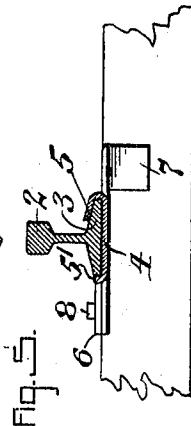
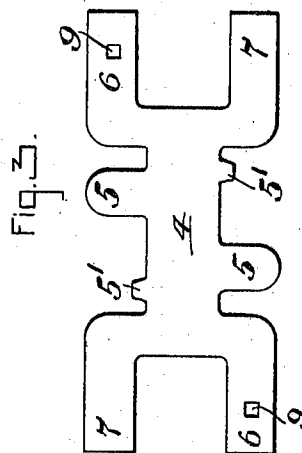
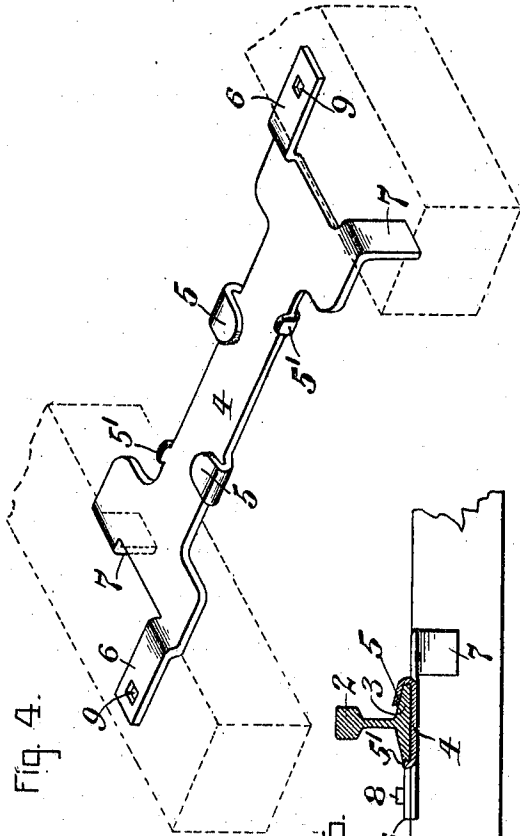
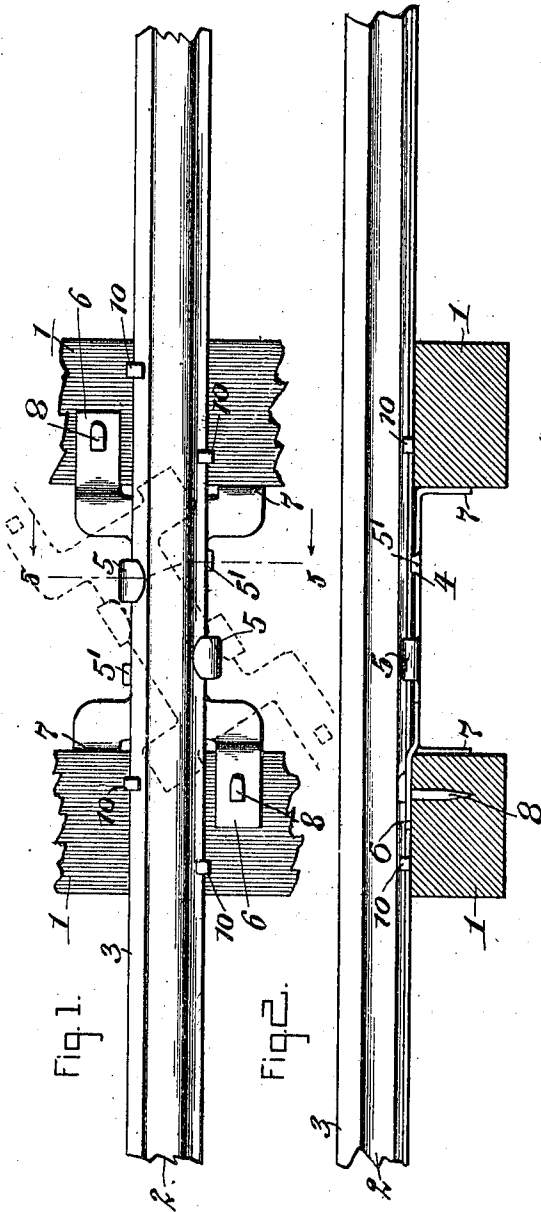


F. DOBMEIER.
RAIL FASTENER.
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1,053,583.

Patented Feb. 18, 1913.



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FRED DOBMEIER, OF BUFFALO, NEW YORK.

RAIL-FASTENER.

1,053,583.

Specification of Letters Patent.

Patented Feb. 18, 1913.

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To all whom it may concern:

Be it known that I, FRED DOBMEIER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Rail-Fasteners, of which the following is a specification.

This invention relates to a fastener which is more particularly designed for securing a railway rail to the ties of the road bed and also preventing longitudinal creeping thereof and the object of this invention is to provide a rail fastener of this character which is comparatively simple and inexpensive in construction, which can be readily applied to or removed from a rail and which when installed will securely hold the rail upon the ties and prevent the same from creeping.

In the accompanying drawings: Figure 1 is a top plan view showing my improved fastener applied to a rail and two adjacent ties. Fig. 2 is a longitudinal sectional elevation thereof. Fig. 3 is a top plan view of a blank from which one of my improved rail fasteners is constructed. Fig. 4 is a perspective view of a rail fastener embodying my invention. Fig. 5 is a vertical cross section taken in line 5-5, Fig. 1.

Similar characters of reference indicate corresponding parts throughout the several views.

