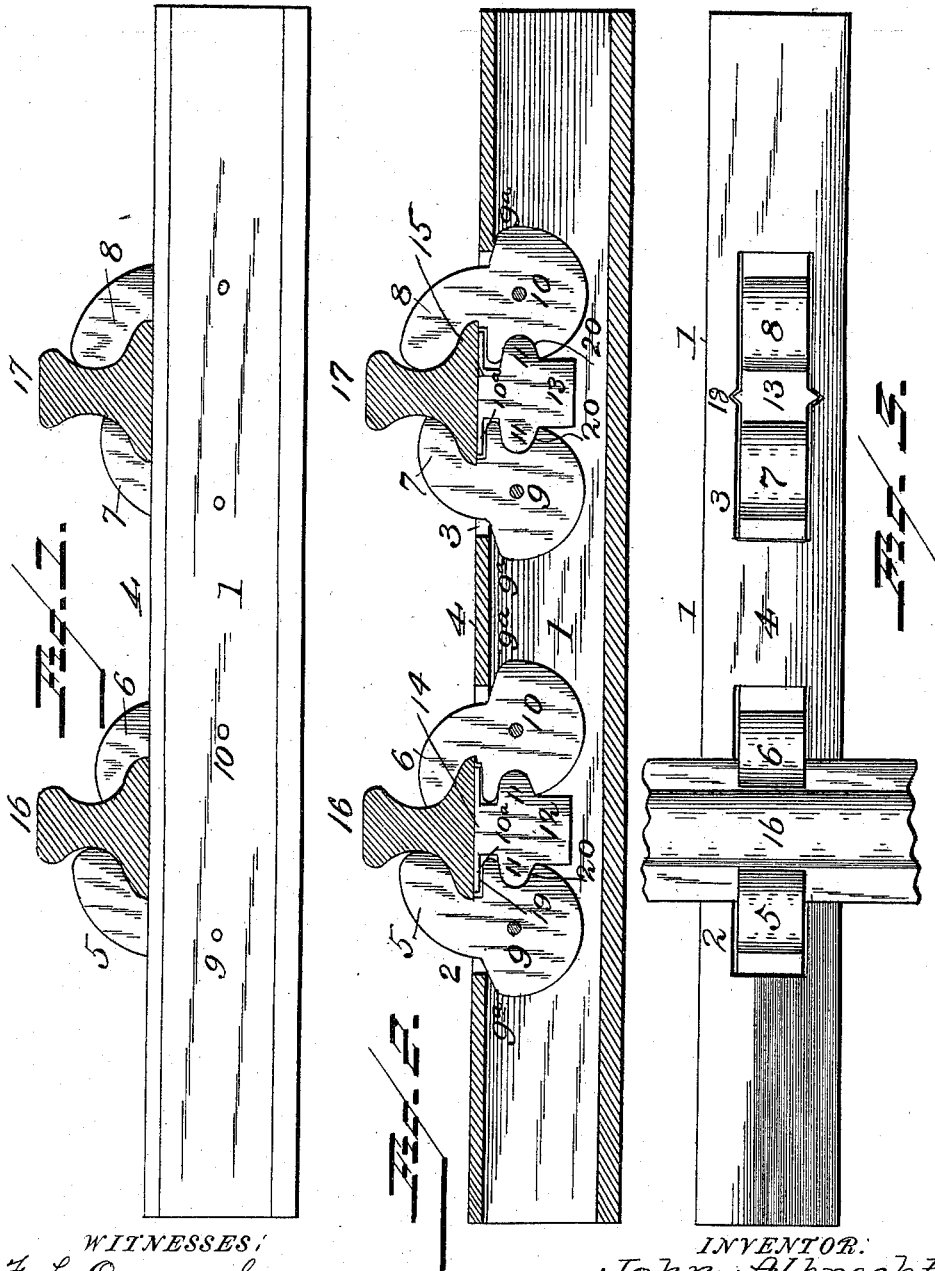


(No Model.)

J. ALBRECHT.  
COMBINED RAIL CHAIR AND TIE.

No. 526,603.

Patented Sept. 25, 1894.



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# UNITED STATES PATENT OFFICE.

JOHN ALBRECHT, OF MASSILLON, OHIO.

## COMBINED RAIL CHAIR AND TIE.

SPECIFICATION forming part of Letters Patent No. 526,603, dated September 25, 1894.

Application filed June 5, 1894. Serial No. 513,543. (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 a Combined Rail Chair and Tie; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to combined rail-chairs and rail-ties for railway-rails, and it consists in the construction and novel combination of the parts of the same, as hereinafter fully described and claimed.

In the drawings, Figure 1 is a side elevation of my improved metallic rail-tie and rail-chairs combined. Fig. 2 is a vertical longitudinal sectional view of the same; and Fig. 3 is a plan view of the rail-tie and rail chairs, showing portion of a railway rail clamped in place on one of the ties by the improved rail-chair.

Referring by numerals to the accompanying drawings, 1 designates a hollow metallic rail-tie which may be made of steel, wrought-iron or of suitable cast metal, and is rectangular in outline in cross-section.

2 and 3 are rectangular openings or recesses in the top-wall 4 of the hollow tie.

5, 6, 7 and 8 are pivoted notched clamps or dogs which are fulcrumed on pivot-rods 9 and 10 passed through the vertical walls of the hollow metal tie short distances below the top-wall of the tie, as plainly shown in Fig. 2.

The lower ends of the notched clamps or dogs 5, 6, 7, 8 are enlarged and are provided with shoulders 9<sup>a</sup>, 9<sup>b</sup>, on their outer edges which at times abut against the lower face of the upper wall of the hollow metal tie and limit the inward travel of the projecting upper ends of the notched clamps or dogs, as shown in Fig. 2. The inner edges of each of the dogs or clamps 5, 6, 7, 8 are provided with notches or recesses 20 and 19 which receive respectively the shoulders or projections, 11 near the lower ends of locking-blocks 12, 13 and the projections 10<sup>a</sup> which are on the tops of the

integral cap-plates 14, 15 of blocks 12, 13 upon which the track-rails 16, 17 rest when in place.

The ends of the integral cap-plates 14, 15 enter the notches 19, 19 in the upper portions of the inner or opposing edges of the clamps or dogs 5, 6, 7, 8 and the bases of the track-rails rest upon these cap plates when the track-rails are in place on the ties, the base flanges of said track-rails entering the upper notches in the clamps or dogs and bearing down upon the clamps or dogs normally. When the weight of the train is on the track-rails, this bearing down is greatly increased so that it is impossible for the track-rails to leave the chairs or clamps when the weight of the train is on the track-rails. The employment of these clamps or dogs dispenses entirely with the employment of the spikes ordinarily used, so that a rail can be removed from the chairs and replaced without necessitating the withdrawing or driving any railway spikes whatever. The upper portions of the outer clamps or dogs of each pair are slightly longer and larger than the similar parts of the inner clamps or dogs.

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

1. The combination with the hollow metal tie having elongated recesses in its top wall intermediate of its ends, of the pivoted notched clamps or dogs projecting upwardly through said recesses, the interposed locking-blocks having cap-plates thereon, and the track-rails resting on the cap-plates and between the projecting portions of the clamps or dogs aforesaid, substantially as set forth and for the purposes specified.

2. The combination with the hollow metal tie having slots or recesses in its upper wall intermediate of its ends, of the pairs of pivoted notched dogs or clamps, of the interposed notched blocks provided with integral cap-plates and the track-rails resting on the cap-plates of said interposed notched blocks, substantially as specified.

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

JOHN ALBRECHT.

Witnesses:

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