

J. W. KENDRICK.
RAILWAY TIE PLATE.
APPLICATION FILED APR. 30, 1910.

1,015,325.

Patented Jan. 23, 1912.

3 SHEETS—SHEET 1.

Fig. 1.

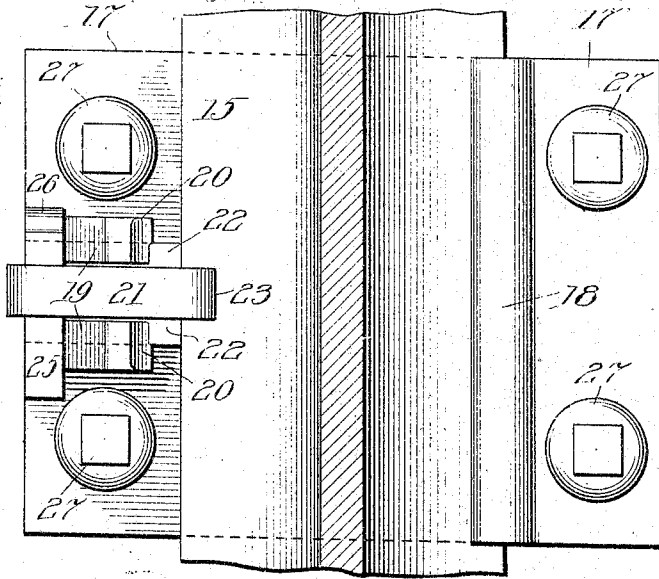


Fig. 4.

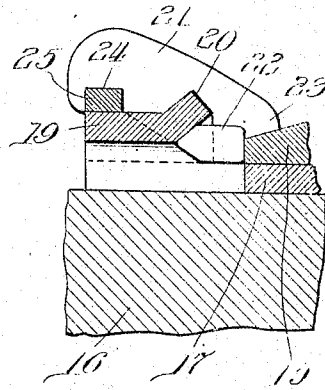


Fig. 2.

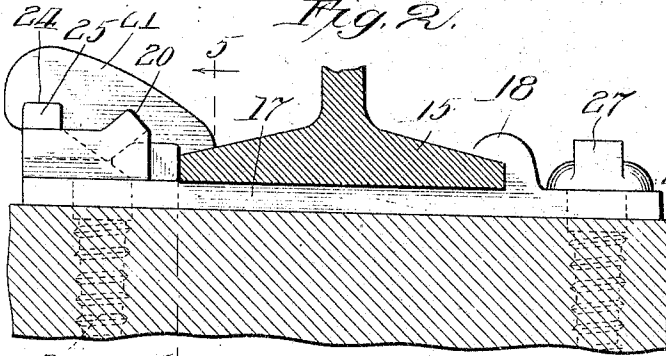


Fig. 5.

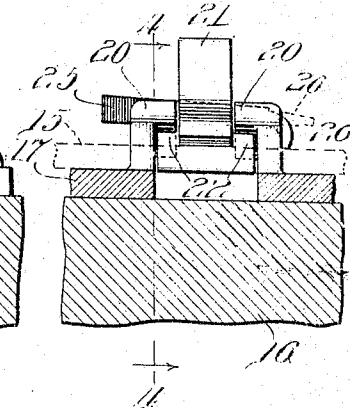
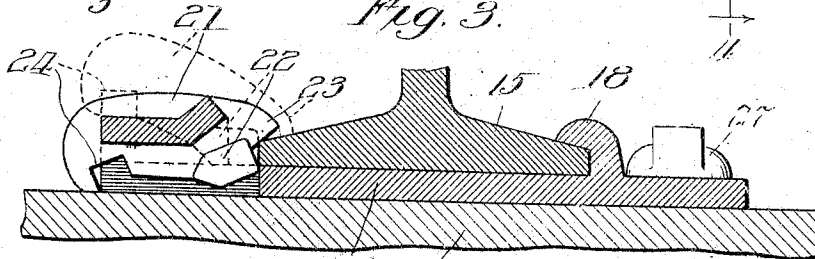


Fig. 3.



