F. KELLY.

BOLTLESS RAIL JOINT.

APPLICATION FILED SEPT. 21, 1908.

938,587. Patented Nov. 2, 1909.

Fig. 1.

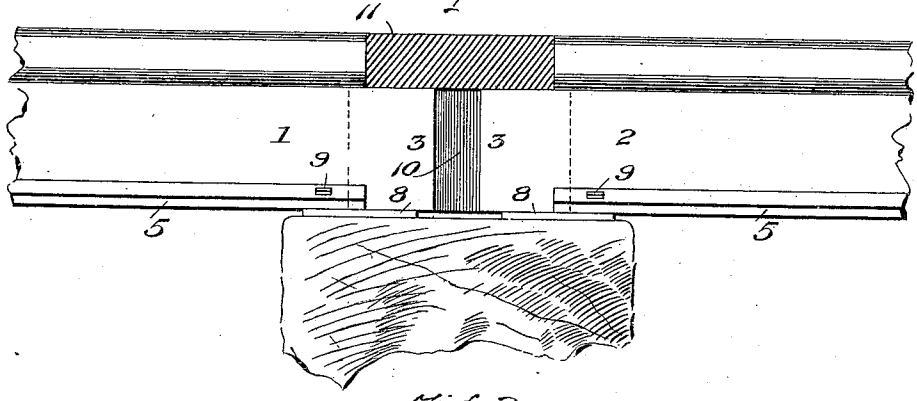


Fig. 2.

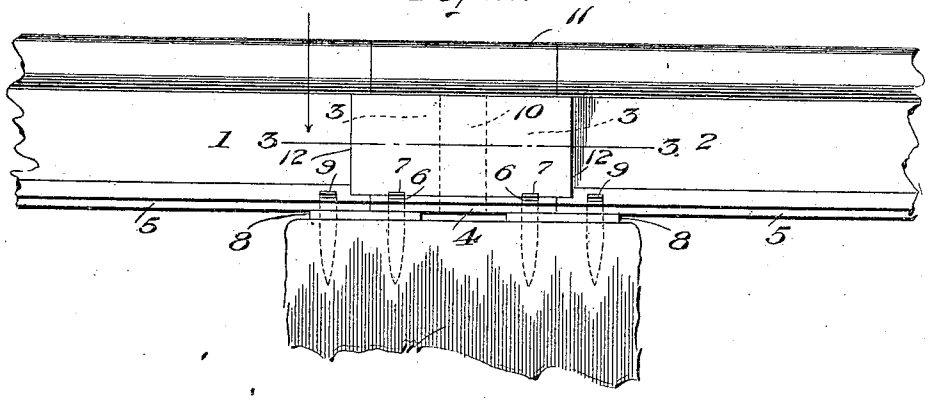


Fig. 3.

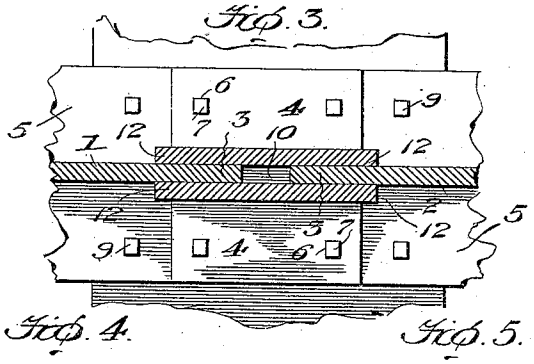


Fig. 4.

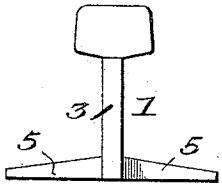
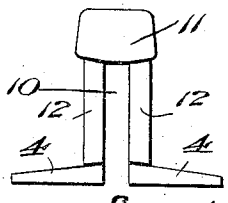


Fig. 5.



Witnesses

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FRANK KELLY, OF EVANSVILLE, INDIANA.

BOLTLESS RAIL-JOINT.

938,587. Specification of Letters Patent. Patented Nov. 2, 1909.

Application filed September 21, 1908. Serial No. 453,922.

To all whom it may concern:

Be it known that I, FRANK KELLY, a citizen of the United States, residing at Evansville, county of Vanderburg, and State of Indiana, have invented certain new and useful Improvements in Boltless Rail-Joints, of which the following is a specification.

This invention relates to boltless rail joints.

The object of the present invention is the provision of a rail joint of simple, durable, strong and inexpensive construction which will be adapted to securely connect the rail ends without requiring the use of any bolts or fish plates and which may be rapidly placed in position and spiked to the tie.

The invention is carried out by the employment of a boltless rail joint of the construction set forth hereinafter, the novel features of which are recited in the appended claims.

In the accompanying drawings:—Figure 1 is a side elevation showing the joint head in section to disclose how the rail ends are received in the bifurcation of the joint; Fig. 2, a side elevation of the complete invention; Fig. 3, a horizontal section on line 3—3 of Fig. 2; Fig. 4, an end elevation of one of the rails; and Fig. 5, an end elevation of the joint.

The rail ends 1 and 2 are of ordinary construction with the exception that the webs thereof are extended as at 3 beyond the heads and bases thereof.

The joint has a base flange 4 of the same width as the base flanges 5 of the rails 1 and 2 and abuts the ends thereof, said flange 4 being provided with spike holes 6 through which spikes 7, Fig. 2, are driven into the tie, but plates 8 are preferably interposed between the joint and the rail ends on the one hand and the tie on the other hand, said plates 8 being provided with spike holes through which the spikes 7 pass, while the spikes 9 which secure the rail ends to the tie, also pass through openings in said plates 8. With this arrangement the joint is held in the same relative position to the rail ends at all times, because the plates 8 are unyielding and the spikes 7 and 9 remain spaced apart the same distance at all times.

The joint is bifurcated or split vertically, as shown at 10, Fig. 5, in which bifurcation the web ends 3 are received, as shown in Figs. 1, 3, the head 11 of the rail joint being of the same shape and size as the rail heads of the rails 1 and 2 and forming a continuation thereof, the under surface of said rail head resting upon the upper edges of the web ends 3, whereby the joint cannot fall in relation to the rails.

The joint is provided with extensions or lugs 12 at its ends which receive or embrace the webs of the rails 1 and 2, whereby any relative movement of the joint is prevented, the reception of the web ends 3 in the bifurcation 10 serving the same purpose.

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

1. In a boltless rail joint, the combination with rail ends having their webs extended beyond their heads and bases, of a joint having a bifurcated web receiving and overlapping said web extensions, said joint having a head resting on said web extensions and a base fitting in between and abutting the bases of the rail ends.

2. In a boltless rail joint, the combination with rail ends having their webs extended beyond their heads and bases, of a joint having a bifurcated web receiving said web extensions and overlapping the heads and bases of said webs, said joint having a head resting on said web extensions and a base fitting in between and abutting the bases of the rail ends.

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

FRANK KELLY.

Witnesses:
WM. F. KELLY,
WILLIAM M. SMITH.