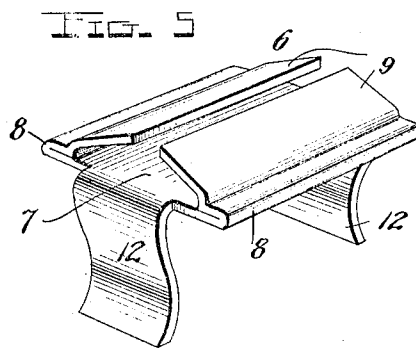
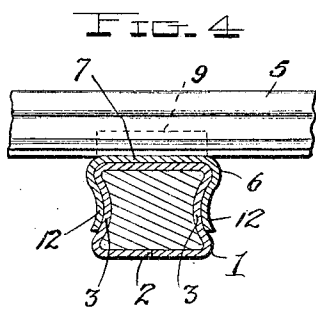
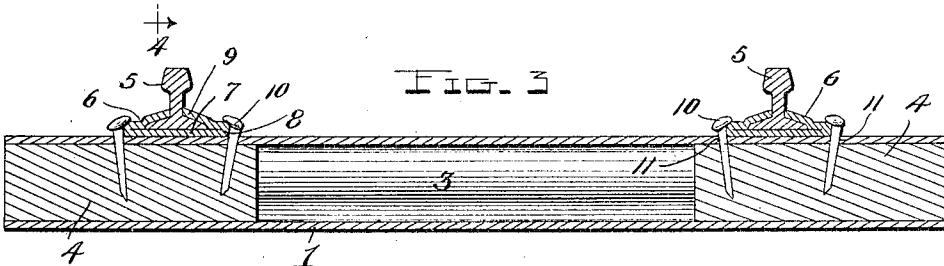
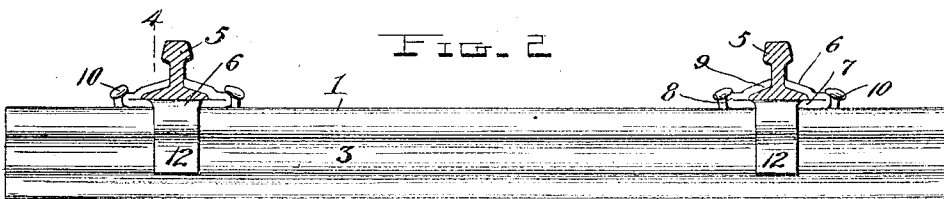
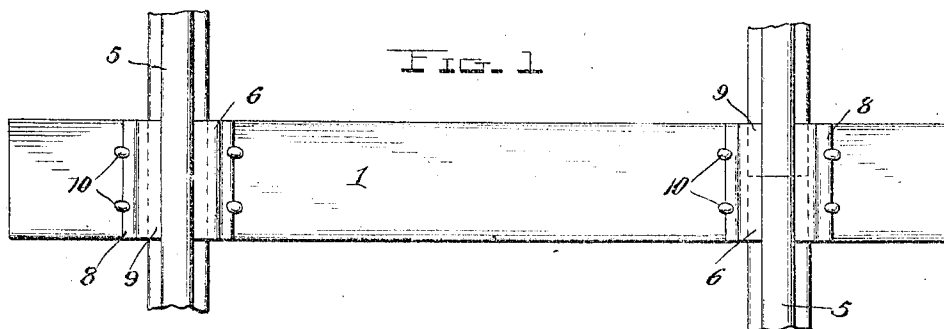


No. 844,622.

PATENTED FEB. 19, 1907.

A. P. SELLS.
RAIL CHAIR AND TIE.
APPLICATION FILED DEC. 11, 1906.



Witnesses
J. H. Griesbner Jr.
A. L. Weaver

A. P. Sells Inventor
By *Watson E. Coleman* Attorney

UNITED STATES PATENT OFFICE.

ABRAHAM P. SELLS, OF SEARCY, ARKANSAS.

RAIL CHAIR AND TIE.

No. 844,622.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed December 11, 1906. Serial No. 347,256.

