Aug. 21, 1923. 1,465,324

R. H. WILKE

TIE PLATE

Filed Jan. 24, 1923 2 Sheets-Sheet 1

Fig. 1.

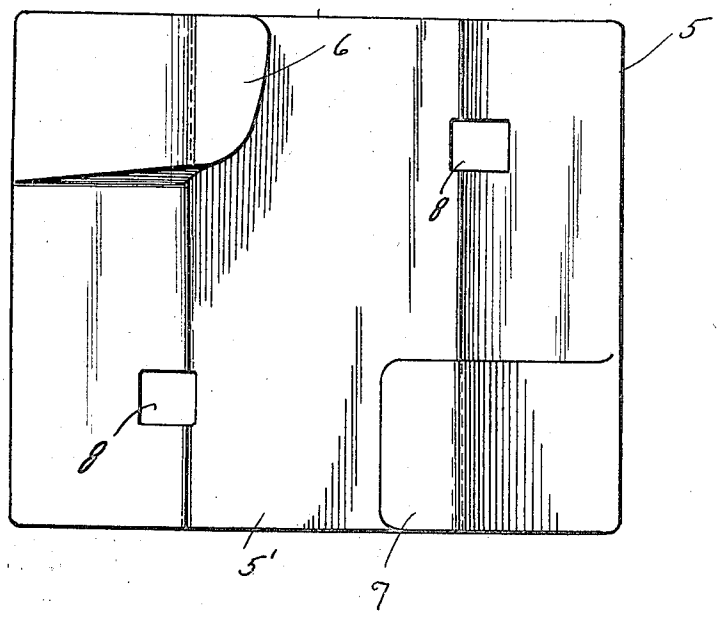
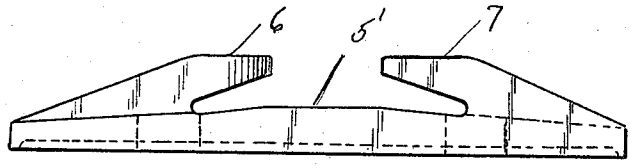


Fig. 2.



Witnesses:
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Aug. 21, 1923.

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2 Sheets-Sheet 2

Fig. 3.

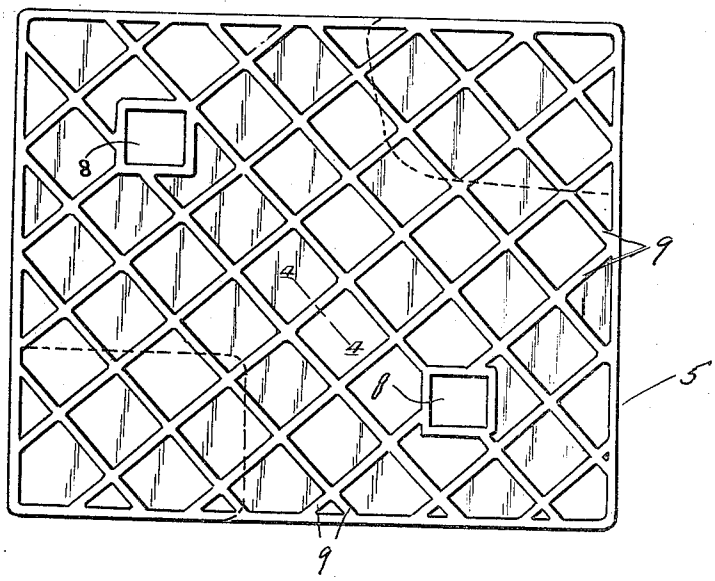
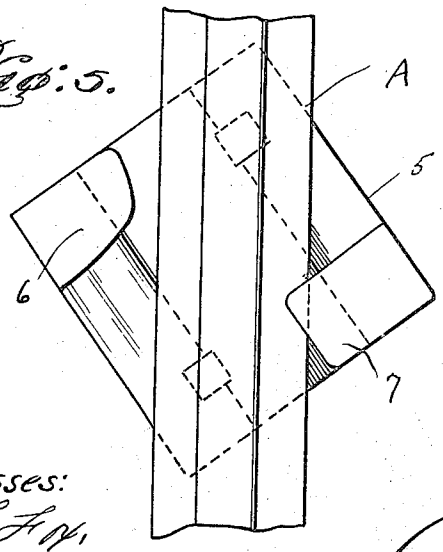


Fig. 5.



