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W. B. HILL  
RAILWAY TIE PLATE  
Filed May 8, 1926

Fig. 1.

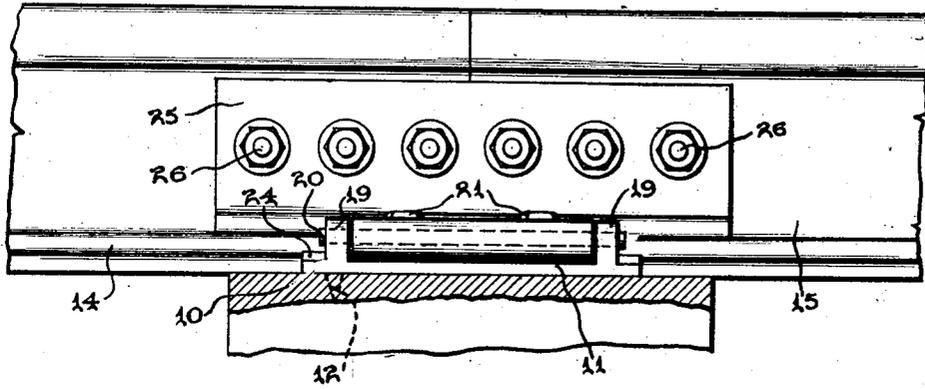


Fig. 2.

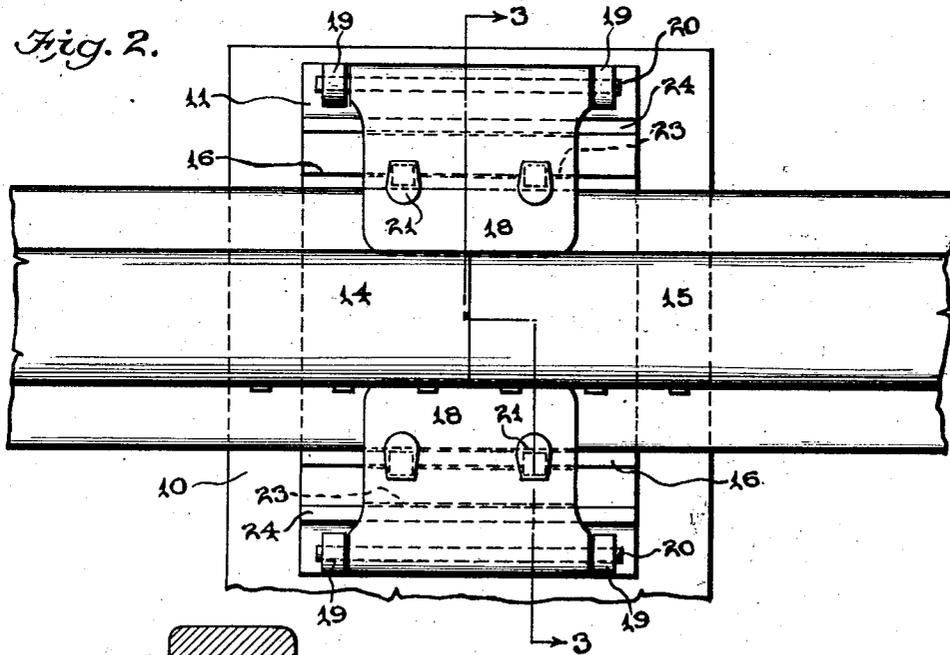
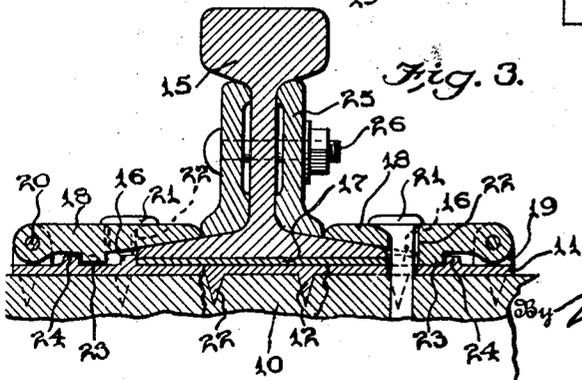


Fig. 3.



