

No. 825,876.

PATENTED JULY 10, 1906.

J. C. ZIMMERMAN, J. C. STOOPS & R. M. LANE.

RAILROAD TIE.

APPLICATION FILED SEPT. 19, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

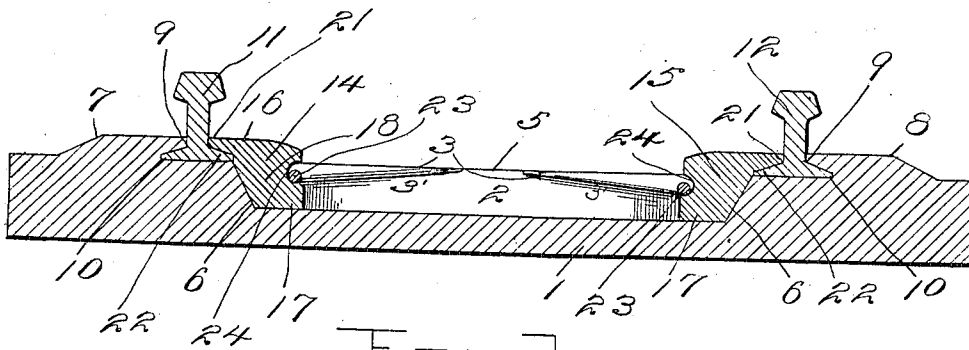
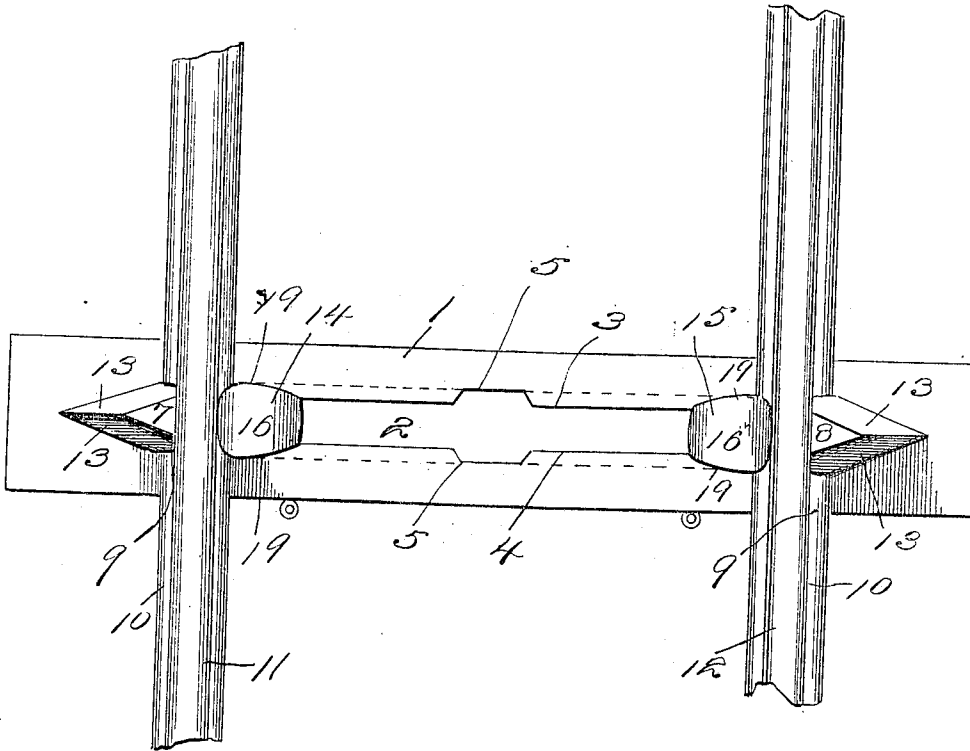


Fig. 2.

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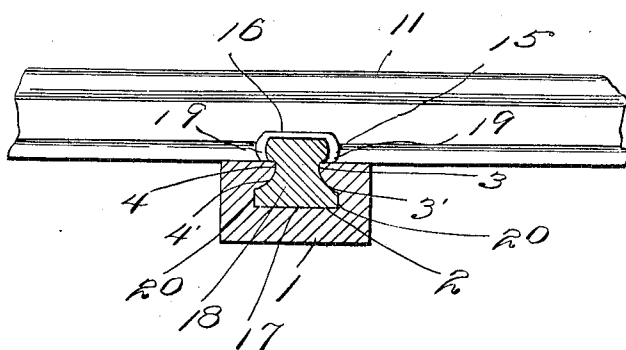
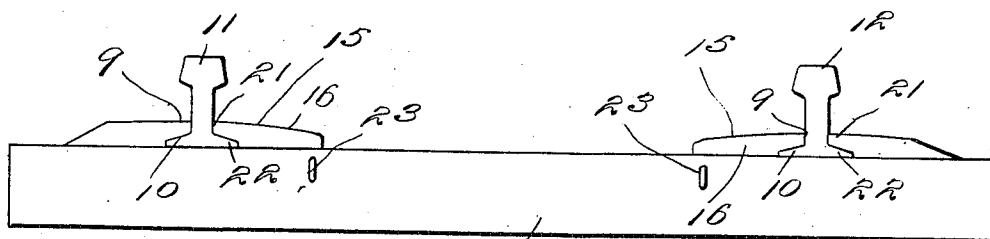
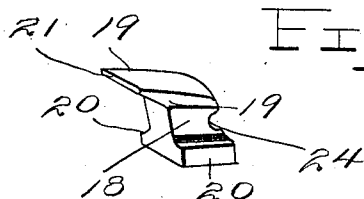


