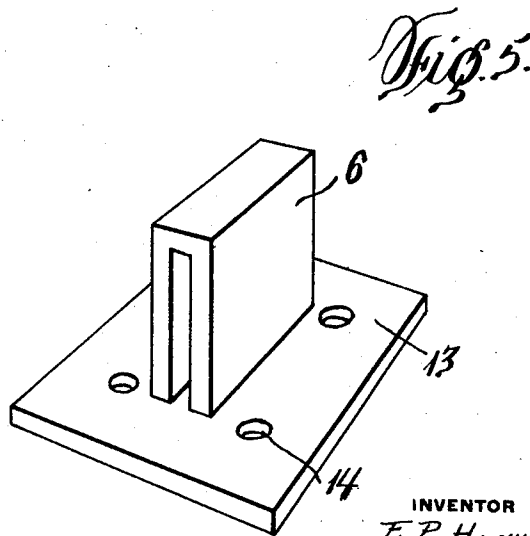
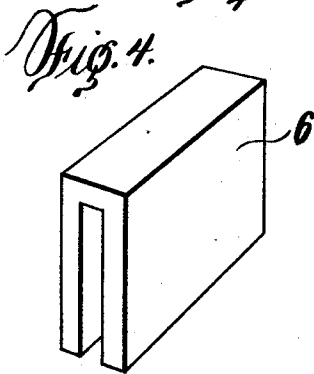
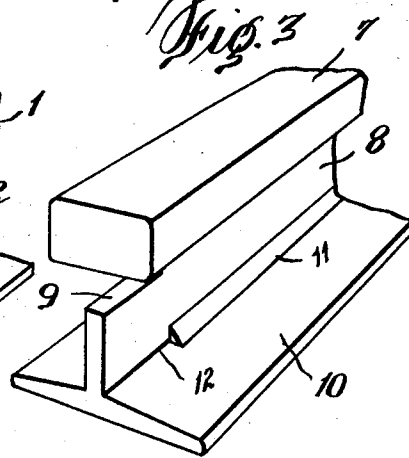
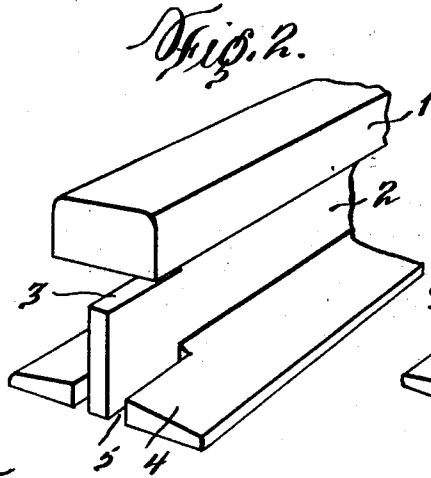
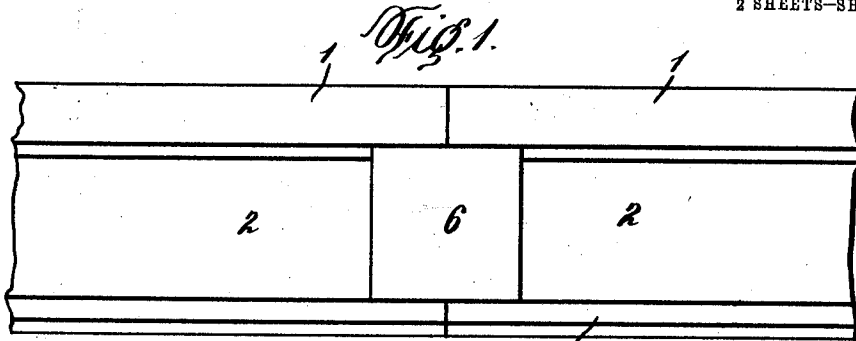


F. P. HUNKELE.
RAIL JOINT.
APPLICATION FILED FEB. 21, 1911.

997,132.

