M. H. LOONEY.

RAILROAD JOINT.

APPLICATION FILED MAR. 14, 1911.

995,264.

Patented June 13, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

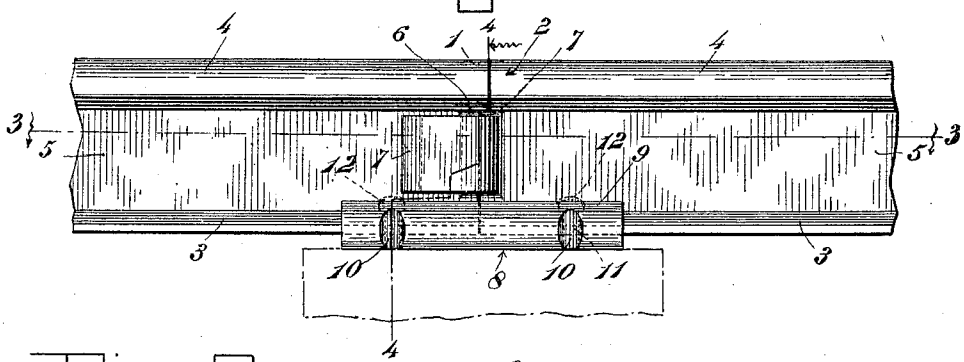


Fig. 2.

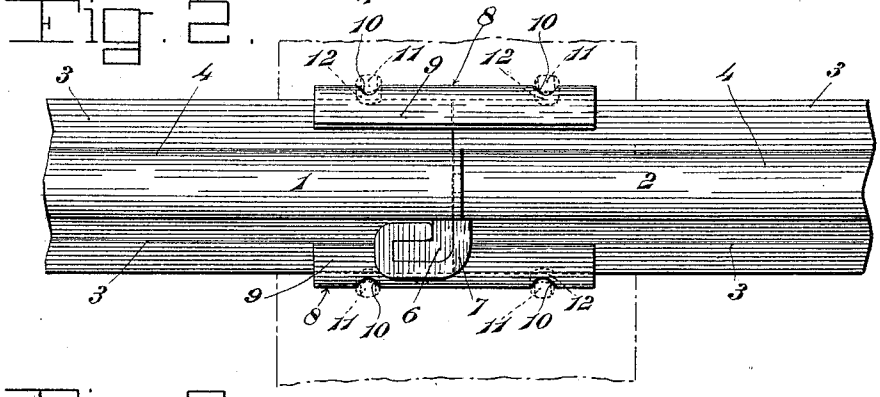
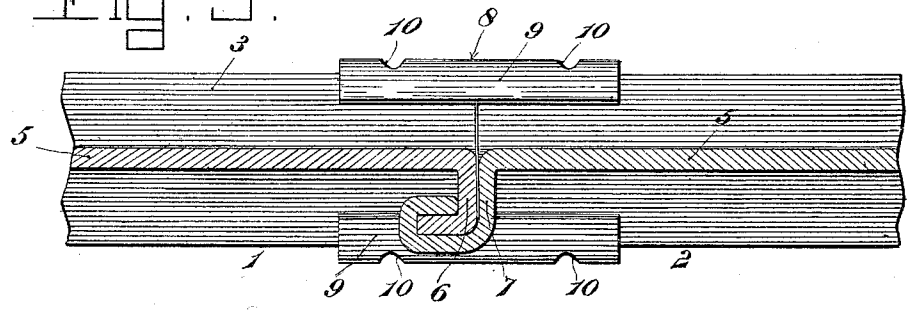


Fig. 3.



Inventor

Miles H. Looney

Witnesses

Harry King.

C. C. Hines.

By Victor J. Evans

Attorney

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2 SHEETS—SHEET 2.

Fig. 4.

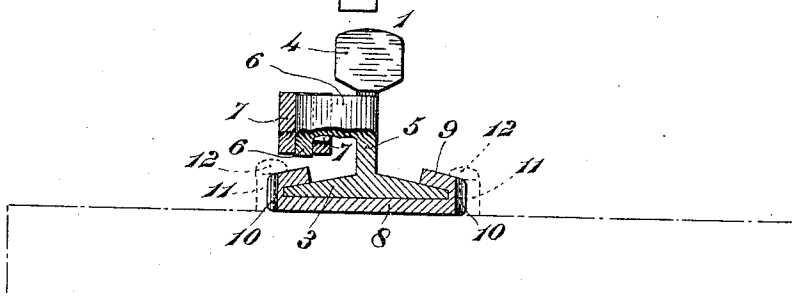


Fig. 5.

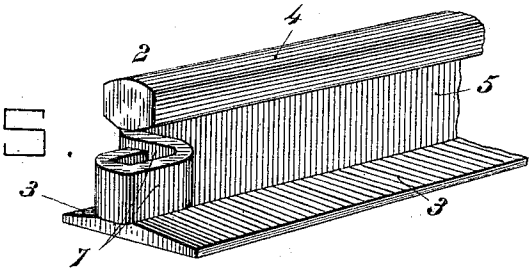


Fig. 6.

