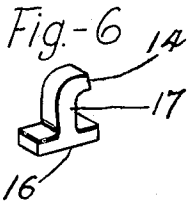
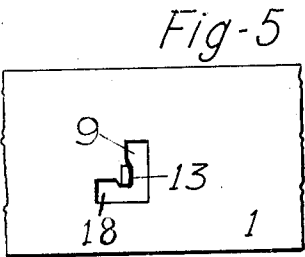
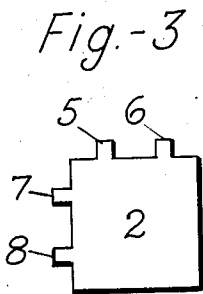
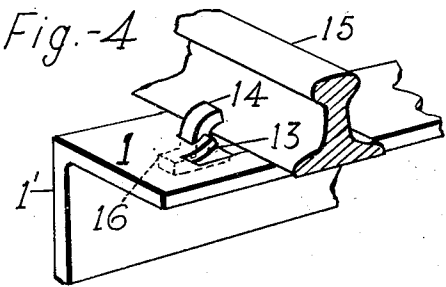
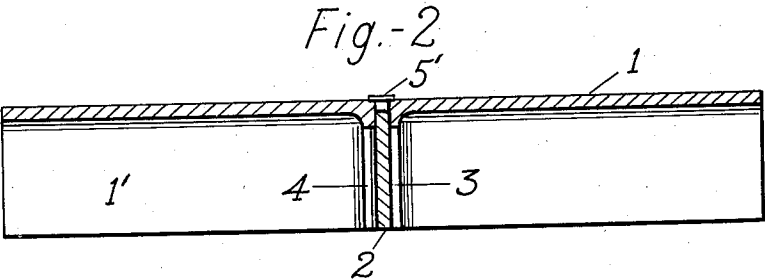
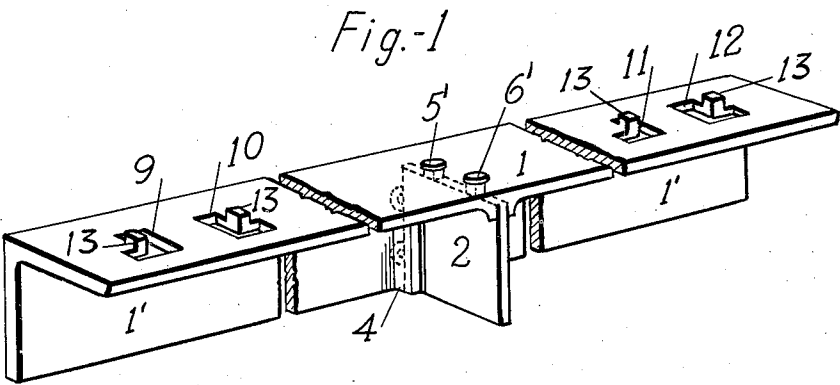


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A. ROSENBERG OF MICHAEL
CROSS-TIE AND CLEAT THEREFOR

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INVENTOR

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UNITED STATES PATENT OFFICE

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CROSSTIE AND CLEAT THEREFOR

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1 Claim: (Cl. 238—54)

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My invention relates to railroad cross-ties which can be made in the same steel rolling mills as steel rails, and particularly is designed to permit installation by automatic machinery which could press them into the ground without requiring a trench for them like is required for wood cross-ties, and I provide a novel punched out and spaced part for inserting keyed device or cleat whereby to secure the rail to said steel tie. It is noted that my steel tie is angled shape and has re-inforcements at or about the center of its length, or channeled ribs to receive a plate which is riveted to both the top and sides of my steel cross-tie, in order to pre-end movement of said cross-tie, with the same area which wood cross-ties have, and my angled slotted part is designed to permit my keyed cleat to be inserted in said angled slotted part and then moved into position onto the rail whereby to secure the rail to said cross-tie; and then I provide an upset part or lug made integral with said cross-tie, whereby it can be hammered over said angle slot to prevent the keyed cleat from working out of said angle slot.

