W. F. & E. PERSBACKER.

RAIL ANTICREEPER AND TIE PLATE.

APPLICATION FILED JAN. 11, 1912.

1,044,236.

Patented Nov. 12, 1912.

FIG. 4

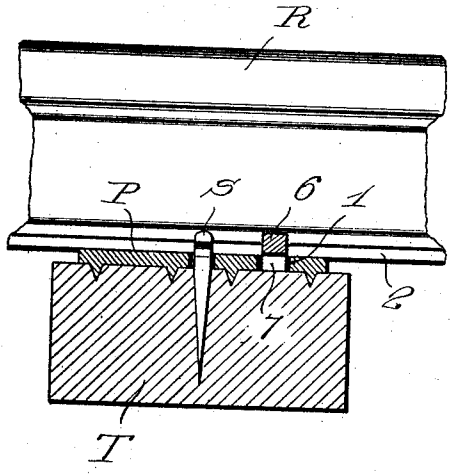


FIG. 1

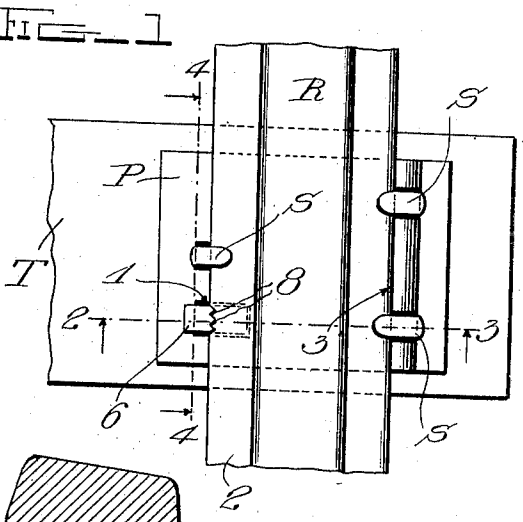


FIG. 2

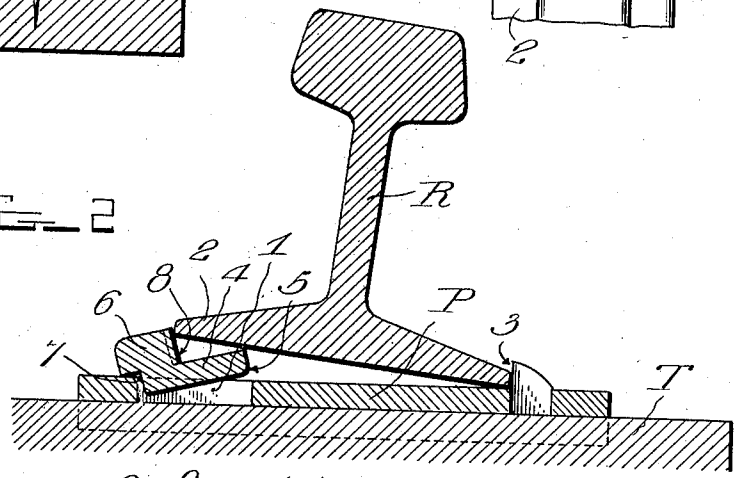


FIG. 3

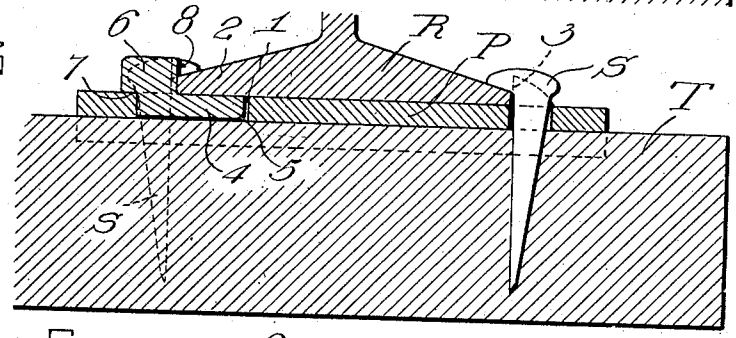
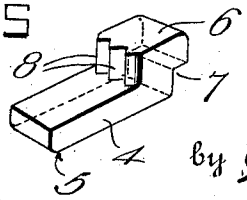


FIG. 5



Witnesses:

C. [illegible]

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UNITED STATES PATENT OFFICE.

WALTER F. PERSBACKER AND EDWARD PERSBACKER, OF DICKSON CITY, PENNSYLVANIA.

RAIL-ANTICREEPER AND TIE-PLATE.

1,044,236. Specification of Letters Patent. Patented Nov. 12, 1912.

Application filed January 11, 1912. Serial No. 670,614.