Patented July 4, 1911.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 6.

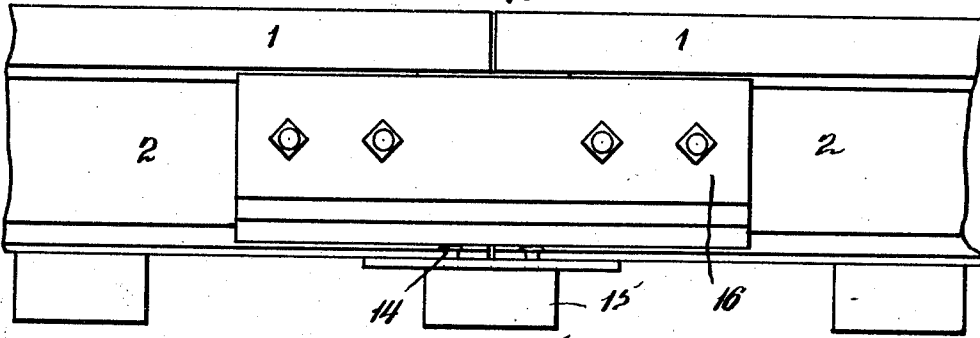


Fig. 7.

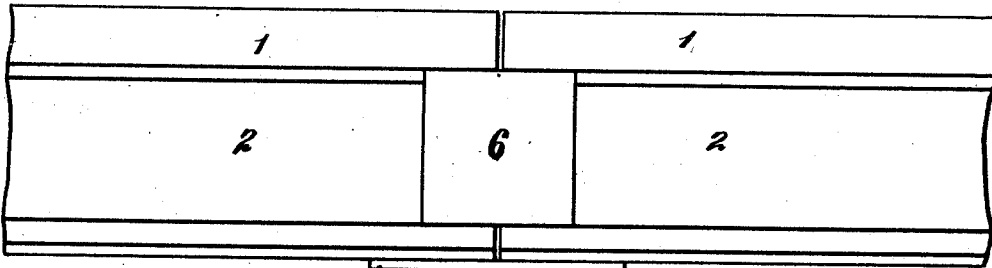


Fig. 8.

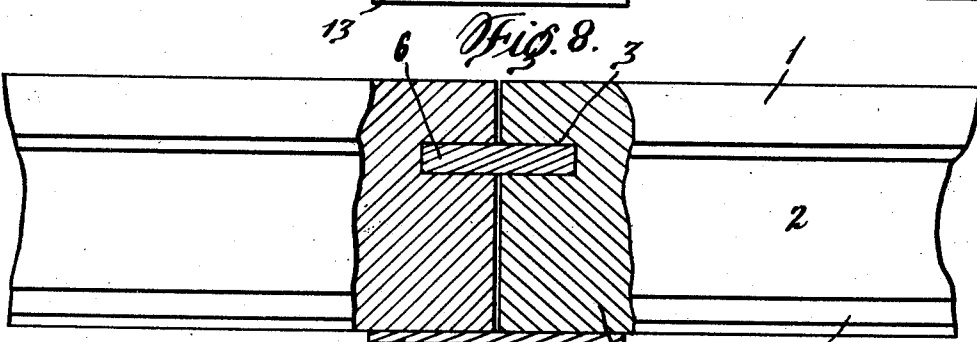
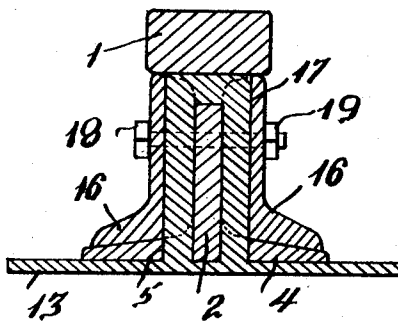


Fig. 9.



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RAIL-JOINT.

997,132.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed February 21, 1911. Serial No. 610,109.

