

UNITED STATES PATENT OFFICE.

JOHN ALBRECHT, OF MASSILLON, OHIO.

COMBINED RAIL CHAIR AND TIE.

SPECIFICATION forming part of Letters Patent No. 529,097, dated November 13, 1894.

Application filed October 1, 1894. Serial No. 524,566. (No model.)

To all whom it may concern:

Be it known that I, JOHN ALBRECHT, a citizen of the United States, residing at Massillon, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Combined Rail Chairs and Ties; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1, is a side elevation, showing the different parts placed in proper position to lock or hold the rails. Fig. 2, is a longitudinal section, showing the different parts belonging to the chair. Fig. 3, is a top view showing one of the rails properly placed upon the tie. Fig. 4, is an edge view of one of the locking dogs. Fig. 5, is a view showing a portion of a tie and illustrating the dog locking block, placed in position to be moved to lock the dogs. Fig. 6, is a detached view of a bar design for moving the dog locking block.

The present invention has relation to a combined rail chair and tie, and it consists in the different parts and combination of parts hereinafter described and parts pointed out in the claims.

Similar letters of reference indicate corresponding parts in all of the figures of the drawings.

In the accompanying drawings A, represents the tie which is formed of the usual length and as illustrated in Fig. 2, it is formed hollow from end to end. For the purpose of properly closing the top and bottom of the tie, the plates *a* are provided and are bolted or riveted to suitable flanges formed upon the sides of the tie proper. Within the tie proper are located the dog locking blocks B, which dog locking blocks are pivoted to the sides of the tie by means of suitable shafts *b* or their equivalents.

For the purpose hereinafter described, the ends of the dog locking blocks are rounded or beveled. The locking dogs C and D are substantially of the form shown in the drawings and as shown they are extended above the tie proper, to embrace and hold the rails E, and for the purpose of providing a strong support or brace for the rails E, the locking

dogs D are extended upward so that their top or upper ends will come in contact with the bottom or under side of the upper flanges of the rails E.

For the purpose of providing a means to properly enter the dogs C and D, the top and bottom of the tie is provided with the elongated slots *c*, which slots are formed of such a length that they will properly hold the rails E after the locking blocks B have been placed in the position indicated by the dotted lines Fig. 1. For the purpose of preventing the dogs C and D from moving upward their bottom or lower ends are provided with the hooks or flanges *d*, which hooks or flanges embrace the bottom or under side of the tie proper after said dogs have been brought or forced into position to lock the rails E.

The locking dogs C and D are bent or curved at their top or upper ends so that they will embrace and hold the webs of the rails E substantially as illustrated in the drawings.

In use the locking blocks B are turned upon their pivotal points so as to bring them in proper position to admit the dogs to be placed through the tie; after which the locking blocks B are brought into substantially a horizontal position by means of a bar such as F, which bar is entered through the apertures *e*, and entered into the recesses *f*, and the outer end of the bar F lifted or moved upward, thereby lowering the recessed end of the locking block.

The locking blocks B are formed of such a length that when they are brought into a horizontal position or nearly so, the ends will come in contact with the inner edges of the dogs and spread the bottom or lower ends of such dogs, which movement brings the top or upper ends of the dogs securely against the web of the rail, thereby securely and firmly locking the rail E in proper position.

It will be understood that by rounding the ends of the locking blocks that said locking blocks can be better brought into position to spread the bottom or lower ends of the dogs C and D.

For the purpose of providing dogs of sufficient strength to properly hold the rails, the top or upper ends of said dogs are formed somewhat thicker than the lower portions as illustrated in Fig. 4.

For the purpose of providing a means for operating the locking blocks B the shafts *b*, are extended through the tie proper upon one side, said extensions being angular, so
 5 that a wrench can be applied. It will be understood that the locking blocks B are to be securely attached to the shafts *b*.

Having fully described my invention, what I claim as new, and desire to secure by Letters
 10 Patent, is—

1. The combination of the hollow tie A provided with intermediate slots formed in the top and bottom of the tie, the locking dogs extended above the tie to embrace the rails
 15 and extended below the tie to embrace the under side thereof, the locking blocks pivotally connected to the tie and provided with recesses *f*, and apertures located in the tie, substantially as and for the purpose specified.

2. The combination of a hollow tie provided with slots, locking dogs provided with flanged lower ends and with curved upper ends, the locking blocks B located between the locking dogs, substantially as and for the purpose
 20 specified.

3. The combination of a hollow tie having located therein locking blocks, secured to shafts having angular extensions, and locking dogs, substantially as and for the purpose
 25 specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence
 30 of two witnesses.

JOHN ALBRECHT.

Witnesses:

EDWIN S. CRAIG,
 F. W. BOND.