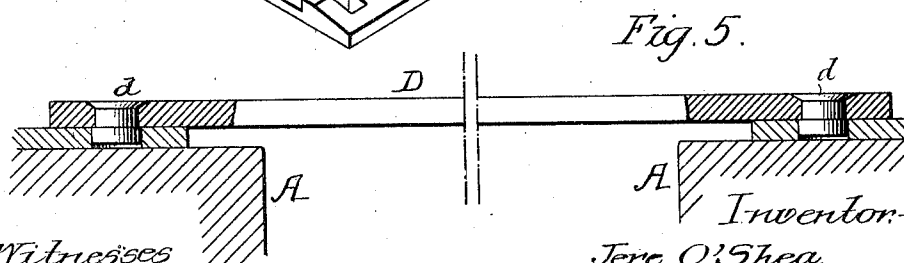
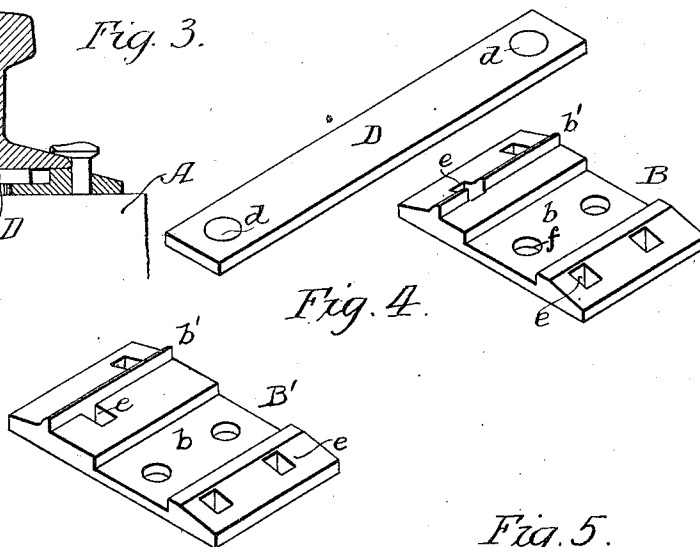
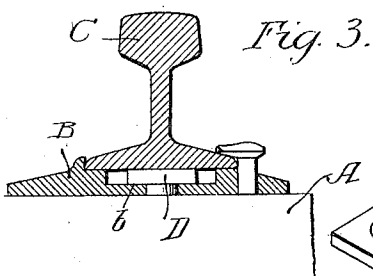
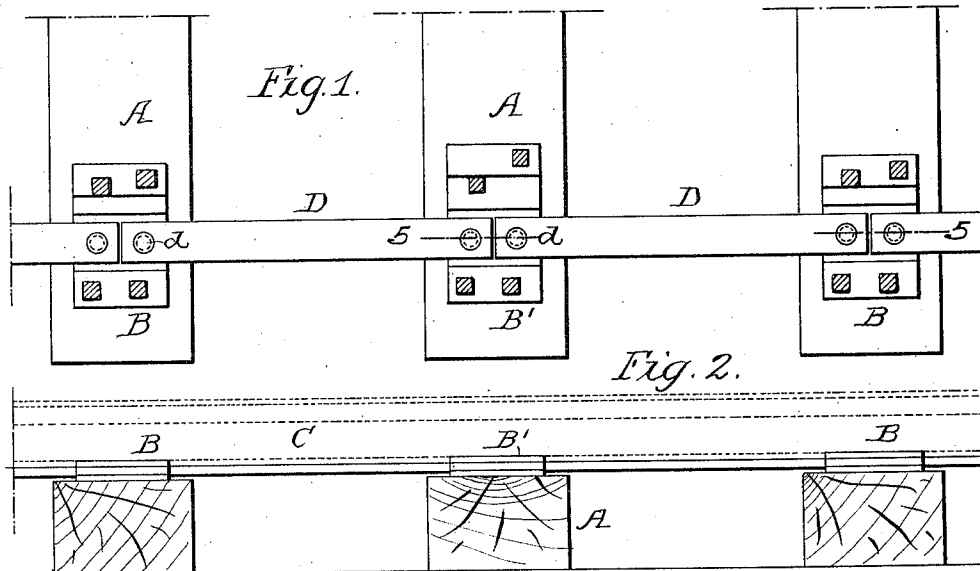


J. O'SHEA.
 ANTICREEPING DEVICE FOR TIES.
 APPLICATION FILED DEC. 28, 1911.

1,038,975.

