May 29, 1928.

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COMBINED TIE PLATE AND RAIL CLAMP

Filed July 18, 1927

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This invention relates to a combined tie plate and rail clamp, one of the objects being to provide a plate adapted to extend under both rails of a track and so shaped as to constitute a means for holding the rails properly spaced apart, thereby obviating the necessity of employing a gage when laying the rails.

A further object is to provide a device of this character which will tightly grip the rails and hold them firmly against displacement without requiring the use of bolts such as commonly employed for fastening the rails.

Another object is to provide a device of this character the parts of which can be assembled readily.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings, the preferred form of the invention has been shown. In said drawings:

Figure 1 is a plan view of the device in use.

Figure 2 is a central vertical longitudinal section.

Figure 3 is a perspective view of one of the plate members.

Figure 4 is a perspective view of the other plate member.

Figure 5 is a section on line 5—5, Figure 1.

Referring to the figures by characters of reference 1 designates a plate having one end reduced in thickness at 2 and provided with apertures 3 for the reception of spikes 4 or the like whereby the plate can be secured to a tie T. Adjacent this reduced end the plate is formed with a transverse recess 5 the width of which is greater than the width of the base B of a rail R. One side of the recess 5 is undercut as at 6 to receive one of the base flanges of the rail while the other side of the recess is also undercut to provide an upwardly inclined wall 7. That end of the plate 1 remote from the reduced portion 2 is recessed as at 8 to receive a base flange of a rail, the distance between this end of the plate and the undercut wall 6 of the recess 5 being such that when two rails are positioned with base flanges in engagement with the said portions, said rails will be spaced apart correctly for use. A longitudinal channel 9 is formed in the bottom face of the plate 1 and intersects the bottom of the recess 5, this channel extending from under the recessed or undercut wall 6 to the remote end of the plate where it intersects the recess 8.

The other member of the device consists of a plate 10 the width of which is slightly less than the width of the channel 9. This plate is provided at one end with a head 11 having a recess 12 extending thereinto for the reception of a base flange of a rail R, that side of the head remote from the recess being undercut or beveled as shown at 13. This head is adapted to extend into the recess 5 when plate 10 is seated in channel 9.

An enlargement 14 is provided at the other end of the plate 10 and has an apertured flange 15 for the reception of spikes or the like. This enlargement has a thickened portion 16 formed with a recess 17 adapted to receive the outer base flange of a rail.

As shown particularly in Figure 1 the undercut or beveled walls 7 and 13 converge toward one side of the tie plate. Thus a beveled wedge 18 can be inserted between the said walls when driven endwise, will serve to force the head 11 toward the rail R engaged thereby and at the same time draw the enlargement 14 toward the adjacent engaged rail R. Thereafter the parts can be held securely together by fastening them to a tie with the usual spikes, one spike 19 being driven through registering apertures 20 in the plate 1 and the wedge 18.

In assembling the two parts of the tie plate it is merely necessary first to place the two rails in engagement with the proper portion of the plate 1. Thereafter the plate 10 is inserted under the plate 1 until the head 11 arrives within the recess 5 whereupon further sliding movement of the plate 10 in one direction will bring the recesses 12 and 17 where they will receive the adjacent flanges of the rails. Thereafter the parts are fastened as already explained.

What is claimed is:

1. A combined tie plate and rail clamp including a member having spaced portions for engagement with the base flanges at one side.
of separate rails resting on the member, there being a transverse recess in said member for receiving one of the rails and a longitudinal channel in the bottom of said member opening into the recess, and a second member having spaced rail engaging portions for engagement with the other flanges of the said rails, one of said portions being insertible upwardly into the recess in the first member, and a wedge insertible transversely of and between one wall of the recess and said inserted rail engaging portion, thereby to shift all of the rail engaging portions to bind them upon rails inserted therebetween.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

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