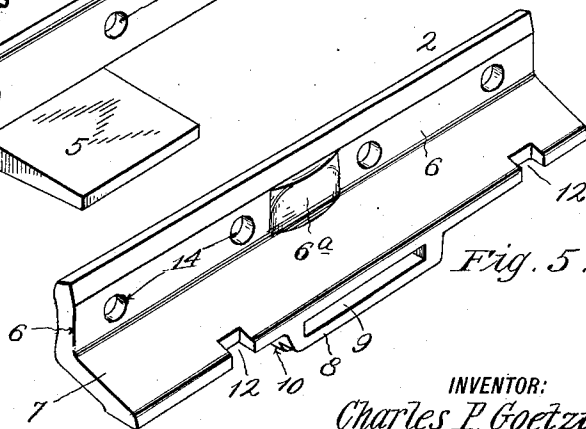
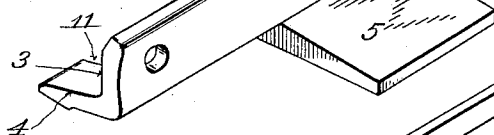


1,026,088.

Fig. 1.



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CHARLES P. GOETZINGER, OF GUTHRIE, OKLAHOMA, ASSIGNOR OF ONE-HALF TO JOHN H. MILAM AND ONE-FOURTH TO JOHN W. THOMAS, BOTH OF GUTHRIE, OKLAHOMA.

RAIL-JOINT.

1,026,088.

Specification of Letters Patent.

Patented May 14, 1912.

Application filed December 11, 1911. Serial No. 665,025.

To all whom it may concern:

Be it known that I, CHARLES P. GOETZINGER, a citizen of the United States, residing at Guthrie, in the county of Logan and State of Oklahoma, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

My invention relates to new and useful improvements in rail joints; and among the objects of my invention are to provide a novel construction of rail joint which allows for the expansion and contraction of the rails and which will support the abutting ends of said rails in such manner that the under surface of the rail balls will be held slightly above the upper surface of the rail joint to prevent wear on said upper surface and rattling incident to the rail balls coming forcibly into contact therewith during the passage of a train over the joint.

A further object is to provide a rail joint with means to engage two adjacent cross-ties and thus prevent creeping of the rails.

Other objects and advantages of my improved rail joint will hereinafter appear, and in order that said invention may be fully understood, reference will now be made to the accompanying drawing in which:

Figure 1 is a side elevation of my improved rail joint secured to two abutting rails. Fig. 2 is an inverted plan view of the same. Fig. 3 is a cross section on line III—III of Fig. 1, and Figs. 4 and 5 are detail perspectives of the two members of the joint ready to be assembled.

Referring in detail to the drawing, A designates two rails with abutting ends supported by my improved rail joint which consists of an angle-bar member 1 and a companion angle-bar member 2, said angle-bar members being adapted to fit against the opposite sides of the rails and bridge the joint *a* between the abutting ends thereof.

The angle-bar member 1 comprises a vertical portion 3 adapted to engage one side of the vertical web B of the rails, an inclined portion 4 adapted to fit upon the sloping upper surface of the base C of the rails, and a centrally disposed tongue 5 adapted to extend beneath the abutting ends of the rails and thus act as a bridge

or truss to support said rails and prevent them from being forced downward by a train running over the same. The upper surface of tongue 5 is arranged in a horizontal plane to fit squarely against the under surface of the rail bases C, while the under surface of said tongue is slightly beveled, as shown in Figs. 3 and 4 for a purpose which will hereinafter appear.

Angle-bar member 2, like angle-bar member 1 has a vertical portion 6 to fit against one side of the webs B and an inclined portion 7 to fit the inclined upper surface of bases C. The inclined portion 7 has a marginal depending loop 8 intermediate its ends, with an elongated slot 9 to receive the end of tongue 5, as shown in Figs. 1 and 3. Loop 8 is reinforced by a depending rib 10, and tongue 5, where it joins the inclined portion 4 of the angle-bar member 1, is provided at its underside with a reinforcing rib 11 having enlarged terminals 11^a. Said ribs materially strengthen the parts with which they are integral and also prevent creeping of the rails by engaging two adjacent cross-ties E.

