H. W. CHURCH.

ANTICREEPER TIE PLATE.

APPLICATION FILED JUNE 2, 1917.

1,291,410. Patented Jan. 14, 1919.

Fig. 1

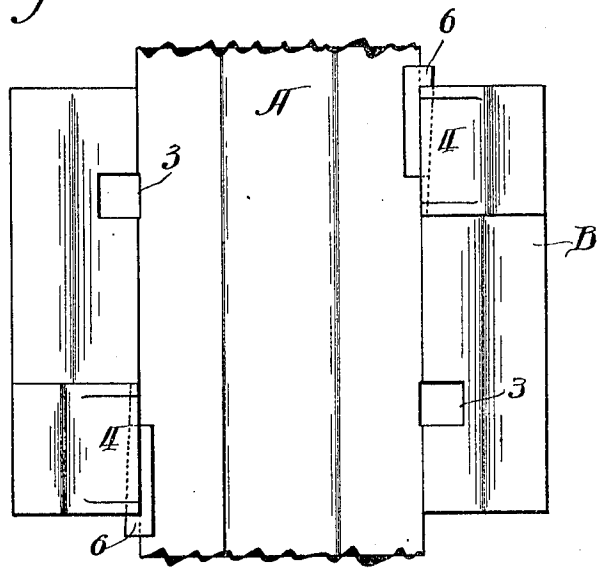


Fig. 2

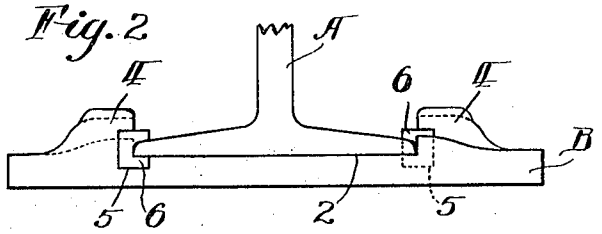
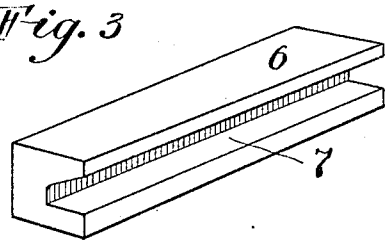


Fig. 3



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UNITED STATES PATENT OFFICE.

HENRY W. CHURCH, OF ST. PAUL, MINNESOTA.

ANTICREEPER TIE-PLATE.

1,291,410. Specification of Letters Patent. Patented Jan. 14, 1919.

Application filed June 2, 1917. Serial No. 172,509.

To all whom it may concern:

Be it known that I, HENRY W. CHURCH, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Anticreeper Tie-Plates, of which the following is a specification.

My invention relates to improvements in anti-creeper tie plates for rails, its object being to provide a tie plate which performs the ordinary function of a securing medium between the rail and cross ties and in addition holds the rail against creeping.

In the accompanying drawings forming part of this specification—

Figure 1 is a plan view of a section of rail showing my improved tie plate arranged in connection therewith;

Fig. 2 is an end view of the same with the rail partly broken away; and

Fig. 3 is a detail view of a wedge forming part of the invention.

Referring to the drawings, A represents a rail of ordinary type. B represents a tie plate formed with a seat 2 for the base of the rail and with openings 3 through which the usual spikes are driven into the cross-ties, the heads of the spikes overlapping the base of the rail in the usual manner.

The tie plate is formed upon opposite sides of the rail with upwardly and inwardly extending lips 4, said lips standing above the sides of the base of the rail when the same is in position as shown in Fig. 2. Between the lips 4 and the bed of the tie plate, rectangular grooves 5 are formed, into which are adapted to be fitted the wedges 6. The outer sides of the wedges are tapered, as indicated in Fig. 1, and the inner sides of the wedges are formed with grooves 7 shaped to receive the edges of the base 8 of the rail.

As shown in Fig. 1, the wedge upon one side of the rail points in the direction opposite to the wedge on the other side of the rail. Thus any creeping tendency of the rail exerts a pull upon one or the other of the wedges in the direction of its taper, tightening said wedge between the tie plate and rail and causing it to exert a clamping effect upon the rail, preventing creeping thereof.

The spike holes 3 are staggered, both in relation to the long axis of the rail and the tie. This becomes necessary to prevent the ties from splitting lengthwise which occurs when two or more spikes are driven in longitudinal alinement in a timber, especially in a rail joint wherein the spikes are separated only by the width of the base of the rail. Further the width of applicant's plate is about the width of the tie which brings the wedges in the staggered lugs into overhanging relation with the edge of the tie facilitating the driving of the wedges.

I claim:

1. In combination with a rail, having a flanged base, a rectangular tie plate having a seat to receive the base of the rail and comprising a pair of spike holes in the plate immediately adjacent the base of the rail and in staggered relationship with the longitudinal axis of the latter, a pair of undercut lugs on the top of the plate opposite said spike holes and bodily in staggered relationship with the longitudinal axis of the rail, having their undercut portions facing said rail base and separated to receive the latter between them, the respective lugs having their opposite ends flush with the transverse ends of the plate with respect to the rail, and a slidable grooved wedge in the undercut of each of said lugs and adapted to engage the rail base with its groove, said wedges being drivable toward each other to grip the rail base laterally to prevent longitudinal movement thereof.

2. In a rail fastening in combination with a rail having a flanged base, of a rectangular plate, spike holes adjacent opposite corners of said plate, two undercut lugs on the top of the plate, one opposite each of said holes and adjacent opposite corners of said plate, a pair of longitudinal shoulders in spaced relation on the top of said plate and adapted to receive said flanged base between them, and a slidable wedge in the undercut of each of said lugs and engaging opposite edges of the flanges of said rail base, and drivable in opposite directions to wedge when driven the rail base against the opposite shoulder on said plate.

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

HENRY W. CHURCH.

Witnesses:
R. A. FISCHER,
H. M. MANGAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."