

W. D. WILLIAMS.
RAIL TIE.
APPLICATION FILED SEPT. 3, 1909.

960,130.

Patented May 31, 1910.

Fig. 1.

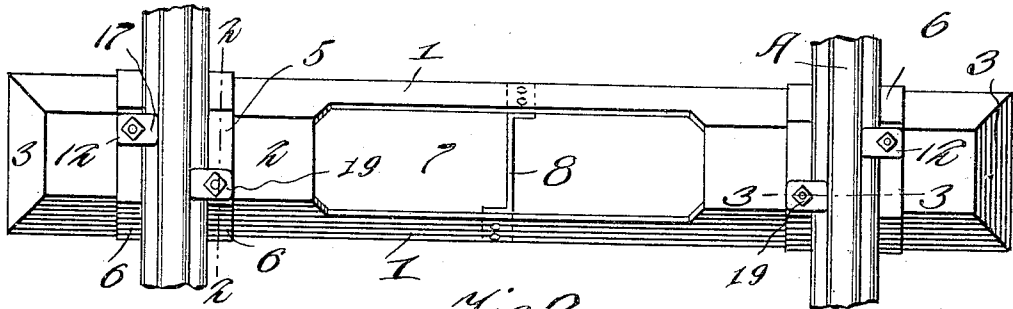


Fig. 2.

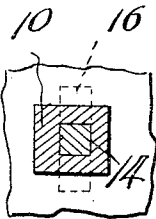
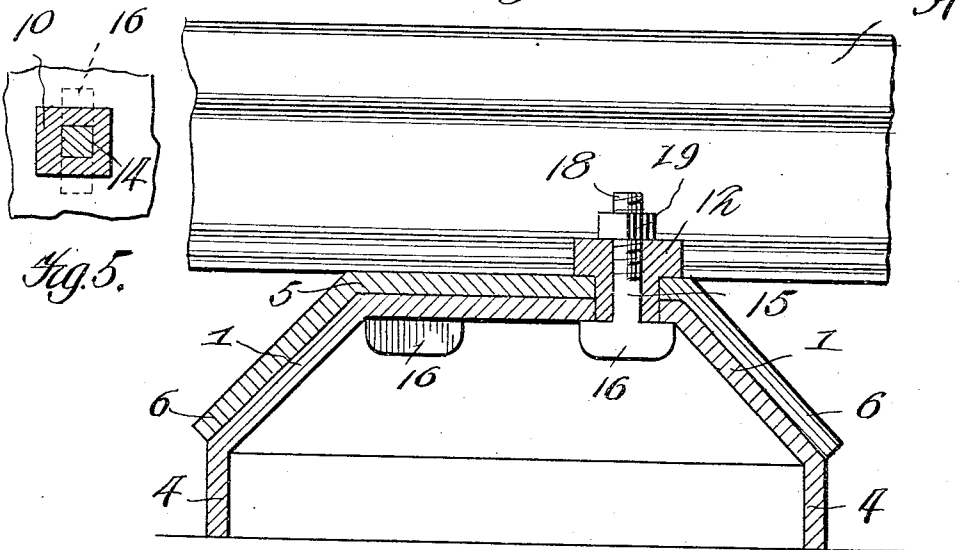
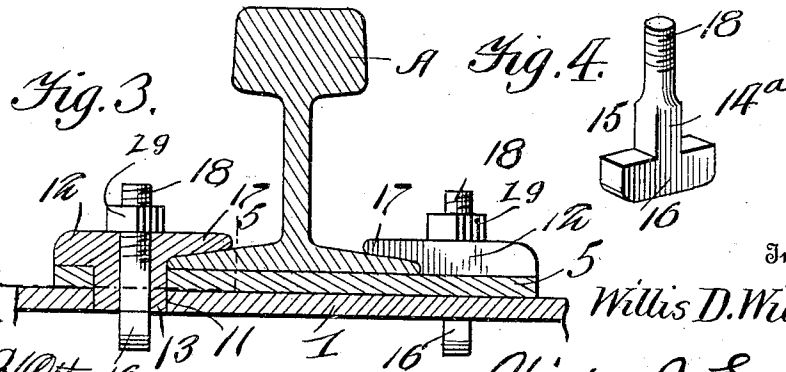


Fig. 5.



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RAIL-TIE.

960,130.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIS D. WILLIAMS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Rail-Ties, of which the following is a specification.

This invention relates to rail ties and more particularly to those constructed from metal, and has for an object to provide a tie of this character which is extremely simple, composed of but few operative parts and which is provided with a novel form of rail clamp.

Other objects and advantages will be apparent as the nature of the invention is better set forth, and it will be understood that changes within the scope of the claim may be resorted to without departing from the spirit of the invention.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a top plan view of the tie. Fig. 2 is a detail section taken on the line 2—2 of Fig. 1. Fig. 3 is a detail section taken on the line 3—3 of Fig. 1. Fig. 4 is a detail perspective view of one of the retaining bolts. Fig. 5 is a detail section taken on the line 5—5 of Fig. 3.

Referring now more particularly to the drawing, there is shown a rail tie comprising a metal body which is provided with downwardly inclined side portions 1, a connecting top portion 2, downwardly inclined end portions 3 and flanges 4 which depend from the sides and ends of the tie, as clearly illustrated in Fig. 2. The tie is provided adjacent to each end with a strap member or plate 5 which is formed with downwardly inclined side portions 6 adapted to be secured to the sides of the tie in any suitable well known manner. The top portion 2 of the tie is provided with a slot 7 which is so positioned with respect to the ends of the tie that access can be conveniently gained beneath the top of the tie for the purpose to be hereinafter described. The sides 1 of the tie are connected to each other by a brace member 8 which forms a durable construction and will effectively prevent collapse of the walls of the tie as will be appreciated. The strap members or plates 5 are provided with squared slots 10 which extend vertically and register with correspondingly formed slots 11 in the top 2. The plates or

straps 5 greatly reinforce the end portions of the tie and are adapted to support the rails A. The rails when in their operative positions have their base flanges disposed between the pairs of slots 10 formed in each strap or plate 5.

After the rails have been positioned upon the straps above described they are clamped by means of members 12 which are provided with depending rectangular lugs 13 disposed in the slots 10 and 11. The members 12 are formed with squared passages 14 to receive correspondingly formed portions 14^a of retaining bolts 15. At the lower ends the retaining bolts are provided with key heads 16 which are adapted to lie transversely of the tie and to be frictionally engaged with the top wall upon the underside of the same. The upper threaded extremities 18 of the bolts extend beyond the upper faces of the members 12 to receive clamping nuts 19 which are adapted to be engaged frictionally with the members 12 so as to hold them in their operative positions. The clamping bolts are further employed for the purpose of effectively holding the lugs 13 correctly positioned in the slots 10 and 11. The members 12 are provided with lips 17 adapted for overlapping engagement with the base flanges of the rails A. By providing the slot 7 in the top of the tie access may be gained to the underside thereof when it is desired to correctly position the heads 16 of the retaining bolts.

I claim:—

A tie comprising a metal body having spaced squared slots adjacent to its ends, rail-engaging members, lugs upon the said members adapted to be engaged in the slots, said members having squared passages formed therein, retaining bolts having squared portions engaged in the passages formed in the rail-engaging members, clamping nuts carried by the bolts and adapted for frictional engagement with the lower extremities of the bolts adapted for frictional engagement with the top wall of the tie.

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

WILLIS D. WILLIAMS.

Witnesses:

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