The inclined portions 4 and 7 of the angle-bar members 1 and 2 have notches 11 and 12, respectively, to receive spikes (not shown) whereby said members are reliably secured to the adjacent cross-ties, and the vertical portions 3 and 6 of said angle-bar members 1 and 2 have a plurality of oppositely-disposed holes 13 and 14, respectively, for the reception of bolts 15, which extend therethrough and also through registering openings in the rail webs B.

The vertical portions 3 and 6 of the angle-bar members are materially strengthened at their central portions by reinforcements 3^a and 6^a, respectively.

In practice the two angle-bar members 1 and 2 are placed in position at opposite sides of the rails A, with tongue 5 extending beneath the bases C and into slot 9. The bolts 15 are then passed through the holes 13 and 14 and the registering openings in the webs B against the opposite sides of which the angle-bar members 1 and 2 are firmly drawn by tightening the nuts 16 upon the bolts 15. As the nuts 16 are tightened and the angle-bar members 1 and 2 are drawn toward each other, they are also drawn firmly against the inclined surface of bases C by the tongue 5 engaging

the loop 8, thus holding the upper edges of the angle-bar members out of engagement with the under surface of the rail balls, so that the same can not contact with said angle-bar members during passage of a train and cause wear and rattling, which would otherwise occur should said balls strike the upper surface of said angle-bar members. After the nuts 16 have been duly tightened upon the bolts 15, the angle-bar members are firmly secured to the underlying cross-ties with spikes driven through the notches 12 and into said cross-ties.

From the foregoing description it is apparent that I have produced a rail joint which is comparatively simple in construction, which can be quickly applied to two abutting rails or removed therefrom, and possesses the advantages above enumerated.

Having thus described my invention what I claim and desire to secure by Letters Patent, is:

1. In combination, a rail joint consisting of two angle-bar members adapted to engage opposite sides of two abutting rails, a loop on one of said angle-bar members provided with an elongated slot, a tongue on the companion angle-bar member adapted to extend beneath the base of the rails and into the slot of the first-mentioned angle-bar member, said tongue having a beveled underside adapted to draw the angle-bar members firmly upon the sloping upper surface of the rail bases, and means to draw said angle-bar members firmly against the opposite sides of the rail webs and reliably secure them to said webs, substantially as described.

2. In combination, a rail joint consisting of two angle-bar members adapted to engage opposite sides of two abutting rails, a loop on one of said angle-bar members

provided with an elongated slot and a depending reinforcing rib, a tongue on the companion angle-bar member adapted to extend beneath the base of the rails and into the slot of the first-mentioned angle-bar member, said tongue having a beveled underside adapted to draw the angle-bar members firmly upon the sloping upper surface of the rail bases, a rib integral with the underside of the tongue where it joins its respective angle-bar member, and means to draw said angle bar members firmly against the opposite sides of the rail web and reliably secure them to said webs, substantially as described.

3. In combination, a rail joint consisting of two angle-bar members adapted to engage opposite sides of two abutting rails, a loop on one of said angle-bar members provided with an elongated slot and a depending reinforcing rib, a tongue on the companion angle-bar member adapted to extend beneath the base of the rails and into the slot of the first-mentioned angle-bar member, said tongue having a beveled underside adapted to draw the angle-bar members firmly downward upon the sloping upper surface of the rail bases, a rib integral with the underside of the tongue where it joins its respective angle-bar member, means to draw said angle bar members firmly against the opposite sides of the rail web and reliably secure them to said webs, and reinforcing members integral with the central portions of the angle-bar members, substantially as described.

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

CHARLES P. GOETZINGER.

Witnesses:

N. E. WALLACE,
CARL LEONARD.