1, 1 represent two transverse ties of a railway and 2 a rail resting with its base 3 upon these ties. The rails are of standard construction and the ties are preferably constructed of wood in the usual manner although they may be made of metal or any other suitable material.

The rail fastener which is constructed in accordance with my invention comprises a horizontal flat longitudinal body 4 which is adapted to engage with the underside of the base of the rail and two retaining or locking hooks 5 arranged on diametrically opposite parts of the longitudinal edges of the body and each projecting upwardly and inwardly over the adjacent edge of the rail base. At each end of the body the same is provided on one side with a horizontal longitudinal fastening or anchoring lug 6 which is adapted to rest upon the upper horizontal side of the adjacent tie and on the opposite side of this same end the body is provided with a depending thrust lug 7 which is adapted to engage with the adjacent vertical side of the

respective tie. The fastening lugs of the body are arranged at two of the diagonally opposite corners thereof and the thrust lugs are arranged at the other two diagonally opposite corners thereof.

In order to permit the fastening lugs to engage with the upper side of the companion ties and still enable the underside of the rail to engage fully with the body of the fastener and the upper side of the companion ties, the body of the fastener is depressed below its fastening lugs to such an extent that the upper side of the body is arranged flush with the upper sides of the adjacent ties in the assembled position of the parts. By this means a full bearing surface for the rail on the fastener and the ties is provided and the same is reliably supported.

When my improved fastener is used in connection with wooden ties the fastening lugs may be secured thereto by means of spikes 8 or similar fastenings passing through openings 9 in the fastener lugs and into the upper parts of the ties. If this fastener is used in connection with metal ties the means for connecting the fastening lugs thereto is altered accordingly. By providing the body of a fastener with the thrust lugs which engage with the inner sides of two adjacent ties one of these thrust lugs operates to assist the spikes 8 to hold the fastener and the rail mounted thereon against creeping lengthwise in one direction while the other thrust lug resists the movement of the fastener and the rail mounted thereon lengthwise in the opposite direction, thereby relieving the fastening spikes and distributing the longitudinal strains on the tie between these spikes and the thrust lugs. If desired the body of the fastener may be further provided at its longitudinal edges, opposite the hooks 5 with upturned locking lugs 5¹ engaging with the adjacent edges of the rail base.

In applying this fastener to a rail the fastener with the lugs 5¹ projecting horizontally is placed underneath the base of the rail and turned horizontally at an angle thereto so that the locking hooks 5 may be passed upwardly along opposite sides of the base of the rail, the distance diagonally of the body between one locking hook and the other being equal to the width of the rail base to permit of this movement. After the body of the fastener has been raised into engagement with the underside of the rail

base this body is turned horizontally into alinement with the rail, whereby the hooks thereof are swung in opposite directions over the top of the rail base and the rail becomes interlocked with the fastener. After the fastener has been thus alined with the rail its thrust lugs are engaged with the opposing vertical faces of two adjacent ties, the fastening lugs are secured to the upper side of two adjacent ties by means of the spikes 8 and the locking lugs 5¹ are bent up against the edges of the rail base. The fastener is secured to the ties in such manner that the locking hooks firmly grip opposite sides of the rail base and therefore not only operate to prevent the rail from rising but also hold the same securely against creeping lengthwise under the load which is imposed upon the same by the train running lengthwise thereof. In addition to holding the rail on the ties by my improved fastener spikes 10 of the usual kind may be employed the same being driven into the ties and engaged with the rail base adjacent to the fastener, as shown in Figs. 1 and 2.

Although my improved rail fastener may be constructed in any suitable manner it is preferably stamped from sheet metal in a bulldozer commonly used in steel plants for work of this character.

In the manufacture of this rail fastener a blank of the form shown in Fig. 3 is first cut or punched out from a sheet of metal and then by a subsequent operation the locking lugs are bent upwardly and inwardly from opposite edges of the body, the thrust lugs are bent downwardly at two of the corners of the body and the fastening lugs are bent upwardly so that they are slightly offset vertically relatively to the body, as shown in Fig. 4, thereby completing the rail fastener ready for use.

Owing to the simplicity in construction of this rail fastener the same can be produced at comparatively low cost and the same can also be very easily applied to the rails and ties without requiring tools or skilled workmen for this purpose.

I claim as my invention:

1. A rail fastener comprising a body adapted to engage with the underside of a rail and provided on one side of each of its ends with a horizontal longitudinal fastening lug adapted to be secured to the horizontal upper side of the adjacent tie and on its opposite side with a depending thrust lug adapted to engage with the adjacent vertical side of the respective tie, said body being depressed below said fastening lugs so that its upper side may be arranged flush with the top of the companion ties.

2. A rail fastener comprising a body adapted to engage with the underside of a rail and provided on diagonally opposite parts of its longitudinal edges with upwardly and inwardly turned hooks adapted to engage with opposite edges of the base of the rail and provided on one side of each of its ends with a horizontal longitudinal fastening lug adapted to be secured to the horizontal upper side of the adjacent tie and on its opposite side with a depending thrust lug adapted to engage with the adjacent vertical side of the respective tie.

3. A rail fastener comprising a body adapted to engage with the underside of a rail and provided on diagonally opposite parts of its longitudinal edges with upwardly and inwardly turned hooks adapted to engage with opposite edges of the base of the rail and provided on one side of each of its ends with a horizontal longitudinal fastening lug adapted to be secured to the horizontal upper side of the adjacent tie and on its opposite side with a depending thrust lug adapted to engage with the adjacent vertical side of the respective tie, said body being depressed below said fastening lugs so that its upper side may be arranged flush with the top of the companion ties.

Witness my hand this 4th day of November, 1912.

FRED DOBMEIER.

Witnesses:

E. E. WIELEVER,
J. E. FANE.