To all whom it may concern:

Be it known that we, WALTER F. PERSBACKER and EDWARD PERSBACKER, citizens of the United States, residing at Dickson City, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Anticreepers and Tie-Plates; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railway ties and fasteners, and more especially to the fastening devices used between the base of the rail and the tie; and the object of the same is to produce an extremely simple device of this character capable of being put in place without the use of special tools and which, when pressed to its seat by the weight of the rail, will prevent the latter from lateral movements, or from "creeping" longitudinally. This and other objects are accomplished by the construction hereinafter more fully described and claimed, and as shown in the drawings wherein—

Figure 1 is a plan view of a portion of a rail, shown as mounted upon one end of a tie by means of an ordinary tie plate, three spikes, and our improved anticreeper. Figs. 2 and 3 are cross sections on the line 2—3 of Fig. 1 and on an enlarged scale, Fig. 2 showing the rail as being put into place and Fig. 3 showing the parts in the position they assume after the rail is in place and one of the spikes driven into the tie. Fig. 4 is a vertical section on the line 4—4 of Fig. 1, and Fig. 5 is an enlarged perspective detail of the device forming the subject matter of the present invention.

In the drawings the letter R designates a rail, whose base is shown as resting upon the usual tie plate P which latter rests upon the tie, T, and S, S are the ordinary spikes driven through holes in the plate into the tie with their heads overlapping the base of the rail to hold all parts in position. It is well known that the excessive jar to which the parts are subjected often loosens and finally dislodges some of the spikes with occasional disastrous results; and that, whether the spikes are loosened or dislodged or not, the rails sometimes "creep" longitudinally.

The object of our present invention is to provide an extremely simple fastening device coacting with the ordinary plate P and spike S for readily and quickly locking the rail R to the plate P so that it cannot become loose laterally even though the spikes should be removed, and it cannot creep longitudinally. To this end the plate is provided with a rectangular hole 1 so disposed as to lie under one edge of the rail base 2 and preferably near that edge of the plate which is opposite its flange 3.

In Fig. 5 is shown in perspective view our fastener which by preference is made of steel or other material which is harder than the base of the rail. The same has a flat rectangular base 4 of a size to fit loosely within the hole 1, one end being rounded off at its lower corner as shown at 5, and rising from its other end is a knee 6 also preferably rectangular in plan view and of the same width as but less length than said base 4. The outer end of this knee overhangs this end of the base to produce a shoulder 7, and the inner end of the knee is provided with a series of upright sharp teeth 8. By preference the entire fastener is made from one piece of metal suitably tempered after its formation.

In use the plate P is laid upon the tie T with or without one of the spikes S at the right side of Fig. 1 to hold it in position, and the rail R is brought into place and its base 2 at one edge rested against the flange 3 of the plate P. Before the final spiking the rail is tipped slightly outward as shown in Fig. 2 and one of our improved fasteners inserted as there illustrated, its base 4 passing under the base 2 of the rail and dropping into the hole 1 so that the shoulder 7 rests on the plate P outside the hole 1, the teeth 8 stand against the edge of the rail base 2, and the inner end of the fastener base 4 rests beneath the bottom of the rail. When the parts reach the position here illustrated, the rail will be maintained in its tilted position by four points of contact, two of them between the rail and the fastener and the other two between the fastener and the plate. Assuming that fasteners have been thus disposed throughout the entire length of the rail being put into position, when the higher edge of the rail base 2 is pressed downward the rounded corner 5 of the fastener passes into the inner end of the hole 1 and the parts drop to the position shown in Fig. 3,

the teeth 8 meanwhile indenting the edge of the rail base 2 as shown in Fig. 1. Thereafter the remaining spikes S are applied in the customary manner, and it will be found impossible for the rail to move edgewise or sidewise because it is prevented from movement in one direction by the flange 3 and in the other direction by the fastener. Moreover it will be found to be impossible for the rail to creep longitudinally, because the teeth 8 indent the edge of the rail base 2 and the shoulder 7 abutting against the outer end of the hole 1 holds the teeth permanently in such engagement. The weight of the rail and of the rolling stock upon it prevents the rise of the rail and disconnection of parts, even though the spikes should become loose or lost out.

Thus is produced an extremely simple rail fastener possessing the many advantages of being easy and cheap to make, easy and quick to apply, and efficient when in place for preventing movements of the rail in various directions.

What is claimed as new is:

In a rail fastener, the combination with a plate having a rectangular hole whose end walls are vertical; of the fastener comprising a rectangular base of a size to fit said hole and having one end rounded off at its lower corner, a knee rising from and integral with the other end of said base and overhanging the same to produce a shoulder, and upright teeth at the inner end of the knee.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

WALTER F. PERSBACKER.
EDWARD PERSBACKER.

Witnesses:
ALBERT R. SMITH,
THOMAS E. WILMOT.