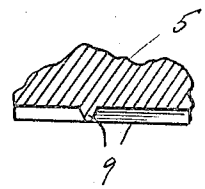


Fig. 4.

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UNITED STATES PATENT OFFICE.

RICHARD H. WILKE, OF WISCONSIN RAPIDS, WISCONSIN.

TIE PLATE.

Application filed January 24, 1923. Serial No. 614,566.

To all whom it may concern:

Be it known that I, RICHARD H. WILKE, a citizen of the United States, residing at Wisconsin Rapids, in the county of Wood and State of Wisconsin, have invented certain new and useful Improvements in Tie Plates, of which the following is a specification.

My invention relates to improvements in tie plates, and the primary object thereof resides in the provision of such an article of manufacture that may be readily positioned upon the base of a rail whereby these rails may be so secured to the tie members that the liability of the same creeping thereon is reduced to a minimum.

A further object of the invention is the provision of such a tie plate that is of extremely simple construction, comparatively inexpensive of manufacture and one that may be applied to the rail in a simple and expeditious manner.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination, and arrangement of parts as claimed.

In the drawings forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1 is a top plan view of the tie plate constructed in accordance with my invention.

Figure 2 is an end elevational view thereof.

Figure 3 is a bottom plan view of the tie plate.

Figure 4 is a fragmentary cross sectional view upon the line 4—4 of Figure 3, and

Figure 5 is what may be termed a diagrammatic view, showing the manner of positioning my tie plate upon the tread of the rail preliminary to the securing of the plate to the tie.

With particular reference to the drawings, there is shown a tie plate 5 manufactured from a single casting and being preferably square shaped. The front and rear ends of the plate 5 are formed upon opposite corners thereof with inwardly extending rail base engaging ears 6 and 7, the under surfaces of these ears being downwardly inclined as shown for purposes hereinafter described, and it is to be noted that the corners of the ear 6 are rounded as per Figures 1 and 5.

The longitudinal sides of the rail seat of the plate 5 are bevelled as more clearly shown in Figure 2 to form inclines which slope less abruptly than the under surfaces of the ears 6 and 7 and forming a central longitudinal raised portion 5′ between the said rail engaging ears 6 and 7.

The tie plate may be formed with any desired number of spike receiving openings 8 at each side of the central raised portion 5′ and the bottom surface of the said plate is formed with crossed spaced rows of tongues 9 for the purpose of biting into the wooden ties for effectively preventing any movement of the said plate upon the tie when the same is rigidly fastened thereon.

In the practical use of my tie plate, the same is positioned upon the base of a rail A in a manner shown in Figure 5, at which time, this plate is rotated so as to have the ears 6 and 7 cooperate with the central raised portion 5′ of the plate for firmly wedging the base flanges of the rail under the ears 6 and 7, thereby preventing creeping of the rail. After the plate has been positioned upon the rail, the same may be secured to the tie by driving spikes through the openings 8 into the ties, the headed ends of these spikes also engaging the base of the rail for functioning as an additional means for securing the same to the tie plate.

In view of the above description, it is believed that the advantages of a tie plate constructed in accordance with this invention will be readily appreciated by those skilled in the art, and while I have herein shown and described the preferred embodiments of the present invention, it is nevertheless to be understood that minor changes may be made therein, without departing from the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:—

1. A tie plate including a rectangular plate having a rail seat on its upper surface embodying a central longitudinal raised portion and downwardly inclined surfaces at the sides of the raised portion, and integral inwardly projecting ears upon diagonal corner portions of said plate and over-

lying said inclined surfaces to engage the base flanges of a rail, the under surfaces of said ears being downwardly inclined.

2. A tie plate including a rectangular plate having a rail seat on its upper surface embodying a central longitudinal raised portion and downwardly inclined surfaces at the sides of the raised portion, and integral inwardly projecting ears upon diagonal corner portions of said plate and overlying said inclined surfaces to engage the base flanges of a rail, the under surfaces of said ears being downwardly inclined more abruptly than the inclined surfaces of the rail seat.

In testimony whereof I affix my signature.

RICHARD H. WILKE.