The objects of my invention are: first, to provide new articles of manufacture, second, to provide means for preventing accidents to rolling stocks and to passenger coaches and passengers carried therein, third, to provide means whereby renewals can be made when the securing means are worn from the constant movement of rails, fourth, to provide a rolled steel tie which can be economically installed, fifth, to provide a rolled steel cross tie which will correspond with the same road bed resistance approximately as wood cross-ties, sixth, to provide cross-ties with uniform spacing devices for rails and to maintain the rails properly spaced to prevent accidents to rolling stocks.

These objects I attain by the devices illustrated in the accompanying drawings in which:

Fig. 1 is a slightly perspective view of my improved steel rolled cross-tie showing the plate riveted in place to prevent end motion to said cross-tie.

Fig. 2 is a vertical elevation of my cross-tie with the upper angle in cross section and the plate 2 in right angle position riveted to the cross-tie.

Fig. 3 is a vertical elevation of the fixed vertical plate 2 to prevent end movement to my cross-tie,

Fig. 4 is a vertical elevation of my keyed cleat which performs the function of the present type of spikes used to hold rails to wood cross-ties, together with a cross section of the surface part

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of my rolled steel cross-tie, showing the said keyed cleat securing a cross-section of the base of a T-rail.

Fig. 5 illustrates the plan view of the angled slot in which is inserted my keyed cleat to hold a T-rail to my rolled steel cross-tie.

Fig. 6 is a perspective view of my clamp with its head, neck and body.

Referring to the drawings, the same numerals refer to similar parts throughout the several views in which:

1 is the surface part of my rolled steel cross-tie, 1' is the vertical part to be driven in the road-bed of a railroad 2 is a vertical plate inserted in suitable channeled re-inforced parts 3 and 4 made integral with said cross-tie, and riveted to the top and side of my cross-tie by the lugs 5, 6, 7, and 8, to prevent end movement of my cross-tie, which is preferably placed in the length center of my cross-tie; but may be just as effective if placed at either end or at any other part of said cross-tie, 5' shows the said lug 5 riveted in place on the surface of my cross-tie, 6' also shows the riveted head of the lug 6, 9, 10, 11, 12 are L-shaped orifices by which to fasten rails to my steel cross-tie, cut through the upper surface of my cross-tie, with the part 13 curled upwards whereby to prevent my keyed cleat 14 from working its way out of said L-shaped orifices, after the key base or body 16 has been inserted in said slot and moved into position to secure the T-rail 15 to said cross-tie 1, by hammering the upset part 13 over said angle slot 9'.

It is not thought necessary to illustrate the upset part 13 hammered into position to hold the keyed cleat 14 in its fixed position to normally hold the T-rail to said cross-tie 1. It is clearly shown in Fig. 6, that my clamp is provided with a head 14 for gripping the base of the rail 15, a neck 17 and its body or base 16, the body having been inserted in the L-shaped orifice is moved under the cross-tie under the rail until the head 14 grips the base of the rail 15, then moved crosswise of the cross-tie into the other leg 9 of the said orifice and past the lug 13 which is then bent downwards to block return of the neck 17 to its original inserted position in the orifice at 18 and thus capable of being removed from said orifice 18.

Having described my invention, what I claim is:

In combination, a railway tie comprising a rail seating portion and a securing portion adjacent thereto, an L-shaped opening in said securing portion with a transverse leg of said opening adjoining said seating portion and a longitudinal

leg extending perpendicularly to said seating portion, an upwardly bent lug integral with said securing portion along the outer side of said transverse leg and extending from said longitudinal leg for a portion only of the length of said transverse leg, an integral clamp member of slightly less width than the width of said longitudinal leg comprising a base portion of slightly less length than said longitudinal leg, a neck portion of slightly less length than the width of said transverse leg and a head portion extending upwardly and laterally of said neck portion, said base, neck and head portions being arranged so that said base portion may be inserted downwardly through said longitudinal leg and then moved longitudinally until said base and head portions clamp a rail on said seating portion and said clamp may then be moved transversely with the neck portion in said transverse leg beyond said lug whereby said lug may be bent

down into said opening to lock said clamp in position.

ALBERT ROSENBERG OF MICHAEL.

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