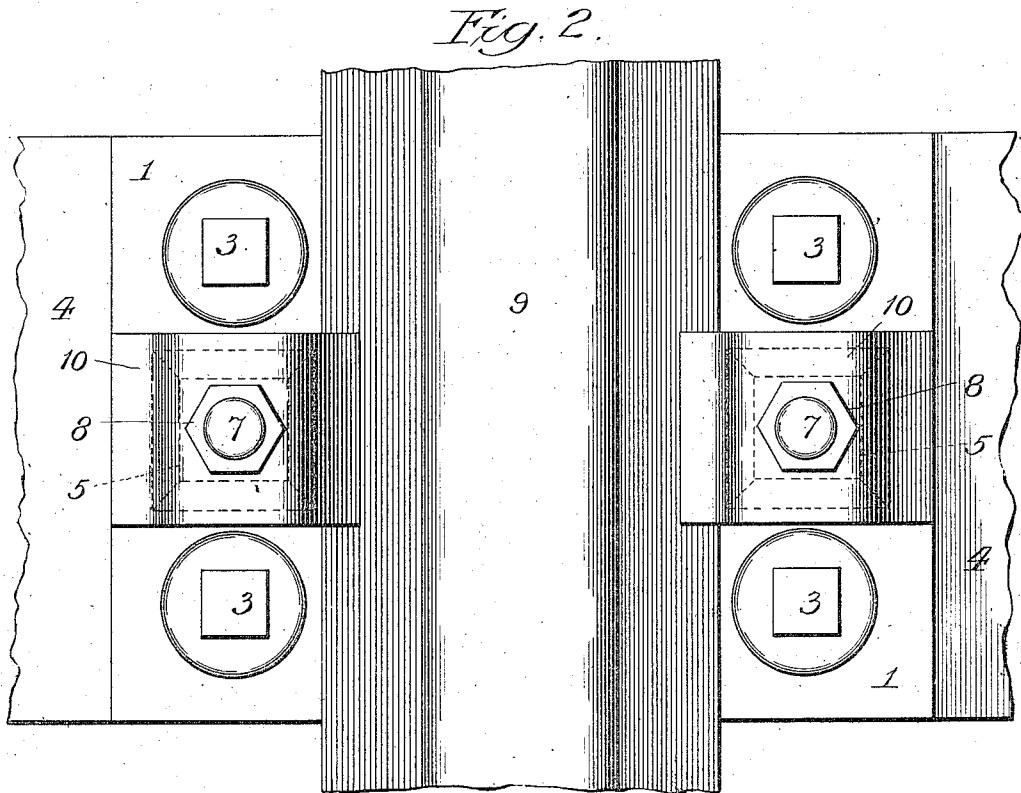
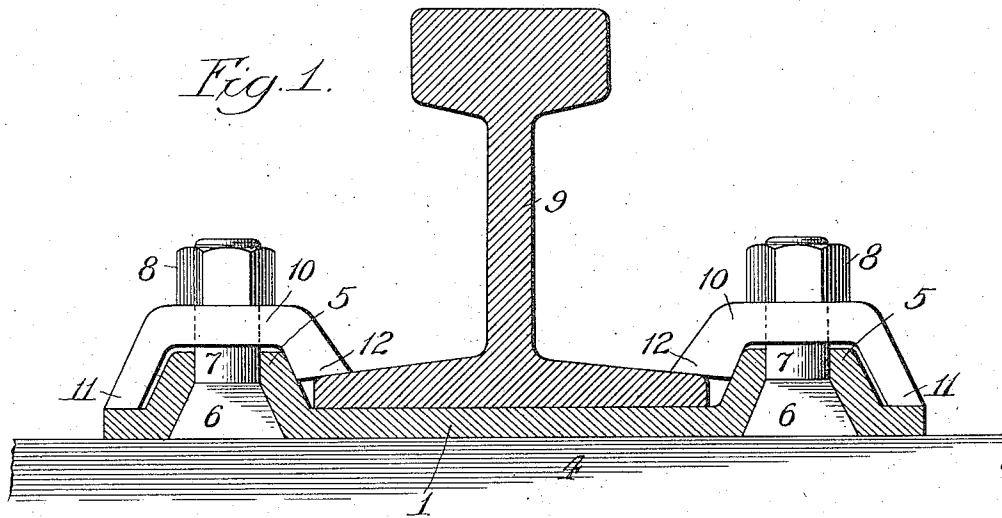


J. W. KENDRICK.  
TIE PLATE.  
APPLICATION FILED MAY 2, 1910.

1,013,179.

