E. POSSON.

TIE PLATE.

APPLICATION FILED APR. 5, 1910.

1,003,505. Patented Sept. 19, 1911.

Fig. 1.

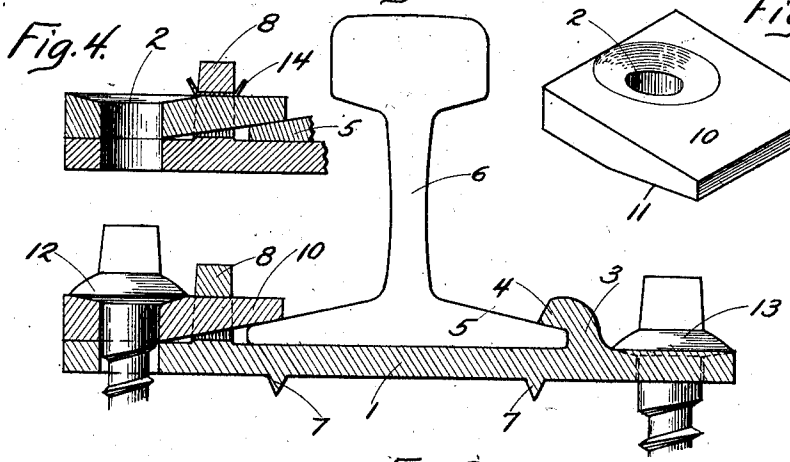


Fig. 4.

Fig. 5.

Fig. 2.

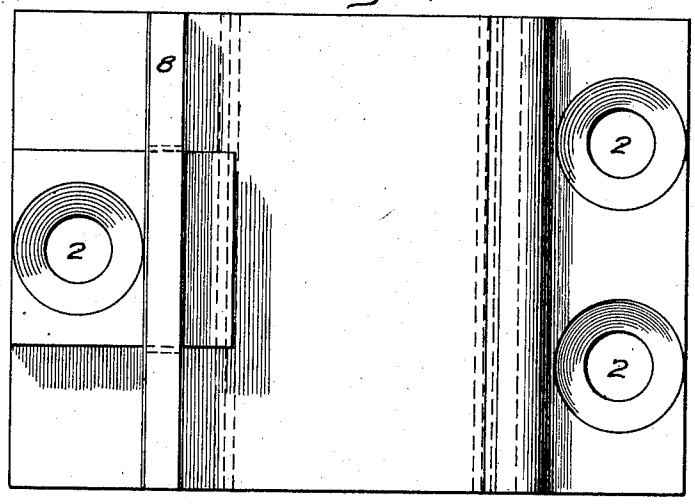


Fig. 7

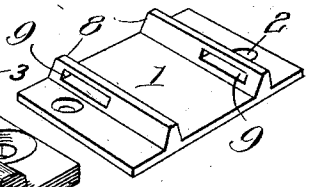


Fig. 6.

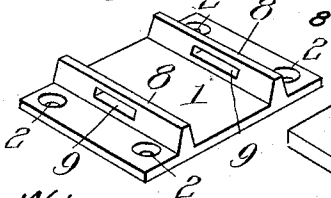
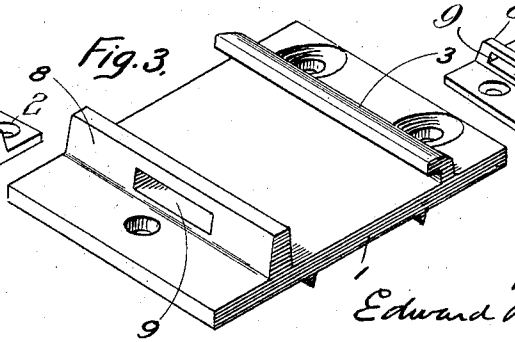


Fig. 3.



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TIE-PLATE.

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To all whom it may concern:

Be it known that I, EDWARD POSSON, 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 Tie-Plates, of which the following is a specification.

The object of my invention is to provide a tie plate of simple and efficient form.

More particularly stated, my object is to construct such a device with a fixed and a movable shoulder for engaging the face of an attached rail, and to provide means whereby the movable shoulder may be forced into secure engagement with the rail base and held in such engagement against the possibility of accidental displacement.

