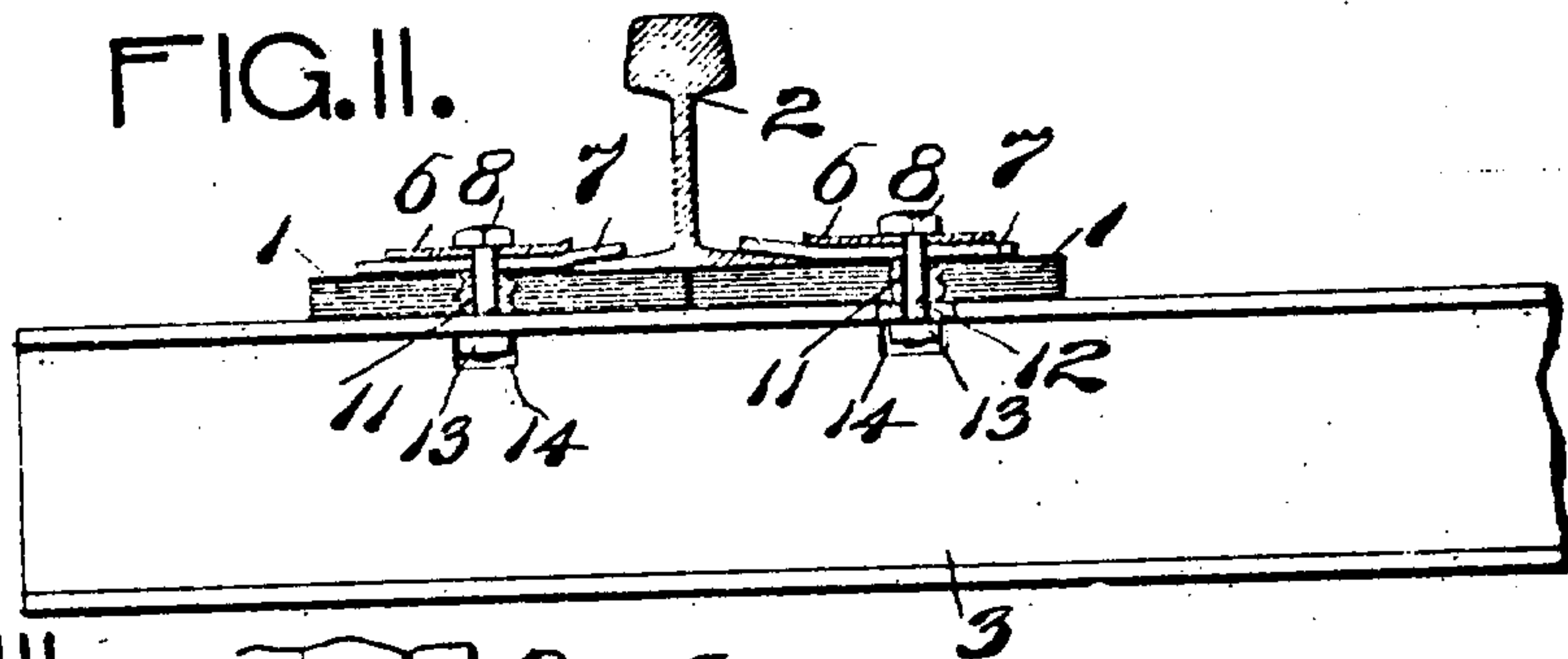


FIG. III.