Patented Jan. 2, 1912.

2 SHEETS—SHEET 1.



Witnesses:

John Enders  
Henry A. Parks

Inventor:

John W. Kendrick,  
by Sheridan, Wilkinson, Scott, & Richmond  
Attys.

J. W. KENDRICK.  
TIE PLATE.  
APPLICATION FILED MAY 2, 1910.

1,013,179.

Patented Jan. 2, 1912.

2 SHEETS—SHEET 2.

Fig. 3.

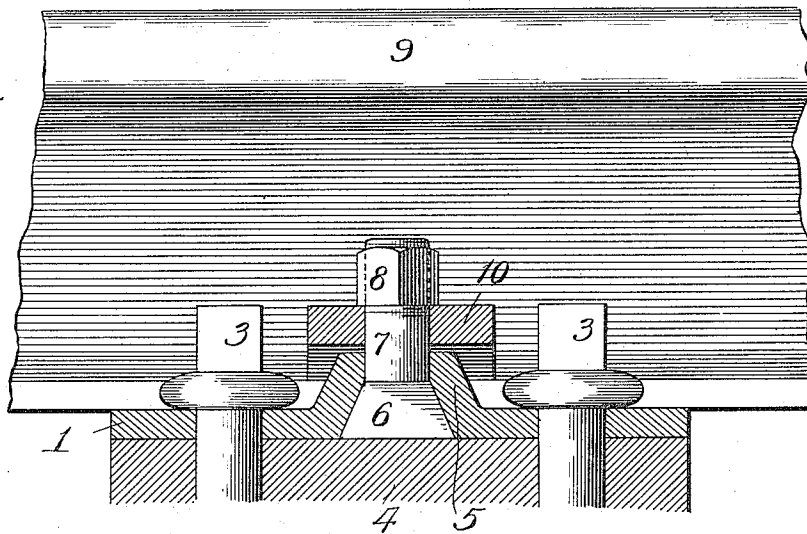


Fig. 4.

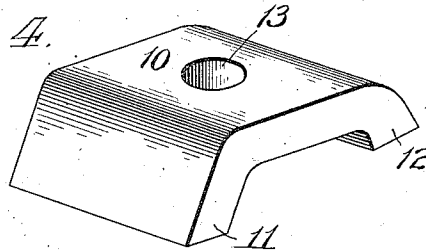
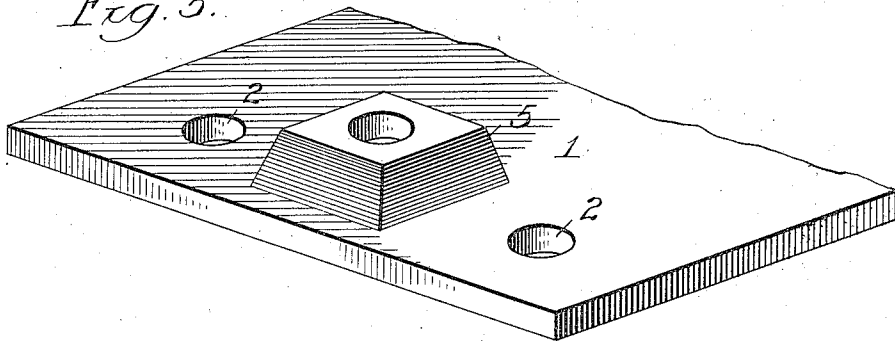


Fig. 5.



Witnesses:

John Enders  
Henry A. Parks

Inventor:

John W. Kendrick,  
by Sheridan, Wilkinson, Scott & Richmond,  
Attys.

# UNITED STATES PATENT OFFICE.

JOHN W. KENDRICK, OF CHICAGO, ILLINOIS.

## TIE-PLATE.

1,013,179.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Application filed May 2, 1910. Serial No. 558,815.

*To all whom it may concern:*

Be it known that I, JOHN W. KENDRICK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Tie-Plates, of which the following is a specification.

The object of my invention is to provide means for fastening railway track rails to the ties in such a manner that the larger part of the work may be performed in the preparation of the ties and before the ties are shipped to the location where the track is to be laid.