In the drawings—Figure 1 is a cross sectional view of my improved tie plate with the rail in place. Fig. 2 is a plan view of the tie plate. Fig. 3 is a perspective view of the tie plate, the wedge which forms a part thereof being omitted from this view. Fig. 4 is a cross section corresponding to the left-hand part of Fig. 1 with the spike removed and showing a shim over the wedge. Fig. 5 is a perspective view of the wedge. Figs. 6 and 7 are perspective views of modified base plates.

The tie plate comprises a base 1 provided with spike holes 2, of which there are two upon one side and one upon the other, referring now to the modification of Figs. 1, 2, and 3. An integral rail clamp 3 extends from end to end of the tie plate upon one side and is provided with an overhanging shoulder 4 formed to tightly embrace the upper side of the base 5 of a rail 6. On its lower side the base plate is also preferably provided with spurs 7 to assist in holding the same securely to the underlying tie. Opposed to the rail clamp 3 and spaced therefrom sufficiently for the reception of a rail is an upwardly projecting lug 8 provided with a rectangular perforation 9. A wedge beveled upon its lower side at 11 is formed to fit the perforation 9 and is provided with a spike hole 2. The wedge is so proportioned that when driven through the perforation 9 into binding contact with the base 5 of a rail the spike hole 2 therein will register with a corresponding spike hole in the base plate 1. The effect of driving the wedge 10 home, as illustrated in Fig. 1, is to drive the base 5 of the rail into firm engagement with the rail clamp 3 and to effect a firm binding contact between the wedge 10 and the opposite side of the rail base. When the parts are driven to this position, spike 12, passing through the wedge 10 and base plate 1, will be driven home, the spikes 13 upon the opposite sides of the base plate having previously been driven. In this manner the rail is firmly held to the tie plate and the wedge 10 is held in engagement with the rail base by one of the spikes which secures the entire structure to the tie. In some instances, a shim 14 may be employed, as illustrated in Fig. 4, in case a tight fit is not obtained without using the same. Ordinarily, however, the manufacture of the parts will be found sufficiently accurate to dispense with the use of a shim.

It will be obvious that the precise form of the various parts illustrated and described herein may be departed from to a considerable extent while still embodying my invention. In Fig. 6 there are similar lugs 8 on both sides of the rail base, with two spike holes on each side. In Fig. 7 there are similar lugs 8 on both sides of the rail base, with only one spike on each side.

What I claim is:

1. In a device of the class described, a base plate provided with spike holes, a rail clamp extending upward from said base and having a shoulder spaced therefrom, a lug extending upward from said base plate and provided with a perforation, and a wedge provided with a perforation, said wedge being so proportioned that when forced through said perforated lug into binding contact with the base of a rail placed between said rail clamp and lug the perforation in said wedge will register with one of the spike holes in said base plate.

2. In a device of the class described, a base plate, a shoulder integral therewith to engage the base of a rail, a wedge forming an opposing shoulder, a seat for said wedge secured to said base plate, and means for holding said wedge in binding contact with said rail, said wedge being held in place by one of the spikes that holds said base plate.

3. In a device of the class described, a base plate, and lugs projecting upwardly and inwardly from said base plate and adapted to overlie the base of a rail, one of said lugs being fixed and the other movable, said movable lug being held by one of the spikes that holds said base plate.

4. In a device of the class described, a base plate, a lug projecting upwardly at one side thereof and adapted to have one side edge of a rail base lie on the plate beside it, said lug having a horizontally extending slot therethrough, a wedge for said slot, and means for locking said wedge in position.

5. In a device of the class described, a base plate, a lug projecting upwardly at one side thereof and adapted to have one side edge of a rail base lie on the plate beside it, said lug having a horizontally extending slot therethrough, and a wedge for said slot, said wedge and base plate having registering holes when assembled to receive a screw spike.

6. In a device of the class described, a base plate, a shoulder integral therewith to engage the base of a rail at one edge, and a wedge adapted to engage said base at the opposite edge and to be held in position by a screw spike.

7. In a device of the class described, a base plate, a shoulder integral therewith to engage the base of a rail at one edge, a wedge adapted to engage said base at the opposite edge and to be held in position by a screw spike, and a second shoulder adjacent said opposite edge having an aperture to receive said wedge and hold it in binding contact with said rail.

8. In a device of the class described, a base plate having a hole to receive a spike, a movable wedge adapted to engage the edge of a rail and having a hole registering with a hole in said plate, and a socket to receive the head of said spike.

In testimony whereof, I have subscribed my name.

EDWARD POSSON.

Witnesses:
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