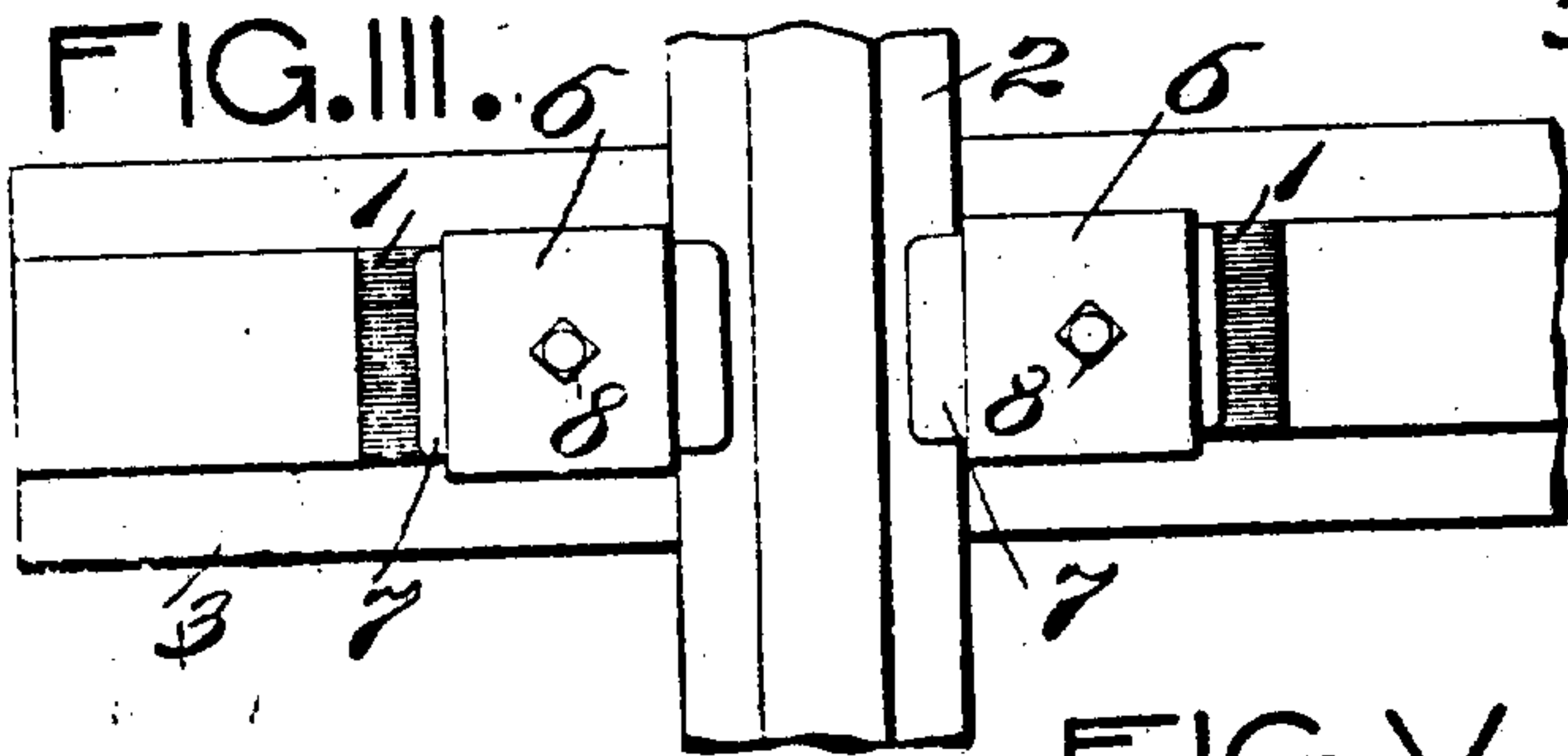


FIG. IV.