In the preliminary preparation of the ties according to my invention, the parts attached to the ties are adjusted to the gage of the track, thus further decreasing the work to be performed at the place where the track is laid.

Other and further objects of my invention will appear from the following description and claims, taken in connection with the accompanying drawings, in which—

Figure 1 is a cross sectional view, showing a rail secured in position by my improved device. Fig. 2 is a plan view of the structure shown in Fig. 1. Fig. 3 is a side elevation of a rail, tie, tie plate and fastening device, the tie, tie plate and fastening device being in section. Fig. 4 is a perspective view of a clip used in fastening the rail in position. Fig. 5 is a fragmentary perspective view of one end of the tie plate.

The tie plate 1 is provided with spike holes 2 to receive the spikes 3,—preferably screw spikes—whereby the tie plate is held in position upon the tie 4. Adjacent its ends the material forming the tie plate 1 is deflected upwardly, forming bosses 5. These bosses take a pyramidal form preferably. In the present instance they are shown as square in horizontal section and tapered upwardly. It is obvious, however, that they may take any non-circular form, in order to prevent rotation of the bolts cooperating therewith. The interior of the boss forms a seat for the pyramidal head 6 of the bolt 7, and insures the bolt against turning when the nut 8 is rotated thereon.

In assembling the device so far as described, a tie plate 1 is spiked at each end of a tie 4, the tie plate being adjusted to such position that when rails 9 are placed upon them, as shown in Fig. 1, the track

will have the correct gage. The bosses 5 at opposite ends of each tie plate are separated a distance equal to the width of the base of the rail 9. It will be understood that prior to placing the tie plates 1 upon the ties, the bolts 6 are inserted in position in their bosses. After the tie plates are spiked to the ties, the bolts 6 form a part of the assembled structure.

The parts may be prepared and assembled as above described prior to their shipment to the place of track laying, provided such prior preparation of the ties is advantageous.

The rails are secured to the tie plates by means of clips 10. One of these clips is shown in perspective in Fig. 4, and the relation of the clips to the other parts of the structure is illustrated in the other views. The clips are provided with downwardly deflected ends 11 and 12, whereby when the parts are assembled, the lower surface of the central upper part of the clip is spaced from the upper surface of the boss 5. Each of the clips 10 is provided with a bolt hole 13. After the track rail 9 is laid in position upon the tie plate 1, the clip 10 is placed in the position shown in Figs. 1, 2 and 3 with its aperture 13 passing over the bolt 7. Thereupon, the nut 8 is screwed down upon the top of the clip 10. The fact that the central part of the clip 10 is spaced from the upper end of the boss 5 insures a firm contact between the ends 11 and 12 of the clip and the tie plate and rail base, respectively.

While the foregoing description of my invention is based upon one specific form, it will be apparent that the invention may be embodied in other specific mechanisms, without departing from the principle thereof.

I claim:

1. In a device of the class described, a tie plate, means for securing said tie plate to a tie, a boss extending upwardly from the base of said tie plate at each end thereof, each of said bosses being spaced inwardly from the end of said tie plate and having a bolt hole in its upper wall, the interiors of said bosses being non-circular in form, and bolts passing through the apertures in said bosses, said bolts having non-circular heads engaging non-circular interiors of said bosses.

2. In a device of the class described, a tie plate, means for securing said tie plate to a

tie, and an upwardly extending pyramidal boss spaced inwardly from the end of said tie plate, the upper wall of said boss being provided with a bolt hole, the bolt having  
5 a pyramidal head, said bolt passing through said aperture and having its head seated inside of said boss.

3. An article of manufacture comprising a tie, tie plates secured thereto, each of said  
10 tie plates having two upwardly extending bosses, the bosses upon each tie plate being spaced apart to receive the base of a rail between them, and bolts secured to and extending upwardly from each of said bosses.

15 4. An article of manufacture comprising a tie, tie plates secured to the ends thereof, perforated bosses struck up in said tie plates,

and threaded bolts having their heads within said bosses and extending upwardly therefrom through the perforations therein. 20

5. In a device of the class described, a tie plate, a perforated boss struck up therein, a bolt having its head within the boss and projecting up through the perforation, and a member overlying the boss and resting  
25 upon the rail base at one side and upon the tie plate at the other side.

In testimony whereof, I have subscribed my name.

JOHN W. KENDRICK.

Witnesses:

HENRY A. PARKS,  
EDYTHE M. ANDERSON.