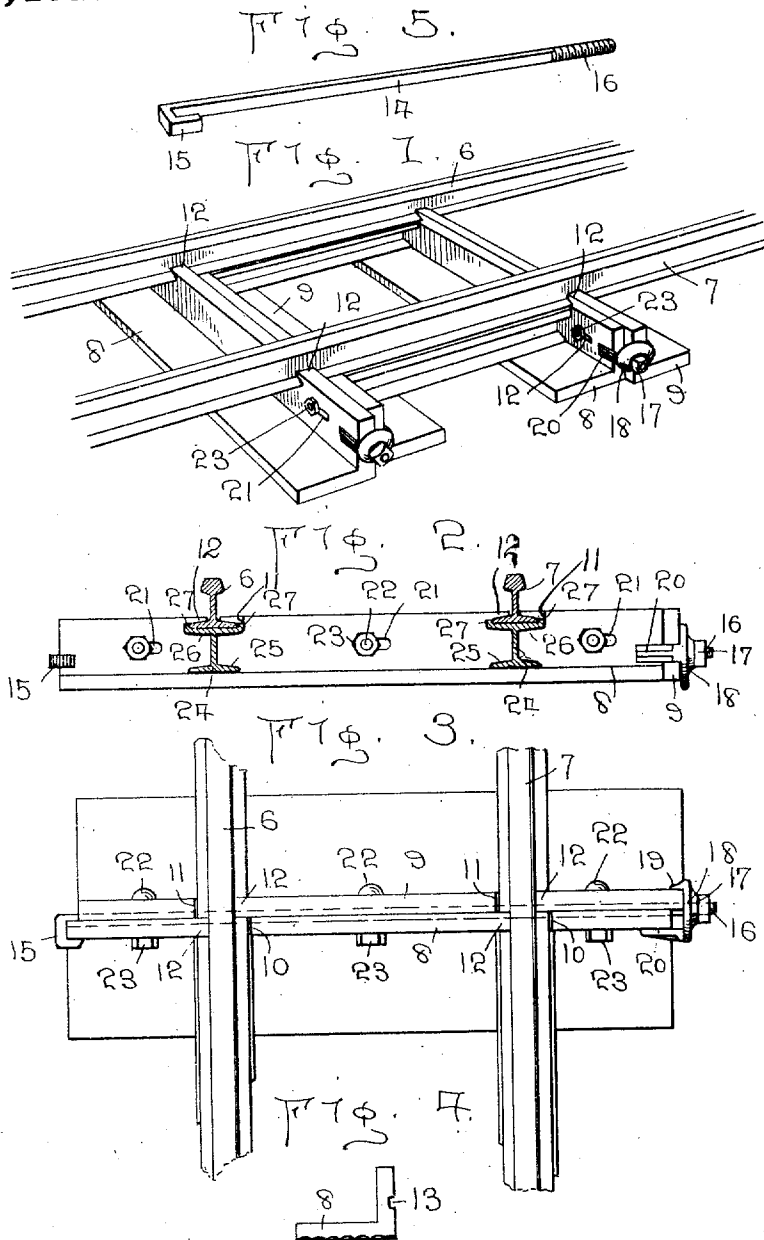


J. H. AKIN.
METALLIC RAILWAY TIE.
APPLICATION FILED SEPT. 1, 1911.

1,018,401.

Patented Feb. 27, 1912



WITNESSES:

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JOHN H. AKIN, OF SUMNER, MISSOURI.

METALLIC RAILWAY-TIE.

1,018,401.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN H. AKIN, a citizen of the United States, residing at Sumner, in the county of Chariton and State of Missouri, have invented certain new and useful Improvements in Metallic Railway-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to novel and useful improvements in metallic railway ties and has for its principal object to provide a tie which is very simple in construction and effective in use.

Another object of the invention is to provide a tie which is made in two sections, said sections being securely held in engagement with each other and which are prevented from any movement relative to each other.