To all whom it may concern:

Be it known that I, FREDERICK P. HUNKELE, citizen of the United States of America, residing at McKeesport, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail joints and fasteners, and the objects of the invention are to obviate the necessity of bolts and nuts as a fastening medium for the abutting ends of two rails, and to provide a rail joint that can be easily and quickly installed without the use of skilled labor.

Further objects of the invention are to provide a rail joint that will allow for the expansion and contraction of rails, and provide practically a continuous tread for the rolling stock when passing over a joint.

With the above and other objects in view the invention resides in a novel construction combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawings, wherein there are illustrated the preferred embodiments of the invention, but it is to be understood that the structural elements thereof are susceptible of such changes as are permissible by the appended claims.

In the drawings:—Figure 1 is a side elevation of the rail joint. Fig. 2 is a perspective view of the end of a rail constructed in accordance with this invention. Fig. 3 is a similar view of the end of a rail used in modification of the invention. Fig. 4 is a perspective view of a detached connecting member. Fig. 5 is a perspective view of a modified form of connecting member. Fig. 6 is a side elevation of a further modified form of rail joint. Fig. 7 is a side elevation of another modified form of rail joint. Fig. 8 is a similar view of the same partly broken away and partly in section, and Fig. 9 is a cross sectional view of the further modified form shown in Fig. 6 of the drawings.

Reference will first be had to Figs. 1, 2 and 4, wherein the rails 1 have the webs 2 thereof cut away to provide longitudinal slots 3 directly beneath the heads of said rails. The base flanges 4 of the rails adja-

cent to the webs 2 are longitudinally slotted, as at 5.

6 denotes an inverted U-shaped connecting member and this member is mounted between the abutting ends of the rails, the member embracing the ends of the webs 2 and extending into the slots 3 and 5 to prevent lateral displacement of one rail relatively to the other. Spikes or other fastening means can be employed for securing the base flanges of the rails to ties or other supports.

A modification of the invention is shown in Fig. 3 of the drawings wherein the rails 7 have the webs 8 thereof provided with slots 9 similar to the rails 1, and instead of slotting the base flanges 10, the fillets 11, at the juncture of the webs and base flanges, are cut away, as at 12 to accommodate a connecting member of less depth than the member 6.

In Figs. 5, 7 and 8 there is another modification of the invention wherein rails similar as shown in Fig. 2 are used and the connecting member 6. Base plates 13 are adapted to support the confronting ends of the rails, the base plate having openings 14 for spikes or other fastening means employed to secure the base plate to a tie or other support.

A further modification of the invention is shown in Figs. 6 and 9, wherein the rails are braced by splice bars 16 having the inner sides thereof cut away, as at 17 to provide clearance for the connecting member 6. The splice bars 16 are connected to the rails by bolts 18 and nuts 19.

What I claim is:—

1. In a rail joint, rails having the webs thereof cut away at the abutting ends adjacent to the heads thereof and the base flanges cut away adjacent to the webs of said rails, and an inverted U-shaped connecting member adapted to fit in the cut away portions of said rails.

2. In a rail joint, rails having the webs thereof cut away at the abutting ends adjacent to the heads thereof and the base flanges cut away adjacent to the webs of said rails, an inverted U-shaped connecting member adapted to fit in the cut away portions of said rails, and a base plate supporting the abutting ends of said rails.

3. In a rail joint, rails having the webs thereof cut away at the abutting ends adja-

cent to the heads thereof and the base flanges cut away adjacent to the webs of said rails, an inverted U-shaped connecting member adapted to fit in the cut away portions of said rails, a base plate supporting the abutting ends of said rails, and splice bars connected to said rails and having the inner side thereof cut away to provide clear-

ance for said connecting member, substantially as described.

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

FREDERICK P. HUNKELE.

Witnesses:

MAX H. SROLOVITZ,
KARL H. BUTLER.

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