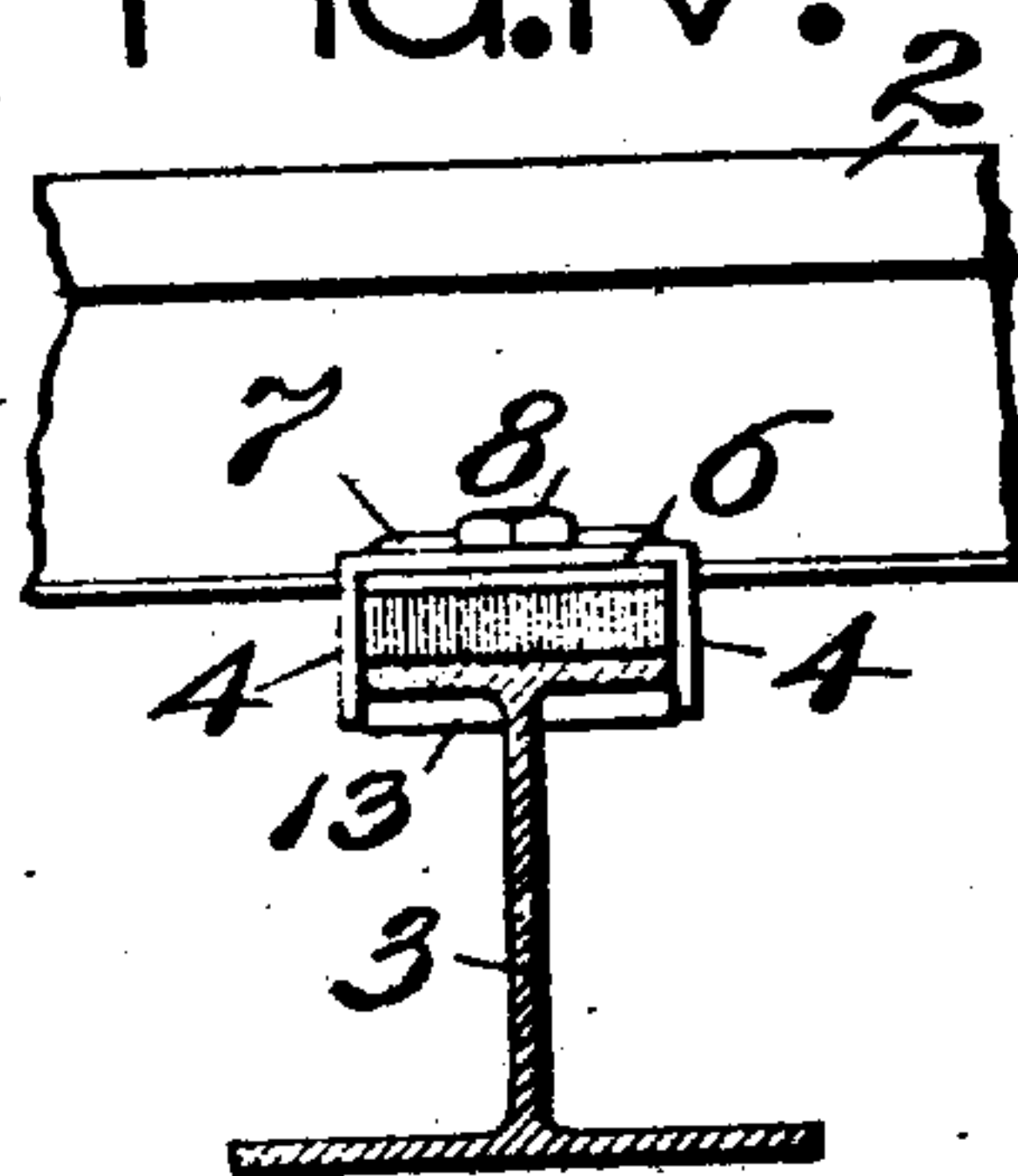


FIG. VI.