Fig. 5.



FI 9-4

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UNITED STATES PATENT OFFICE.

JOHN C. ZIMMERMAN, JOHN C. STOOPS, AND ROBERT M. LANE, OF
NEODESHA, KANSAS.

RAILROAD-TIE.

No. 825,876.

Specification of Letters Patent.

Patented July 10, 1906.

Application filed September 19, 1905. Serial No. 279,110.

To all whom it may concern:

Be it known that we, JOHN C. ZIMMERMAN, JOHN C. STOOPS, and ROBERT M. LANE, citizens of the United States, residing at Neodesha, in the county of Wilson, State of Kansas, have invented certain new and useful Improvements in Railroad-Ties; and we 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 railroad-ties.

One object of the invention is to provide an exceedingly simple, inexpensive, durable, and efficient tie for the support and securing of rails in alinement.

Another object resides in the provision of a tie embodying such characteristics that rails may be secured in alinement thereupon without the use of spikes.

In the drawings, Figure 1 is a top plan view illustrating a pair of rails mounted upon a tie. Fig. 2 is a longitudinal sectional view through the tie. Fig. 3 is a transverse sectional view. Fig. 4 is a side elevation of the tie with the rails thereon. Fig. 5 is a detail view of one of the clamping-blocks.

Referring now more particularly to the accompanying drawings, the reference character 1 indicates the tie, provided with an elongated recess formed longitudinally thereof, as indicated by the character 2. This recess has a pair of ledges 3 and 4 overhanging the recess at each end thereof, each ledge having its under face 3' and 4' beveled for a purpose presently explained. It will be observed that the pairs of ledges terminate short of each other by reason of the opening 5, formed midway of the ends of the recess, and that the ends 6 of the recess taper downwardly toward the bottom of the latter.

Formed integrally with the tie, at each end thereof and adjacent the ends of the aforesaid recess, are lugs 7 and 8, each having a beveled lip 9 for engagement over the outer flange 10 of each of the rails 11 and 12. It

will be observed that the said lugs are of triangular formation and that each has its side edges beveled, as indicated at 13.

Clamping-blocks 14 and 15 are constructed for sliding movement in the recess 2, and each consists of a head 16 and a foot 17, the head and foot being wider than the connecting web or leg portion 18, resulting in the head having flanges 19 upon opposite sides thereof for engagement with the upper faces of the corresponding pair of ledges of the recess 2 and permitting the foot of each block to present its sides 20 to the sides of the recess. It will be seen that the upper side portions of each foot are beveled according to the bevel of the under faces of the aforesaid ledges. Each foot is inserted through the aforesaid opening 5 and moved toward the corresponding end of the recess to present the lip 21 of each head 16 to the lower inner flange 22 of the corresponding rail, the said lip having its under face beveled in accordance with the usual inclination of the flange with which it engages. When the clamping-blocks have been moved to present the lips of their heads to the said flanges of the rails, we pass suitable keys 23 transversely through the tie and the recess for engagement in the groove 24 in the back of the respective clamping-blocks, thereby preventing the latter becoming accidentally disengaged from the same and also positively insuring the proper clamping action between the blocks and lugs to hold the rails in alinement upon the tie without employing the usual spikes.

What is claimed is—

A railroad-tie comprising a bar having a longitudinal recess in its upper face, the ends of said recess being downwardly convergent, said bar having rail-engaging lugs formed upon its upper surface adjacent to the ends of the recess and having a pair of spaced inwardly-extending ledges at each side of its recess, the spaces between the pairs of ledges being oppositely located, blocks slidably engaged in the recess and having beveled faces

resting against the convergent ends of the recess, said blocks having laterally-extending head and base portions projecting above and beneath the ledges respectively and having
5 lips arranged for coöperation with the lugs to receive and hold rails, said blocks having horizontal recesses in their rearward faces, and keys removably engaged in the bar transversely thereof, and lying in the horizontal
10 grooves of the blocks to hold the latter against movement in the recess, the base portions of

the blocks being of a size to pass between the ends of the ledges.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN C. ZIMMERMAN.
JOHN C. STOOPS.
ROBERT M. LANE.

Witnesses:

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