S. A. ROSS.

RAILWAY TIE AND CHAIR COMBINED.

APPLICATION FILED AUG. 25, 1908.

913,238.

Patented Feb. 23, 1909.

Fig. 1

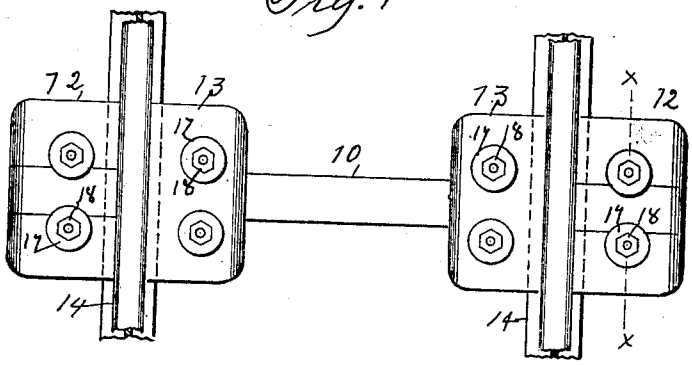


Fig. 2

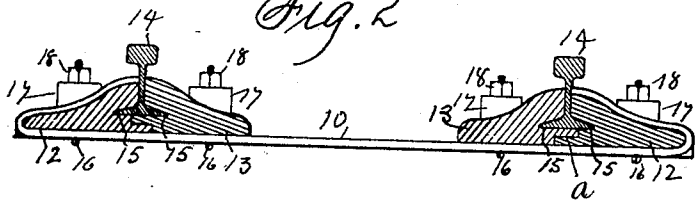
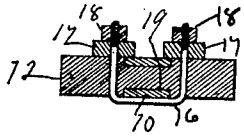


Fig. 3



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UNITED STATES PATENT OFFICE.

STERLING A. ROSS, OF FAYETTE, IOWA.

RAILWAY TIE AND CHAIR COMBINED.

No. 913,238. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed August 25, 1908. Serial No. 450,580.

To all whom it may concern:

Be it known that I, STERLING A. ROSS, a citizen of the United States, residing at Fayette, in the county of Fayette and State of Iowa, have invented a new and useful Railway Tie and Chair Combined, of which the following is a specification.

The object of my combined railway tie and chairs is to promote convenience, efficiency, durability and safety in railway travel and to prevent the dangers, accidents and loss of life incident to the loosening and spreading of rails while cars and trains are in transit on railroads and carrying passengers.

My invention consists in the construction and combination of parts as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawing in which:—

Figure 1 is a top view of a section of track that shows how the two parallel rails are detachably fixed to the two-part chairs separately and detachably fixed to the tie. Fig. 2 is a transverse sectional view that shows how the chairs are formed and fixed to the tie as required to detachably and securely fix rails in the chairs on the end portions of a metal tie. Fig. 3 is a sectional view on the line *x x* in Fig. 1 and shows how one part of a chair is connected with one end of the tie by means of a double bolt or stirrup.

The numeral 10 designates a flat metal bar doubled upward and inward at its ends to serve as a tie between two parallel rails in a track.

Metal chairs are formed in pairs or in two parts 12 and 13 and jointed together at their lower and inner edges by overlapping parts *a* as shown in Fig. 2, or in any suitable way as required to detachably unite them under a rail 14. They have grooves 15 in their inner edges to admit the flanges of the rails. The outer parts 12 of the chairs have flat grooves on their top surfaces and central parts to admit the ends of the tie 10 that are bent inward as required to prevent any longitudinal motions of them relative to the rails or lateral motions relative to the ends of the tie to which they are fastened by means of stirrups 16, washers 17 and nuts 18 as shown in Fig. 3.

The two part chairs 12, 13 have transverse grooves 19 in their bottom faces to admit the tie and to aid in preventing any motion of the chair relative to the tie, the rails and track.

Having thus set forth the purposes of my invention and the manner of its construction and arrangement and combination of its parts in a railway track the practical operation and utility thereof will be obvious.

What I claim as new and desire to secure by Letters-Patent, is:

1. A railway tie and chairs combined, comprising a flat metal bar bent inward at its ends and two-part chairs connected at their inner ends and detachably fastened to the bent ends of the tie.

2. A railway tie and chairs, comprising a flat metal bar bent inward at its ends and two-part chairs detachably fastened to the bent ends of the tie by means of stirrups and nuts as set forth.

3. In a railway tie and chairs combined, a two-part chair composed of two mating parts joined together at their inner and lower edges and provided with grooves in their inner edges to admit flanges of rails, a flat metal bar bent inwards at its ends and stirrups for binding the parts together as set forth.

4. In a railway tie and chairs combined, a two-part chair composed of two mating parts joined together at their inner and lower edges and provided with grooves in their inner edges to admit flanges of rails and grooves in the surfaces of their central portions to admit the ends of a flat tie bent at its ends as set forth.

5. A railway tie and chairs combined, comprising a tie bent upwards and inwards at its ends, two-part chairs joined together at their inner faces and provided with grooves in their inner faces to admit flanges of rails and each member of each part-two chair provided with a groove to admit the end portions of the tie for the purposes stated.

STERLING A. ROSS.

Witnesses:

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