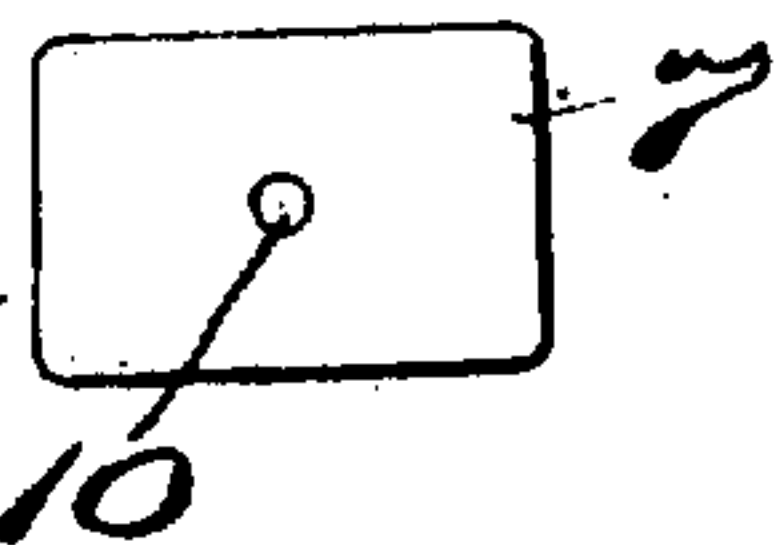
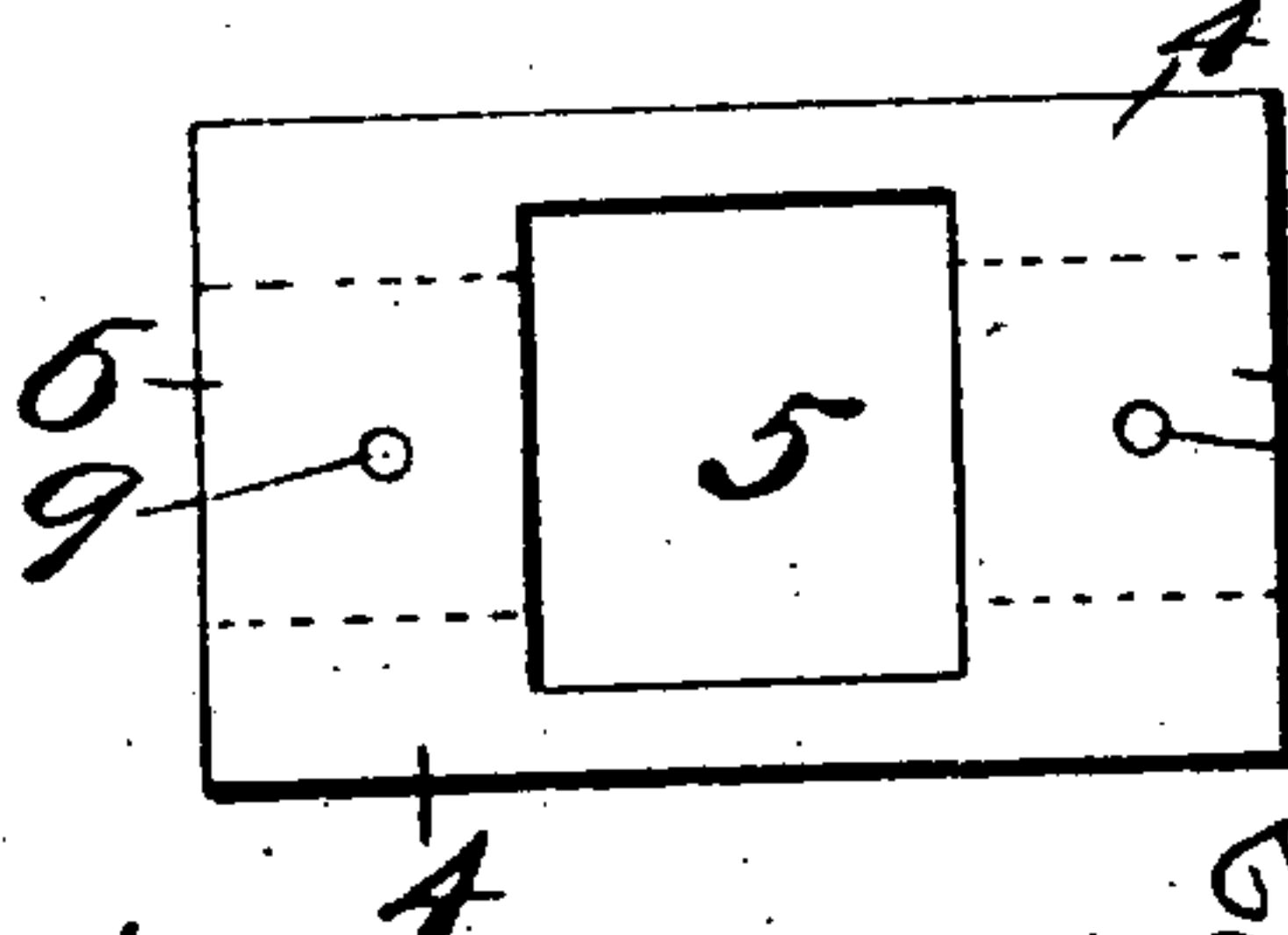


FIG. V.



Witnesses

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By

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UNITED STATES PATENT OFFICE.

HENRY K. MYERS, OF SWISSVALE, PENNSYLVANIA.

RAIL-FASTENING.

No. 899,230.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed May 2, 1906. Serial No. 459,456.

To all whom it may concern:

Be it known that I, HENRY K. MYERS, citizen of the United States, residing at Swissvale, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Fastenings, of which the following is a specification.

My invention relates to new and useful improvements in rail-fastenings, said fastenings being more particularly applicable for service in connection with metal ties.

In practice it has been found heretofore, where clips and the like are employed as fastenings, to be almost impossible to keep such means perfectly tight and in operative position at all times, due to the vibration of the track, with the result that the rails become insecure permitting the track to spread and the object of my invention is to provide fastening means obviating such difficulties.

In the accompanying drawings I have illustrated my invention in various ways, in which

Figure I, is an end elevation of a rail and attending tie having my improved fastening means in connection therewith. Fig. II, is a similar view partly in section. Fig. III, is a plan view thereof. Fig. IV, is a side view of the rail and attending parts. Fig. V, is a plan view of the blank from which the saddle-plate is formed, and Fig. VI, is a plan of one of the rail securing clips, similar detail parts of the structure disclosed in said views being designated by like numerals.