A still further object of the invention is to provide a tie which is composed of angular sections having their vertical sides abutting, and having a locking bar passed longitudinally through the vertical sections and provided on one end with a novel form of clamp nut that is adapted to engage said vertical sides.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are susceptible to changes in detail and structural arrangement one preferred and practical embodiment being shown in the accompanying drawings, wherein:—

Figure 1 is a perspective view showing a pair of the improved ties in use. Fig. 2 is a transverse sectional view taken between the two ties. Fig. 3 is a top plan view thereof. Fig. 4 is an end view of one of the angular sections of a tie, and, Fig. 5 is a perspective view of the locking bar used in connection with the invention.

Referring to the accompanying drawings by numerals 6 and 7 indicate the usual form of railway tracks.

It will be seen that the improved tie comprises two sections 8 and 9, each of said sections being formed of angle iron and when put in place has one portion thereof in a horizontal position and the other portion in a vertical position so that the two vertical portions will abut against each other. Each of the vertical portions of the

sections 8 and 9 is provided with a pair of notches 10 and 11 respectively, which are located at a distance from the ends of the tie to receive the rails 6 and 7. Each notch is provided with an overhanging lip 12 which is adapted to engage the base of the rail and which has its lower face tapered to fit the contour of said base. The notches 10 and 11 are arranged in staggered relation in order that when the rails are placed in position the overhanging lips 12 of one section of the tie will engage the side of the rail opposite to the one engaged by the lips of the other section of the tie. When the sections are arranged in this manner one end of one section will extend slightly beyond the adjacent end of the other section and the opposite end of the last named section will extend beyond the adjacent end of the first named section.

Each vertical portion of the sections of the tie is provided upon its abutting surface with a longitudinally extending groove 13, said grooves being in direct alinement to form a channel through said tie. In order to securely retain the sections of the tie in the relation described a locking bar 14 is passed through the channel formed by the grooves 13. The locking bar 14 is provided upon one end with a hook 15 which is adapted to engage the end of the vertical portion of one section of the tie. The opposite end of the locking bar 14 is threaded as indicated at 16 and this end is adapted to extend beyond the opposite ends of the sections of the tie and is adapted to have threaded thereon a locking nut 17. Before placing the nut 17 upon the locking bar a washer 18 having an enlarged circular body portion is adapted to engage the locking bar. The washer 18 is provided with oppositely disposed laterally projecting ribs 19 and 20. The rib 19 is short and adapted to engage the end of the vertical portion of the section of the tie which extends beyond the other section of the tie, while the rib 20 is of greater length than the rib 19 and adapted to engage the vertical portion of the last mentioned section of the tie. When the washer 18 has been placed in position the nut 17 is threaded upon the locking bar 14 and it will be observed that said nut will cause the two sections of the tie to move in opposite directions relative to each other thereby securely clamping the rails within the notches 10 and 11.

In order to more securely lock the sections of the tie together and relieve the locking bars of any undue strain said sections are provided with a plurality of alined slots 21 through which pass the bolts 22, said bolts being secured in place by the nuts 23.

Between the ties and extending transversely thereof are the rail supporting chairs 24 which are provided with the base portions 25 and a top plate 26, said plate being provided at its opposite sides with the vertical flanges 27 which form a seat for the rails 6 and 7.

It will thus be seen from the foregoing description that the invention provides a tie which is extremely simple in construction and which also provides an effective means for retaining the rails in position upon said ties.

Having thus described the invention what is claimed is:

A railway tie comprising angular abutting sections, the end of one section extend-

ing beyond the adjacent end of the other section, the vertical portions of said sections being provided with alined longitudinally extending grooves, a locking bar in said grooves and extending beyond the ends of said sections, a washer on said bars, oppositely disposed laterally projecting ribs extending from said washer, one of said ribs being short and adapted to engage the vertical portion of the section of the tie that extends beyond the vertical portion of the other section of the tie, the other rib being longer and adapted to engage the vertical portion of the last mentioned section of the tie, and means for holding said washer in position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN H. AKIN.

Witnesses:

JOHN F. PAINTER,
L. SHARP.