Witnesses:

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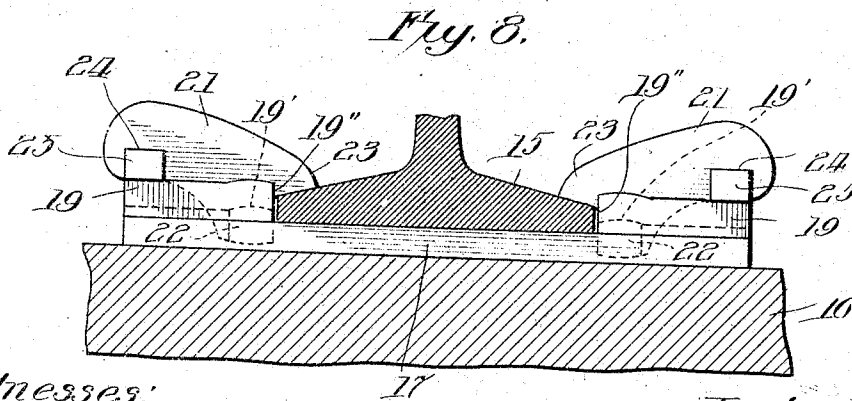
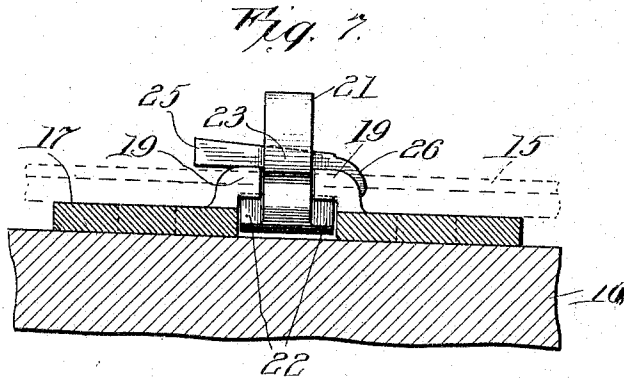
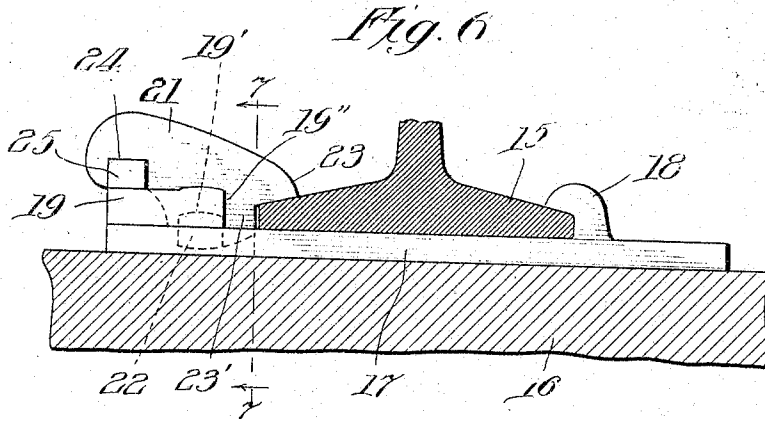
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2 SHEETS—SHEET 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN W. KENDRICK, OF CHICAGO, ILLINOIS.

RAILWAY-TIE PLATE.

1,015,325.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed April 30, 1910. Serial No. 558,577.

To all whom it may concern:

Be it known that I, JOHN W. KENDRICK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Railway-Tie Plates, of which the following is a specification.

The principal object of my invention is to provide a new and improved device for securing railway track rails in place upon the ties.

Another object of my invention is to provide for securing the rails to the tie plates.

Still another object of my invention is to provide a convenient and secure means for attaching the rails to the tie plates after the tie plates have been secured on the ties.

These objects and others will be made apparent in the following specification and claims, taken in connection with the accompanying drawings.

In these drawings I have shown a few specific embodiments of my invention, but the definition of the invention will be found in the appended claims.

Referring to the drawings—Figure 1 is a plan view of one embodiment of my invention. Fig. 2 is an elevation thereof. Fig. 3 is a similar elevation partly broken away and showing the locking member in an intermediate position. Fig. 4 is a section on the line 4—4 of Fig. 5. Fig. 5 is a section on the line 5—5 of Fig. 2. Fig. 6 is an elevation of a modified form of my invention. Fig. 7 is a section on the line 7—7 of Fig. 6. Fig. 8 is an elevation of another form in which my invention may be embodied.

