

G. A. HASSEL.
RAILWAY TIE PLATE.
APPLICATION FILED JAN. 30, 1909.

949,270.

Patented Feb. 15, 1910.

2 SHEETS—SHEET 1.

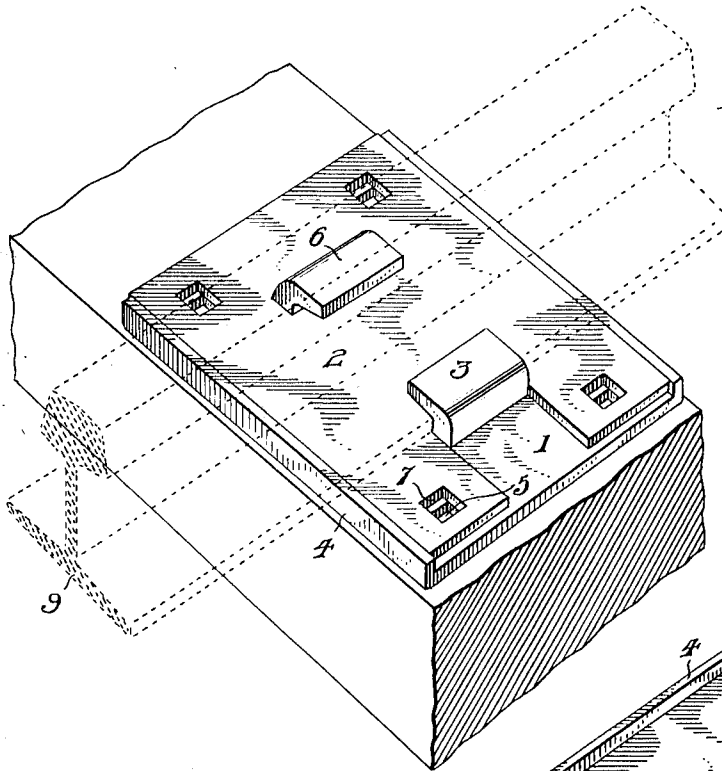


Fig. 1.

Fig. 2.

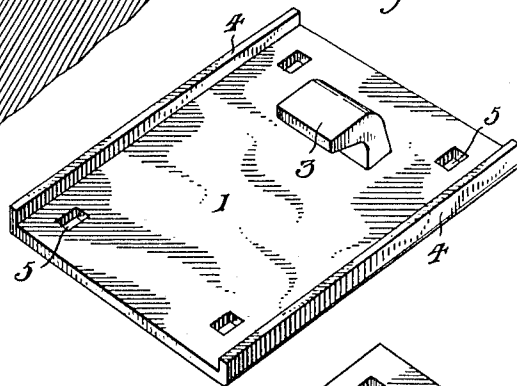
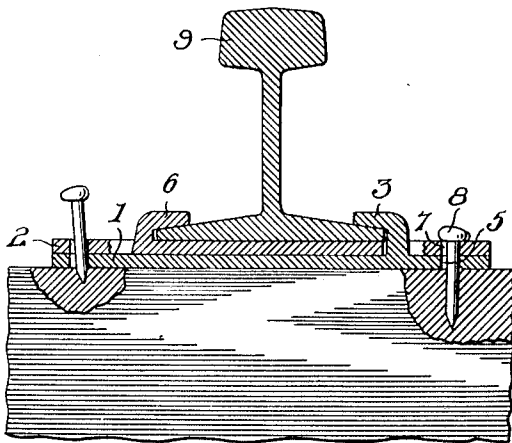


Fig. 3.

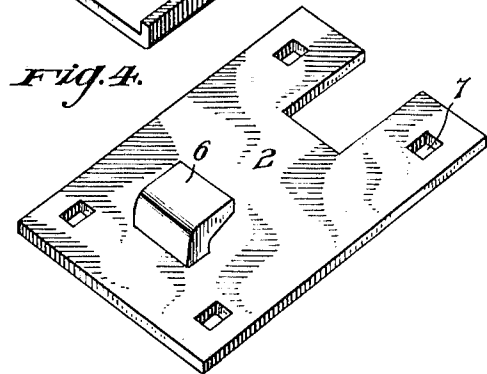


Fig. 4.

witnesses:

J. C. Hoffman,
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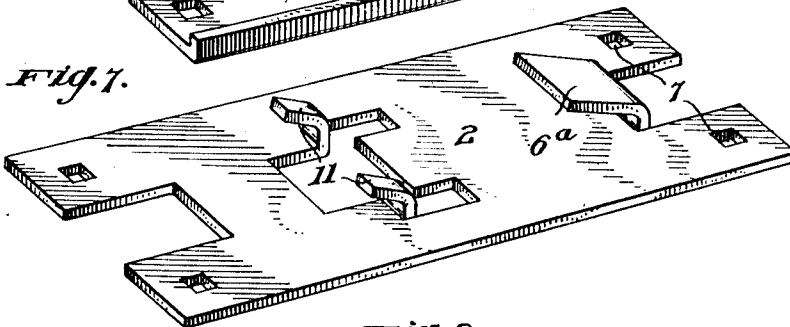
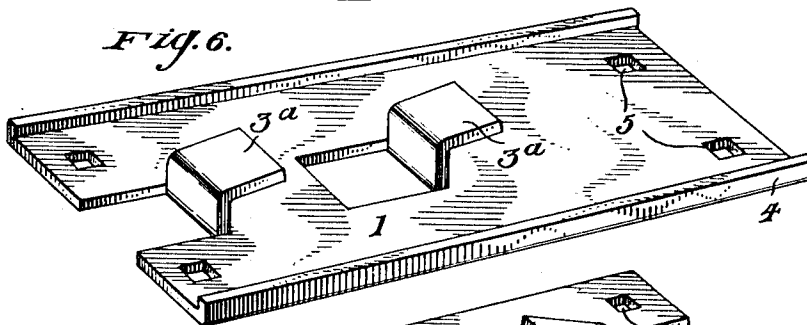
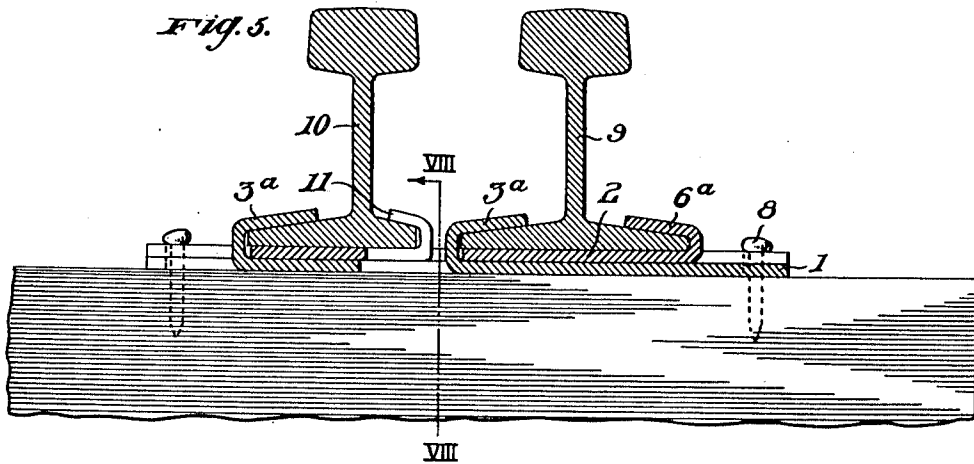
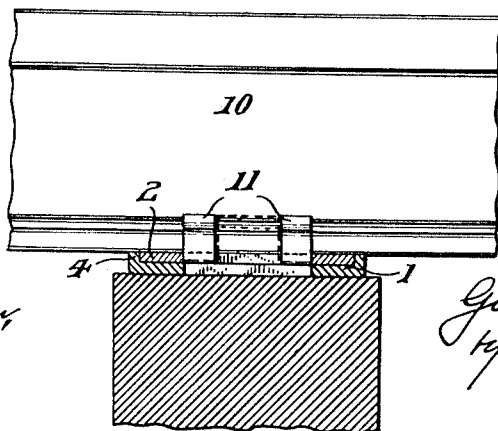


Fig. 8.



witnesses:

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UNITED STATES PATENT OFFICE.

GUSTAV A. HASSEL, OF McKEESPORT, -PENNSYLVANIA, ASSIGNOR TO PITTSBURGH TRACK SPECIALTY COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF DELAWARE.

RAILWAY-TIE PLATE.

949,270.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed January 30, 1909. Serial No. 475,286.

To all whom it may concern:

Be it known that I, GUSTAV A. HASSEL, resident of McKeesport, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Tie Plates, of which the following is a specification.

The object of my invention is to provide a new and improved railway tie-plate.

In the accompanying drawings, which illustrate applications of my invention, Figure 1 is a perspective view of a metallic tie-plate embodying my invention shown in connection with a railway-tie and rail; Fig. 2 a vertical sectional view taken transversely through the rail and longitudinally of the tie; Figs. 3 and 4 detail perspective views of the two members constituting the tie-plate; Fig. 5 a view similar to Fig. 2, showing an application of my invention in connection with a guard-rail; Figs. 6 and 7 perspective views of the members constituting the tie-plate of the form of Fig. 5; and Fig. 8 a part elevational view and a part sectional view, the section being taken on line VIII—VIII of Fig. 5.

As illustrated and as preferred my tie-plate consists of two main members or parts 1 and 2. In the form of Fig. 1, the lower-member 1 is adapted to receive the upper-member 2 and is provided with an engaging-member 3 and with longitudinally extending side flanges 4, running the full length of member 1. In addition to the parts mentioned member 1 is formed with spike-receiving-openings 5.