My invention consists of a member 1, formed of wood or other suitable material interposed between the rail 2 and tie 3 so as to destroy the effect of vibration as much as possible and form a cushion for the rail, said member being divided into two parts the meeting ends being directly beneath the center of the rail. Engaging over the said cushion and tie top, is a saddle-plate having parallel depending flanges 4 at its sides which extend down over the edges thereof, which plate has its central portion removed so as to form an opening 5 of a width corresponding to that of the rail base and extends a short distance below the same at and within its flanged sides.

Arranged between the saddle portions 6 of the plate and member 1, are the clips 7, which clips project from beneath the saddle over upon the upper inclined surface portions of the rail base, the whole being securely fastened to the tie by means of bolts 8 passing

down through openings 9 and 10 in the saddle and clips and openings 11 and 12 in the cushion and tie top, said bolts having transversely disposed elongated nuts 13 within the openings 14 in the web of the tie.

It will be observed that the bolt openings in the opposite sides of the saddle and in the clips, differ in distance from the center thereof to the center of the rail, the object thereof being that when the side of the rail becomes worn that the said rail, and attending connections, may be reversed to compensate for such wear, or for a change in the gauge of the track. Again, the cushion being in two parts permits their ready removal and reversing, end for end, when worn down by the rail.

In addition to the above advantages it will be noted that the saddle being firmly secured to the tie, and the rail engaging between the transverse portions thereof, that any tendency for the rails to spread will be prevented. Furthermore, the clips being embraced by the saddle and held by the bolts any tendency for the said clips to swerve from their fixed position will be impossible, even were the bolts to become loosened.

In forming the saddle plate from the blank, if proper proportions are observed, the clips may be formed from the material removed from the center thereof, thus economizing in material.

In some instances it may be preferable to dispense with the cushion between the rail and tie and substitute a thin sheet of insulation or other material, or the saddle and clips may be used without any material whatever beneath the rail and saddle.

The nuts 13, being of such length as to extend across to and within the flanged portion of the saddle effectually prevents displacement of the same should necessity require the removal of the bolts, as well as prevent their turning and consequent loosening of the bolts through vibration, etc.

It will be further apparent that various modifications may be made in the detail parts and arrangement without departing from the spirit of my invention.

Having thus fully shown and described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The combination with a tie and rail, of a saddle-plate engaging over the tie at each side of the rail and having depending side flanges extending beneath the rail and over-

lapping the tie, clips interposed between said saddle and tie and extending therefrom out upon each side of the rail base, and means to secure said saddle and clips to the tie.

2. The combination with a tie and rail, of a cushion on said tie beneath the rail base, a saddle-plate engaging over said cushion at each side of the rail and having depending side flanges extending beneath the rail and overlapping the tie, clips interposed between said cushion and saddle and extending therefrom out upon each side of the rail base, and means to secure said saddle, clips and cushion to the tie.

3. The combination with a tie and rail, of a saddle plate engaging over the tie at each side of the rail and having depending side flanges extending beneath the rail and overlapping the tie, clips interposed between said saddle and tie and extending therefrom out upon each side of the rail base, and bolts passing down through said saddle and clips securing the same to the tie.

4. The combination with a tie and rail, of a cushion on said tie beneath the rail base, a saddle-plate engaging over said cushion at each side of the rail and having depending side flanges extending beneath the rail and overlapping the tie, clips interposed between said cushion and saddle and extending therefrom out upon each side of the rail base, and

bolts passing down through said saddle, clips and cushion securing the same to the tie.

5. The combination with a tie and rail, of a cushion on said tie beneath the rail base, a saddle-plate engaging over said cushion at each side of the rail and having depending side flanges, clips interposed between said cushion and saddle and extending therefrom out upon each side of the rail base, and bolts passing down through said saddle, clips and cushion securing the same to the tie, said cushion being formed in two parts the abutting ends meeting beneath the rail.

6. The combination with a tie and rail, of a cushion on said tie beneath the rail base, a saddle-plate engaging over said cushion at each side of the rail and having depending side flanges, clips interposed between said cushion and saddle and extending therefrom out upon each side of the rail base, and means to secure said saddle, clips and cushion rigidly to the tie, said cushion being formed in two parts the abutting ends meeting beneath the rail.

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

HENRY K. MYERS.

Witnesses:

D. B. OAKS,
R. S. HARRISON.