To all whom it may concern:

Be it known that I, ABRAHAM P. SELLS, a citizen of the United States, residing at Searcy, in the county of White and State of Arkansas, have invented certain new and useful Improvements in Rail Chairs and Ties, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in railway cross-ties and in rail-chairs therefor.

The object of the invention is to improve and simplify the construction of devices of this character, and thereby render the same stronger and more durable and at the same time less expensive.

With the above and other objects in view the invention consists in the novel construction combination, and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved cross-tie showing track-rails secured thereon by means of my improved rail-chairs. Fig. 2 is a side elevation of the parts shown in Fig. 1. Fig. 3 is a vertical longitudinal section. Fig. 4 is a vertical cross-section on the plane indicated by the line 4 4 in Fig. 2, and Fig. 5 is a perspective view of the improved rail-chair.

Referring to the drawings by numeral, 1 denotes my improved cross-tie, which is preferably formed from a single piece of heavy galvanized steel plate. In making the tie the sheet or plate of steel is bent longitudinally at suitable points, so that the tie is substantially square or rectangular in cross-section, and the longitudinal edges of the sheet or plate are then suitably united, as shown at 2 in Fig. 4. In bending the plate or sheet the portions 3, which form the vertical sides of the tie are preferably curved transversely, so that said sides are of concave form, as clearly shown in Fig. 4. In each end of the hollow tie is inserted a wooden block 4, suitably treated with creosote or some other preservative. The blocks 4 fill the ends of the tie and thereby strengthen and support those portions of it above which the track-rails are disposed.

The track-rails 5 are fastened to the tie by my improved rail-chairs 6. Each of the latter is preferably formed from a single piece of heavy sheet metal by suitably cutting and bending the same into the form shown in Fig.

5. This chair 6 has a flat rectangular body portion 7, adapted to rest upon the top of the tie 1 and to receive the base of the track-rail.

At each side of the body portion 7 the metal plate is doubled upon itself, as shown at 8, to provide projecting flanges, and it is then bent upwardly and inwardly to provide flanges 9, which engage the upper faces of the base flanges of the track-rail 5. The flanges 8 are engaged by the heads of the spikes or similar fastenings 10, which secure the chair upon the top of the tie. The spikes 10 are driven through apertures 11, formed in the top of the tie 1 and into the wooden block 4, as will be seen upon reference to Fig. 3. Projecting from each of the ends of the body 7 of the chair 6 is a downwardly-bent tongue or flange 12, which is curved or shaped to fit the concaved side 3 of the tie. These tongues 12 prevent the chair from shifting transversely of the tie and also prevent it from being elevated or lifted off of the tie.

The construction, use, and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings and the following brief statement.

This improved track may be quickly laid, since the chairs may be readily adjusted upon the rails either at their joints or at intermediate points, and they may be as readily adjusted upon the ties and then quickly spiked thereon.

Both the ties and the chairs may be produced at a comparatively small cost and will be extremely durable in use.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination with a hollow metallic cross-tie having concaved sides and filling-blocks inserted in its ends, of rail-chairs having base portions to receive the track-rails and to engage the top of said tie, side flanges to engage the base-flanges of the track-rails, and depending end flanges or tongues shaped to fit the concaved sides of said tie, and fastening means engaged with said chairs and passed through apertures in the top of said tie and into said filling-blocks, substantially as shown and described.

2. The combination with a hollow metallic cross-tie having concaved sides and filling-blocks inserted in its ends, of rail-chairs formed from a single plate or sheet of metal and having a rectangular body to rest upon

the top of the tie and to receive the base of the track-rail, horizontally-projecting side flanges formed by doubling the metal plate upon itself, upwardly and inwardly extending side flanges to engage the upper faces of the base-flanges of the track-rails, and depending end flanges or tongues curved to fit the concaved sides of said tie, and fastening-spikes driven through apertures in the top of the tie and into said filling-blocks and having

their heads engaged with the horizontal side flanges of said chairs, substantially as shown and described.

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

ABRAHAM P. SELLS.

Witnesses:

H. A. RACHELS,
WILLIS CALDWELL.