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## RAILWAY-TIE PLATE.

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The object of the invention is to provide a tie plate adapted to positively maintain its position on the tie when seated thereon; to provide such a plate in which a seat is provided for the base of the rail to positively preclude lateral movement of the rail; and to provide rail engaging means carried by the plate and movable into and out of overhanging relation with the rail base, and held in such overhanging relation by the spikes employed to attach the whole to the tie.

With this object in view, the invention consists in a construction and combination of parts of which a preferred embodiment is illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevational view of the connecting ends of two rails showing the invention applied in operative position.

Figure 2 is a top plan view of the structure of Figure 1.

Figure 3 is a transverse sectional view on the plane indicated by the line 3—3 of Figure 2.

Adapted for disposition on top of the tie, the invention comprises a plate 11 provided on its under face with spurs 12 for penetration into the top face of the tie to preclude relative lateral movement of the two. The ends of the connecting rails 14 and 15 seat centrally on the top face of the plate 11 which is provided on said upper face with the spaced ribs 16 disposed transversely of the rails and therefore longitudinally of the rails and act as abutments for the base flanges of the rails and preclude lateral movements of the rails so long as the plate 11 remains in position. A wood or fiber cushion 17 is disposed on the plate 11 in the seat defined by the ribs 16 and the rail bases rest upon this.

The rails are secured in their seat upon the plate by means of the ear plates 18 pivoted at their outer ends in the ears 19 formed as integral parts of the base plate 11, the pivotal connection consisting of a pin 20 extending through the ears and through the ear plates. The ear plates swing into a position overhanging the bases of the rails 14 and 15 and are secured in such position by the spikes 21 which are of the usual form and which pass through openings 22 formed in the ear plates and through corresponding openings formed in the base plate 11, penetrating the tie below the base plate. The

spikes thus secure the ear plates in snug engagement with the rail bases and also secure the base plate to the tie, thus precluding the rails leaving their seat defined by the ribs 16. The ear plates on the under side are provided with lugs 23 which extend down between the ribs 16 and supplemental ribs 24 disposed parallel to the ribs 16 but spaced laterally from the latter. The ribs 24 thus take any side thrust imposed upon the ear plates and thereby relieve the ears 19 and the pivot pin from the strain which would otherwise be imposed upon them.

The use of the invention does not interfere with the employment of the usual form of angle bar 25 employed to connect adjoining rail sections together, the angle bars being secured to the rail sections by the bolts 26.

The invention having been described, what is claimed as new and useful is:

1. A device for the purpose indicated comprising a base plate provided on its upper face with spaced ribs defining a rail base seat, ear plates pivotally mounted at the outer extremities of the base plate and swingable into overhanging relation with the base of a rail seated in said seat, and spikes extending through said ear plates and engaging with a tie on which said base plate is seated.

2. A device for the purpose indicated comprising a base plate provided on its upper face with spaced ribs defining a rail base seat, a cushion member disposed in said seat, and rail fasteners pivotally mounted at the extremities of the base plate and swingable into and out of overhanging relation with said rail seat.

3. A device for the purpose indicated comprising a base plate provided on its upper face with a rail seat to preclude relative lateral movement of the base plate and an attached rail, ear plates pivotally mounted between ears carried by said base plate, said ear plates being swingable into a position in overhanging relation with said rail seat, the ear plates having depending lugs and the base plate having ribs spaced from said rail seat behind which said lugs engage, and spikes passing through openings in the ear plates and in the base plate for penetration into a tie upon which the base plate is mounted.

In testimony whereof he affixes his signature.

WILLIAM B. HILL.