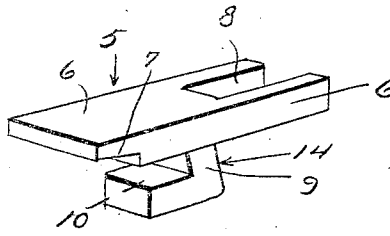
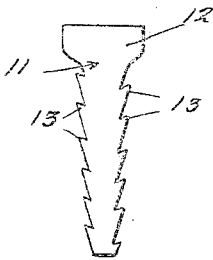
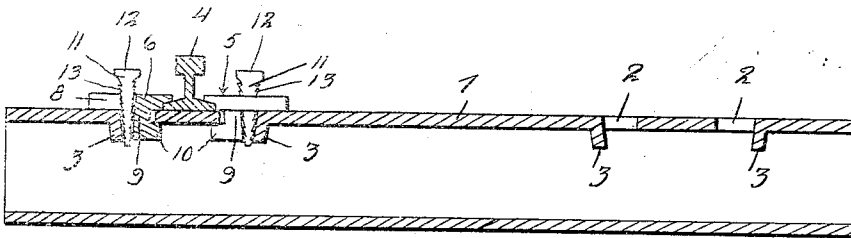
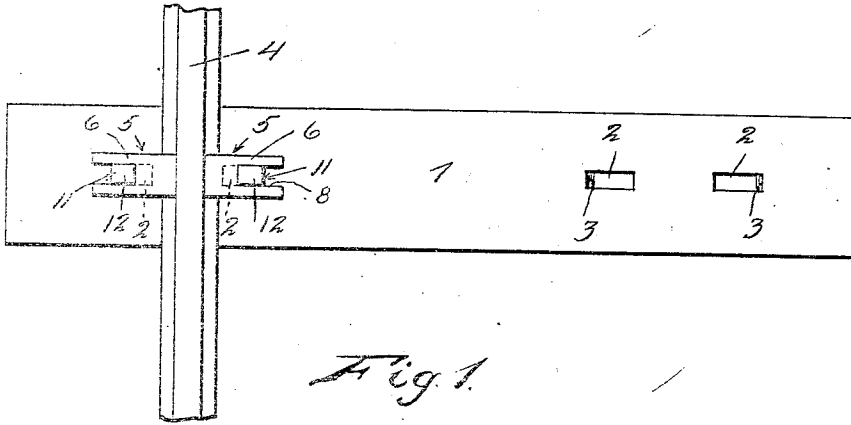


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RAIL FASTENER.
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1,054,896.

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RAIL-FASTENER.

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To all whom it may concern:

Be it known that I, GARDNER A. BELKNAP, a citizen of the United States, residing at Conneautville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Fasteners, of which the following is a specification.

This invention relates to rail fasteners and particularly to a rail fastener to be used in connection with a metallic tie.

The object of the invention is to provide a novel device of this character which will hold a rail positively in place without danger of twisting or loosening the device.

An important object is to provide a rail fastener which permits of lateral adjustment of the rails for taking up wear.

Another object is to provide a device of this character which will be simple, inexpensive to manufacture, and durable in service.

With these and other objects in view, my invention consists in the novel arrangement and construction of parts as hereinafter more fully described and claimed.

Referring to the drawings forming a part of this specification and in which like numerals are employed to designate corresponding parts throughout the several views, Figure 1 is a top plan view of a tie showing one rail securely locked in place and one rail removed, Fig. 2 is a longitudinal section therethrough, Fig. 3 is a perspective view of the clamping plate, and Fig. 4 is an enlarged view of the locking wedge.

Referring more particularly to the drawings, the numeral 1 designates a tie formed of metal which is provided with openings 2 cut or stamped therefrom in such a manner as to form depending lugs 3. The rails 4 are disposed between the openings 2 and are held in place by clamping members designated as a whole by the numeral 5.

The clamping members 5 comprise a plate 6 adapted to seat upon the tie 1 and provided with a cut out portion 7 upon one end for engagement with the tread of the rail. The plate 6 is provided with a cut out portion 8 and has formed upon its lower side a downwardly extending lug 9 terminating in a forwardly extending projection 10. The clamping member 5 is inserted within the opening 2 and is moved into engagement with the tread of the rail. The extension 10

will then contact with the lower side of the top wall of the tie, thus preventing its withdrawal from the opening. The opening 8 in the plate 6 will then be in registration with the opening 2.

In order to lock the clamping member 5 securely in engagement with the rail, I provide a locking wedge 11 provided with a head 12 and further provided with teeth 13 upon two of its opposite sides, the teeth on one side being in staggered relation to the teeth on the other side. It will be noted that the rear face 14 of the lug 9 is slightly inclined and that the lug 3 has its face inclined. Both of these inclined surfaces converge downwardly and form a seat for the locking wedge 11. After the wedge has been inserted it is driven in until the clamping member 5 is forced into tight engagement with the rail. As the wedge 11 is formed of some very hard material, the teeth 13 would bite into the material of the lug 3 and the lug 9, thus preventing the accidental displacement of the wedge. If, however, it is desired to withdraw the wedge, this may be done by applying considerable force to the head 12.

When in time the inner edge of the ball of the rail becomes worn the wear may be taken up by moving the rails toward each other. This may readily be done by withdrawing the inner locking wedges and forcing in the outer locking wedges until the rail is moved the desired distance, after which the inner locking wedges may be reinserted and forced in to clamp the rail.

Having thus described my invention what I claim is:

1. The combination with a rail, of a tie upon which said rail is mounted, said tie being provided in its upper wall with openings upon the opposite sides of said rail and further provided with a downwardly extending lug adjacent the edge of each opening farthest from the rail, means for securing said rail upon said tie, each of said means comprising a securing plate provided with a cut out portion upon its end for engagement with the base of the rail and further provided with a depending lug slidable in said opening, each of said depending lugs terminating in a forwardly extending projection adapted to engage the under side of the top wall of the tie, each of said securing plates being further provided with a slot in its end most remote from the rail, said slot

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being in registration with one of said openings in said tie, and locking wedges adapted to engage said first and last named lugs, said locking wedges being provided with teeth
5 upon their engaging sides.

2. The combination with a rail, of a tie upon which said rail is mounted, said tie being provided in its upper wall with openings adjacent the base of said rail and upon
10 opposite sides thereof, said tie being provided with a depending lug adjacent the edge of each opening most remote from the rail, said lugs being inclined toward said rail, means for securing said rail to said tie,
15 each of said means comprising a plate seated on said tie and provided with a cut out portion upon one end for engagement with the base of the rail and further provided with a slot upon its other end in registration with said opening in said tie, a
20 depending lug formed on said plate and extending through said opening in said tie, a

forwardly extending projection formed on said lug adapted to engage the lower side of the top wall of the tie, the rear face of said
25 lug being rearwardly inclined, and locking wedges adapted to engage the first and last named lugs, said wedges being provided with teeth upon their engaging sides.

3. In a device of the character described, comprising clamping members slidable upon the tie and adapted for engagement with the rail, locking wedges adapted for engagement with said clamping members and said tie, said locking wedges being provided with
35 teeth upon two of their opposite sides, the teeth on one side being in staggered relation to the teeth on the other side.

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

GARDNER A. BELKNAP.

Witnesses:

A. B. GREENFIELD.

H. C. GREENFIELD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."