The rail base 15 stands on the tie plate 17 which is secured to the tie 16 by means of screw spikes 27. In the form of my invention shown in Figs. 1 to 5 inclusive, the tie plate 17 has a lip 18 along one side under which one edge of the rail base 15 may be introduced. On the other side of the tie plate two opposed lips 19 are struck up, leaving a slot between them extending in from the edge of the tie plate. The inner ends of these lips 19 are inclined up as indicated by the reference numeral 20. The dog 21 has side lugs 22 adapted to lie under the inclined ends 20 of the lips 19. These side lugs 22 also abut against the edge of the rail base 15 crowding the opposite edge thereof under the lip 18. The dog 21 has a tip 23 that overlies the edge of the rail

base 15. At its other end the dog 21 has a notch 24 into which the wedge or key 25 may be driven across above the lips 19. This key 25 is malleable and its tip 26 may be hammered down from the dotted line position 26' in Fig. 5, so as to lock the key 25 in place.

The tie plates 17 are attached to the ties at the gage distance by means of the screw spikes 27 before the ties are laid. Before the dogs 21 are put in place, the rail 15 is placed on the tie plates and the edge of the rail base 15 is slipped under the lip 18. Then the dog 21 is introduced in the slot between the lips 19, being slipped in horizontally from the left to the position shown in Fig. 3. From this position the dog 21 is raised to the dotted line position; then a key 25 is driven into the notch 24. When this key has been driven as far as it will go, its tip 26 is hammered over as shown in Fig. 5. It will be seen that the lugs 22 crowd against the inclined ends 20 of the lips 19 and also push in an opposite direction horizontally against the edge of the rail base 15, thus crowding the rail base 15 tightly between the lip 18 and these lugs 22. Moreover, the tip 23 of the dog 21 locks down on the edge of the rail base 15.

Referring now to Figs. 6 and 7, it will be seen that the side lugs 22 are farther back from the rail base and lie in shallow sockets 19' in the ends of the lips 19. In this case the dog 21 has a part 23' which lies against the edge of the rail base. In this modification, the ends of the lips 19 are designated 19''. These ends must be spaced far enough away from the rail base so as to permit the rail base to be slipped horizontally under and out from under the lip 18. In this respect this modification is like that of Figs. 1 to 5 inclusive.

Referring now to Fig. 8, it will be seen that in this case there is no fixed lip 18 on one side and the lips 19 have their ends 19'' close against the edges of the rail base. In this case before the dogs 21 are put in place, the rail 15 can be placed or removed by moving it in or out vertically.

I claim:

1. In a device of the class described, a rail, a tie plate thereunder having opposed spaced lips on its upper surface, a member engaging the said lips and also engaging the rail base, said lips being inclined where they are

engaged by said member, the direction of the inclination of such lips being in a plane transverse to the rail and a key to lock the said member.

2. In a device of the class described, a tie plate, a rail thereupon, a fixed lip on one side of the tie plate to engage an edge of the rail base, a pair of opposed lips on the other side of the tie plate extending perpendicularly from the edge of the tie plate toward the rail base and having a slot between them, a member adapted to lie in said slot and engage these lips and also engage the adjacent edge of the rail base, and means to force the part of said member that engages the rail base downwardly in an inclined direction against the edge of the rail base.

3. In a device of the class described, a tie plate, a rail thereupon, means on one side of the tie plate to engage an edge of the rail base, a pair of opposed lips on the other side of the tie plate extending perpendicularly from the edge of the tie plate toward the rail base and having a slot between them, a member adapted to lie in said slot and engage these lips and also engage the adjacent edge of the rail base, and means to force the part of said member that engages the rail base downwardly in an inclined direction against the edge of the rail base.

4. In a device of the class described, a rail, a tie plate thereunder having opposed spaced lips on its upper surface, the inner ends of these lips being upwardly inclined, a member lying between the said lips and having lugs engaging their inclined ends, said mem-

ber also engaging the rail base, and a key to lock said member.

5. In a device of the class described, a rail, a tie plate thereunder having opposed spaced lips on its upper surface, a member having lugs projecting under the said lips, said member also engaging the rail base, and a key to lock the said member.

6. In a device of the class described, a rail, a tie plate thereunder having opposed spaced lips on its upper surface, a member engaging the said lips and also engaging the rail base, said member having a notch, and a key in said notch to lock the said member.

7. In a device of the class described, a rail, a tie plate thereunder having opposed spaced lips on its upper surface, a member engaging the said lips and also engaging the rail base, and a key to lock the said member, said key being malleable and having its end adapted to be hammered down to secure the key in place.

8. In a device of the class described, a tie plate, a rail thereupon, said tie plate having an opening therethrough, the edges of said opening being struck up, means engaging the edges of said opening and also engaging the edge of the rail base, and means to tighten and lock the said first-mentioned means in engagement with the said rail base.

In testimony whereof, I have subscribed my name.

JOHN W. KENDRICK.

Witnesses:

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FLORENCE A. FLORELL.