

1,041,498.

J. C. LOEWER.
RAILROAD TIE.
APPLICATION FILED FEB. 8, 1912.

Patented Oct. 15, 1912.

2 SHEETS-SHEET 1.

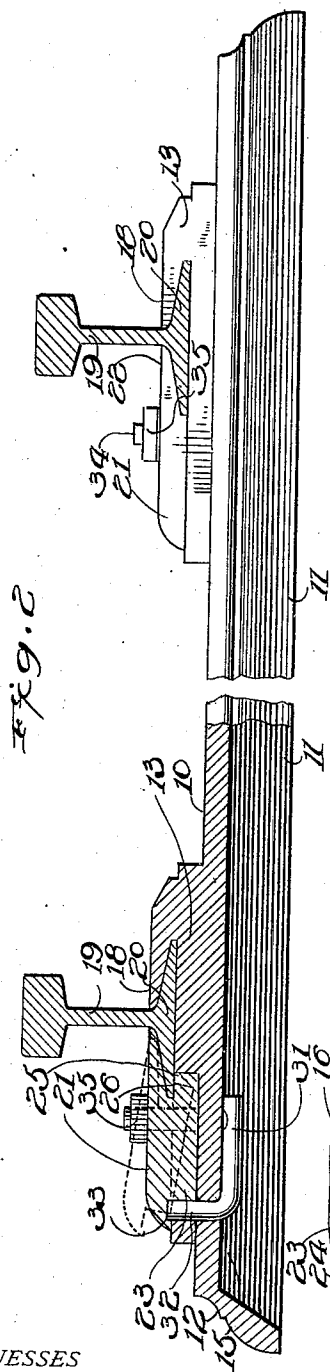


Fig. 2

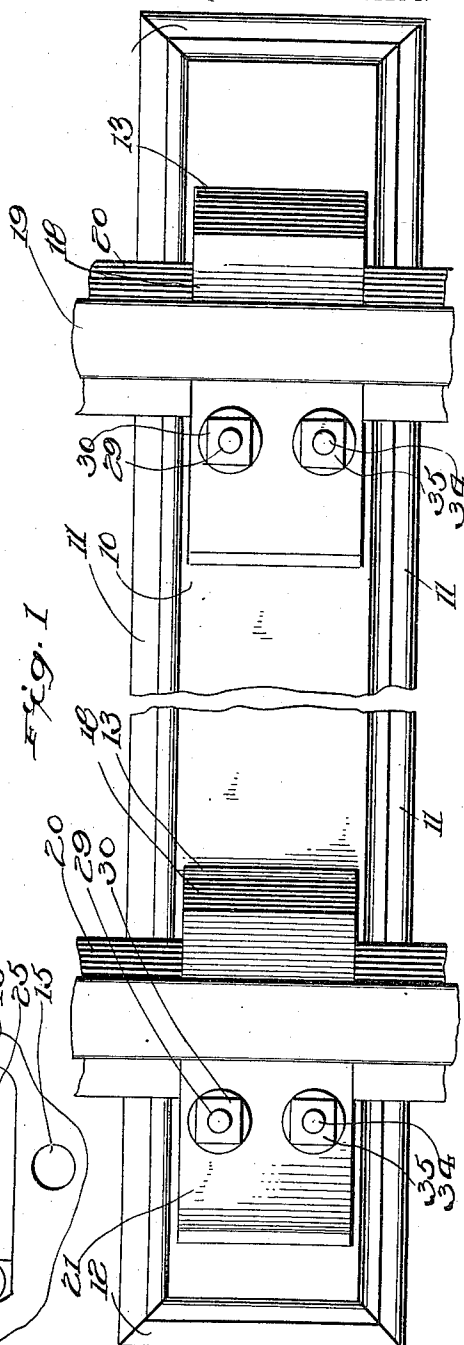
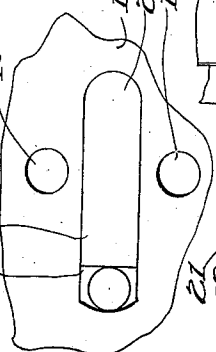


Fig. 1

Fig. 3



WITNESSES

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WITNESSES

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JOHN C. LOEWER, OF WORDEN, ILLINOIS, ASSIGNOR OF ONE-HALF TO FRANK BROWALSKI, OF WORDEN, ILLINOIS.

RAILROAD-TIE.

1,041,498.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN C. LOEWER, a citizen of the United States, residing at Worden, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to railroad ties and the principal object of the same is to provide the tie with an improved type of attaching bolt for securing the rail chair to the tie.

This invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a top plan view of the tie. Fig. 2 is a view of the tie partially in longitudinal section and partially in side elevation. Fig. 3 is a bottom plan view of the tie. Fig. 4 is a transverse section through the tie. Fig. 5 is a perspective view of the bottom plate of the rail chair. Fig. 6 is a perspective view of the securing plate which forms part of the rail chair. Fig. 7 is a perspective view of the bolt used in connecting the rail chair with the tie. Fig. 8 is a fragmentary bottom plan view of the tie.

Referring to the accompanying drawings by numerals it will be seen that this invention comprises a tie 10 having supporting side and end walls 11 and 12 which hold the major portion of the tie in spaced relation to the road bed. A rail chair is formed at each end of the tie and comprises a base 13 having a longitudinally extending opening 14 in one end portion and bolt openings 15 and 16. The opposite end portion of the plate 13 is thickened as shown at 17 and carries a lip 18 which overhangs the plate 13. The lip 18 conforms to the shape of the base of a rail 19 so that when the rail 19 is placed upon the rail chair one side of the rail base 20 will fit tightly beneath the lip 18. A plate 21 fits upon the plate 13 and is provided with a lip 22 which engages the opposite side portion of the rail 20 so that the rail will be securely held upon the rail chair. The plate 21 is provided with a rib 23 which has a straight end 24, and has its opposite end 25 extending beneath the lip 22. After the rail has been placed upon the chair with one side fitting beneath the tongue 18, the plate 21 is placed in the position indicated by the dotted lines in Fig. 2 so that the edge of the rail base 20 rests upon the end

25. The plate 21 can then be moved to the position shown by the full lines in Fig. 2, and moved toward the rail so that the end of the lip 22 fits against the web of the rail with the end 25 of the rib positioned beneath the base of the rail and with the bolt openings 27 and 28 registering with the openings 15 and 16. A bolt 29 is passed through the openings 16 and 28 and has a securing nut 30 screwed upon its outer end so that the bolt will be held in position. A bar 31 has one end turned to form a lug 32 which fits into a socket formed at one end of the slot 14 by the rib 23 having its end 24 cut as shown in Figs. 6 and 8. This lug passes through the tie and plate 13 up into a socket 33 formed in the plate 21 so that it forms an additional means for limiting the movement of the plate. A shaft 34 extends from the opposite end of the bar 31 through the openings 15 and 27 and protrudes beyond the outer face of the plate 21. A securing nut 35 is screwed upon the threaded end of the shaft 34 so that the second securing bolt will be held in position.

When using this device the plate 13 is placed upon the tie and the rail mounted upon the plate with one side of the base fitting beneath the lip 18. The plate 21 is then placed upon the plate 13 with the rib 23 fitting into the slot 14 and beneath the base of the rail and with the lip 22 bearing against the upper face of the rail base. The securing bolts are then inserted and the nuts 30 and 35 screwed upon the bolts so that the plates 13 and 21 will be securely held together upon the tie.

What is claimed is:—

1. A tie, a rail chair at each end of said tie, each of said rail chairs comprising a base plate provided with a longitudinally extending slot in one end portion and with bolt openings at each side of said longitudinally extending slot, the opposite end portion of said base plate being thickened, a lip extending from the thickened portion of said base-plate, a clamping plate fitting upon said base-plate, a lip extending from said clamping plate in the direction of said first-mentioned lip, said clamping plate provided with openings registering with the openings at each side of said longitudinally extending opening, a rib carried by said clamping plate and fitting in said longitudinally extending opening, said clamping

plate provided with a socket at one end of said rib, a threaded shaft extending through one set of registering openings, a bar extending from said threaded shaft and having one end portion bent to form a lug passing through said longitudinally extending opening into said socket formed in said clamping plate, and a bolt passing through said second set of registering openings.

10 2. A tie, a rail chair at each end of said tie, each of said rail chairs provided with a base-plate provided with a longitudinally extending opening in one end portion, a lip extending from the opposite end portion of said plate and adapted to fit upon the base
15 of a rail, a clamping plate fitting upon said base plate, a lip extending from said clamping plate and adapted to fit upon the base of a rail, a rib carried by said clamping plate and one end of said rib extending beyond
20 said clamping plate beneath said second lip, the end of said rib being adapted to fit beneath a rail base, and means for securing said plates together.

25 3. A tie, a rail chair at each end of said

tie, each of said rail chairs comprising a base plate provided with a longitudinally extending opening, a clamping plate fitting upon said base plate, a rib carried by said clamping plate, and fitting in said longitudinally extending opening, said rib being of less length than said opening and providing a socket at the end of said rib, and clamping means passing through said chair and tie, and having one end fitting in said
30 socket.

4. A tie, a rail chair at each end of said tie, a clamping plate carried by each chair, means for securing said plates upon said chairs, said securing means comprising a
40 bar having one end portion bent to form a lug, a shaft extending from the opposite end of said bar, and clamping means mounted upon said shaft.

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

JOHN C. LOEWER.

Witnesses:

R. M. SANDBACH,
WM. HERING.