The upper-member 2 is provided with an engaging-member 6, similar to the engaging-member 3 of part 1, and is also formed with openings 7, which openings, when the two main-members are assembled and before the spikes 8 are inserted, partly register with the openings 5 of member 1, as shown by Fig. 1. Member 2 is also formed with a recess or cutaway portion 2^a adapted to receive a portion of member 3 of part 1. The walls of this recess relieve the side-flanges of twisting strains and cooperate with said side-flanges to prevent twisting of the plates.

Both of the members 1 and 2 extend under and project from the base of a rail and are of substantially the same dimensions, thereby providing a solid even bearing for the rail and presenting a firm and even tie-contacting surface.

The respective engaging-members 3 and 6 are designed to engage the base of a rail 9, on opposite sides of the web of the rail, or in case fish-plates are employed, to engage the same on opposite sides of the web of a rail or the webs of two adjacent rails.

The size of the respective members 3 and 6 of the two main members may be varied to suit different conditions, and, if lengthened considerably, may be employed at the meeting ends of two adjacent rails in place of the well known fish-plates.

Driving the spikes into position moves or slides the upper-member on the lower-member slightly or until the ends of the respective members are flush with each other or until the openings 5 and 7 register.

In the form of Fig. 5, I have shown a form of my invention particularly designed to be employed in connection with a guard-rail 10. In this form, the lower-member 1 is provided with two engaging-members 3^a, one member 3^a, being adapted to engage the guard-rail and the other the rail 9. The upper-member in this form is provided with a rail engaging-member 6^a and with engaging-members 11, for the guard-rail. Members 11 are spaced apart to permit one of the members 3^a to be passed between said members 11 when the parts are being assembled.

Attention is particularly called to the fact that in my construction I do not employ a spike or spikes between the guard-rail and the main-rail.

What I claim is:

1. A tie-plate consisting of two superposed members constituting the body-portion, each member being provided with a rail engaging-member, one member formed with a recess to receive a rail engaging-member the walls of which are in contact with the sides of the rail engaging-member, one member formed with side flanges adapted to engage the other member, and a spike-receiving-opening formed in each member.

2. A tie-plate comprising an upper-member formed with a rail-engaging-member and a recess, a lower-member formed with a rail-engaging member adapted to enter the recess of the upper-member, and with side flanges extending the entire length of the lower-member, and means for securing the upper and lower-members together and to a tie.

3. A tie-plate consisting of an upper-

member provided with an engaging-member, a lower-member provided with an engaging-member, said upper and lower members of substantially the same dimensions and adapted to overlap under the base of a rail and project from the sides of a rail, one member formed with side flanges adapted to engage the other member and each formed with an opening, said openings adapted to be brought into register.

4. A metallic tie-plate consisting of an upper separable member provided with an engaging-member and formed with a spike-receiving-opening, a lower separable member provided with an engaging-member and formed with a spike-receiving-opening, said members arranged to overlap under the base of a rail and side flanges on the lower member extending the entire length of the member and having their upper edges flush with the upper-member.

5. The combination with a rail, of a tie-plate consisting of an upper-member provided with an engaging-member, arranged to engage the rail on one side of its web, a lower-member provided with an engaging-member in line with the first engaging-member arranged to engage the rail on the opposite side of its web, and side flanges adapted to engage the edges of the upper-member, said upper and lower-members overlapping under the base of the rail and projecting therefrom.

6. The combination with a rail and a guard-rail, of a tie-plate consisting of two members constituting the body-portion, each member provided with means for engaging the rail and the guard-rail.

7. The combination with a rail and a guard-rail, of a tie-plate consisting of an

upper-member and a lower-member constituting the body-portion, each member provided with means for engaging the rail and the guard-rail, said lower-member having side flanges extending the entire length of said member.

8. The combination with a rail and a guard-rail, of a tie-plate consisting of an upper-member formed with a rail engaging-member and a divided guard-rail engaging-member, a lower-member formed with rail and guard-rail engaging-members, and side flanges.

9. The combination with a rail and a tie, of a tie-plate consisting of an upper-member formed with a rail engaging-member and a recess, a lower-member formed with a rail engaging-member adapted to enter the recess of the upper-member, and with side flanges, said members overlapping under the base of the rail and each formed with a spike-receiving-opening, said opening arranged to be drawn into register by means of a spike driven through the openings.

10. The combination with a rail and a tie, of a tie-plate consisting of an upper-member formed with a rail engaging-member, a lower-member formed with a rail engaging-member and side flanges, said members overlapping under the base of the rail and each formed with a spike-receiving-opening, said openings arranged to be drawn into register by means of a spike driven through the openings.

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

GUSTAV A. HASSEL.

Witnesses:

A. C. WAY,

W. G. DOOLITTLE.