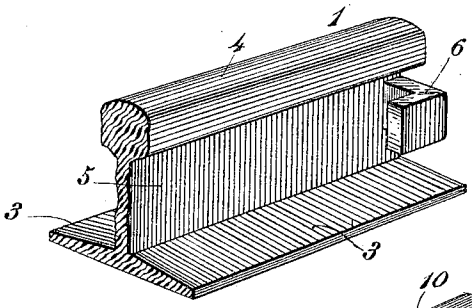
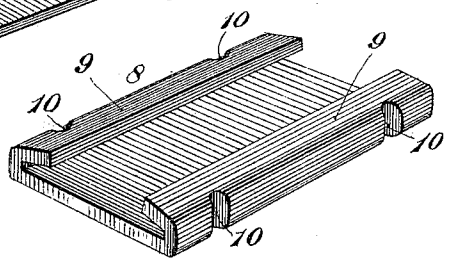


Fig. 7.



Witnesses

Harry King

C. C. Hines.

Inventor

Miles H. Looney

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

MILES H. LOONEY, OF VANSANT, VIRGINIA.

RAILROAD-JOINT.

995,264. Specification of Letters Patent. Patented June 13, 1911.

Application filed March 14, 1911. Serial No. 614,332.

To all whom it may concern:

Be it known that I, MILES H. LOONEY, a citizen of the United States, residing at Vansant, in the county of Buchanan and State of Virginia, have invented new and useful Improvements in Railroad-Joints, of which the following is a specification.

This invention relates to rail joints or means for connecting the meeting ends of railway rails, the object of the invention being to provide a simple, inexpensive and reliable form of coupling for holding the rails firmly against longitudinal, vertical and lateral movements, and which adapts the rail ends to be readily and conveniently coupled and uncoupled.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is a side elevation of the meeting ends of adjoining rails connected by my improved rail joint couple. Fig. 2 is a top plan view of the same. Fig. 3 is a horizontal section on the line 3—3 of Fig. 1. Fig. 4 is a vertical transverse section on the line 4—4 of Fig. 1. Figs. 5 and 6 are views of the ends of the rails separated. Fig. 7 is a view of the flanged coupling plate.

Referring to the drawings, 1 and 2 designate the meeting ends of adjoining rails, each of which is of conventional form comprising a base 3, head 4 and vertical flange or web 5. The ends of the rails are respectively provided with interlocking members 6 and 7, formed as extensions from the adjacent ends of their vertical webs. The interlocking member 6 consists of a free portion of the web of the rail 1 bent at right angles to one side of the rail, and then bent at its free end in a direction longitudinally of the rail and toward the opposite end thereof, said member 6 thus being substantially of hook-form. The member 7 upon the rail 2 is bent laterally to the same side of the rail as the member 6, thence bent parallel with and outwardly beyond the end of said rail 2, and thence bent inwardly and rearwardly to form a hook which projects in a reverse direction to the hook 6 and is adapted to interlock therewith to hold the rails firmly against longitudinal separation.

In practice, the rails may be rolled in the usual manner, with extensions of the webs projecting beyond the ends thereof, and these extensions then formed to provide the locking hooks in any preferred way. It will be seen that the construction of these hooks is such as to adapt the rails to be readily and conveniently coupled or uncoupled by a relative downward or upward movement of one rail relative to the other, and that when the rails are united by the interlocking members said members will operate not only to hold them against longitudinal separation but also against relative lateral motion.

In order to more firmly lock the rail ends together to prevent any slight lateral play which may be allowed by the members 6 and 7, as well as to hold the rails against relative vertical movement and to couple them to be fastened to the ties at the junction point, I provide a coupling plate 8 on which the base flanges of the rails are adapted to rest, and which is provided with inturned or hook-shaped side flanges 9 to engage over and interlock with the edges of the rail flanges. The outer surfaces of the hooked edges of this locking plate are formed with vertical grooves or niches 10, to receive the shanks of the usual spikes 11 which are driven into the ties, the heads 12 of the spikes bearing upon the flanges of the plate to clamp the parts firmly against movement. By this construction absolute rigidity of the joint is insured, while upon removing the spikes the rail ends may be readily and conveniently disconnected.

Having thus described the invention, I claim:—

1. In a rail joint, the combination of rails provided at their meeting ends with extensions projecting from the webs thereof, one of said extensions being bent laterally and rearwardly to provide a hook, and the other extension bent laterally, forwardly, inwardly and rearwardly to provide a coacting hook, said hooks being adapted for engagement and disengagement by a relative vertical movement of the rail ends, and a coupling plate adapted to bridge across the joint and to interlock with the base flanges of the rails to hold the same against lateral or vertical movement.

2. In a rail joint, the combination of rails

having interlocking hooks formed by extensions from the webs of the rails, said hooks being arranged to lie wholly at one side of the rails and to be connected and disconnected by a relative vertical movement of said rails, and flanges coupling plate adapted to bridge across the joint and to engage the base flanges of the rails, to hold the ends of the rails against vertical and lateral movement.

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

MILES H. LOONEY.

Witnesses:
JOSEPH YATES,
E. R. BOYD.