Patented Sept. 17, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

JEREMIAH O'SHEA, OF PHILADELPHIA, PENNSYLVANIA.

ANTICREEPING DEVICE FOR TIES.

1,038,975.

Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed December 28, 1911. Serial No. 688,282.

To all whom it may concern:

Be it known that I, JEREMIAH O'SHEA, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Anticreeping Devices for Ties, of which the following is a specification.

The object of my invention is to provide means for preventing the creeping of railway ties and also to prevent the creeping of the rails on the ties. This object I attain in the following manner, reference being had to the accompanying drawing, in which:—

Figure 1, is a sectional plan view showing a series of ties connected together according to my invention; Fig. 2, is a side view showing a rail in dotted lines; Fig. 3, is a transverse sectional view; Fig. 4, is a detached perspective view showing two tie plates and the connecting bar; and Fig. 5, is an enlarged longitudinal sectional view on the line 5—5, Fig. 1.

A represents wooden ties in the present instance, but metal or concrete ties may be used without departing from the essential features of the invention.

B, B' are the tie plates mounted on each tie and upon which rest the rails C. Each tie plate has a transverse recess *b* and at one side of the tie plate a rib *b'* against which rests the base flange of the rail. The tie plates have holes *e* for the spikes which secure the rails and the plates to the ties, and the tie plates are perforated at *f* for the reception of the pins or projections *d* on the connecting bar D. This connecting bar extends from one tie plate to the other directly under the rail in the present instance, and is held in engagement with the tie plates by the rail. Thus the several ties are connected together independently of the rails, as it will be understood that the spikes while holding the rails in alinement on the tie plates they do not prevent the longitudinal movement of the rails on the tie plates. The rails are only notched at the joints to receive the spikes; special tie plates being used for this purpose, such as illustrated at B', Fig. 4; one of the spike perforations of this tie plate being set in past the flange *b'* so as to enter the notch in the rail.

It will be understood that the plates illustrated in the drawing are made to rest upon wooden ties, and these plates may be modified

to accommodate ties of different shapes without departing from the invention.

By the above description it will be seen that I connect two or more ties together by the use of the bar D; the bars connecting one tie plate directly with another, and, as these tie plates are firmly secured to the ties, any strains exerted, which would tend to move one tie out of position, would be resisted by the other ties to which it is directly connected.

My invention is particularly useful for connecting the ties at switches; crossings; and frogs where it is essential that the track structure shall be practically a unit.

My invention is applicable for each side of a splice or rail joint, and it can also be used in connection with down grades, or, in fact, any place where it is desired to firmly hold one or more ties against lateral movement on the bed.

I claim:—

1. The combination of two ties, a tie plate on each tie, each tie plate being recessed and having perforations; and a bar extending from one tie plate to the other and fitting within the recess of each tie plate, said bar having projections adapted to engage respective perforations in the tie plates.

2. The combination of two ties; a tie plate on each tie; each tie plate being recessed and having perforations; with a bar extending from one tie plate to the other and located in the recess and having a projection at each end adapted to enter the perforations in the tie plates.

3. The combination of a series of ties; tie plates rigidly mounted thereon, each tie plate having a transverse recess and having perforations in the bottom of the recess; a bar extending from one tie plate on one tie to a tie plate on another tie, the ends of the bar being mounted in the recesses of the tie plate and having projections entering the perforations in the tie plate, whereby the two tie plates are connected together; a rail resting on the tie plates and extending over the recesses and the bar, said tie plates having spike openings through which the spikes extend which retain the rails in position.

4. The combination of a series of ties; a tie plate on each tie, said tie plates having spike holes; spikes extending through the spike holes and into the ties, whereby the tie plates are rigidly secured to the ties;

each tie plate having a transverse recess and a flange at one side of the recess; a rail mounted on the tie plates and having a side bearing against the said flanges, said
5 plates having perforations at the base of the recess; a bar extending from one tie plate to another under each rail and having projections extending into the perforations whereby the said bars connecting the tie
10 plates prevent them from moving one independently of the other.
5. A tie plate consisting of a body por-

tion having a transverse recess extending to and between opposite edges, the base portion of the recess being perforated and having a flange at one side of the recess and a series of spike openings. 15

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JERE. O'SHEA.

Witnesses:

JOS. H. KLEIN,
WM. A. BARR.