

F. H. LOOKABAUGH.
RAIL JOINT.
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973,948.

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Fig. 1

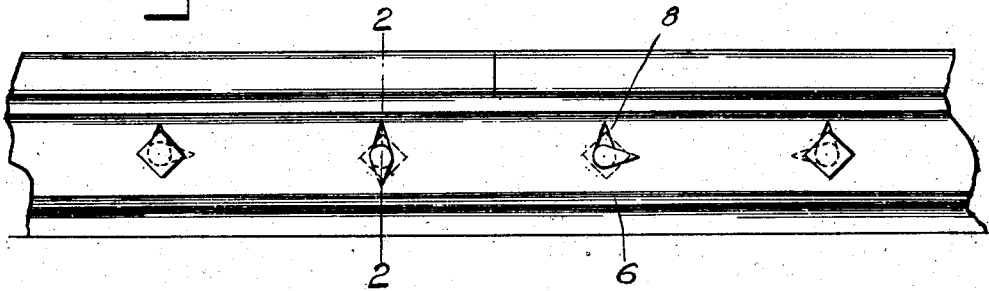


Fig. 2

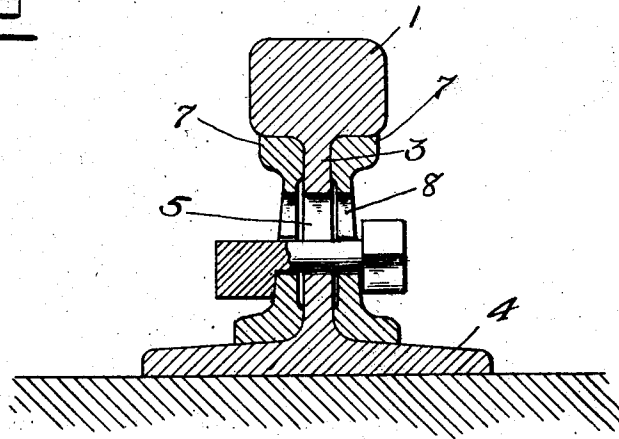
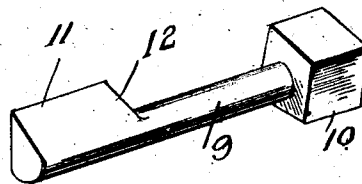


Fig. 3



WITNESSES

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RAIL-JOINT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK HOLMES LOOKABAUGH, a citizen of the United States of America, residing at Leechburg, in the county of Armstrong 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 the objects of my invention are to provide novel means for connecting the confronting ends of rails, whereby one rail cannot become accidentally displaced relative to the adjoining rail, and to obviate the necessity of using bolts and nuts as a fastening means for the splice bars of rails.

Further objects of the invention are to provide a rail joint that can be advantageously used in connection with the rails of steam or electric railways, and to furnish means by which the confronting ends of rails can be easily and quickly connected without the use of skilled labor.

Further objects of the invention are to accomplish the above results by a rail joint that is strong, durable and inexpensive to manufacture, and to provide means for connecting rails of various sizes and shapes.

These and such other objects as may hereinafter appear are attained by the mechanical construction to be hereinafter specifically described and then claimed, and reference will now be had to the drawing forming a part of this specification, wherein:—

Figure 1 is a side elevation of a rail joint constructed in accordance with this invention, Fig. 2 is a cross sectional view taken on the line 2—2 of Fig. 1, and Fig. 3 is a perspective view of one of the fastening means.

In the accompanying drawing I have illustrated the confronting ends of two rails, each rail comprising a head 1, a web 3 and base flanges 4. The web 3 is provided with a plurality of transverse inverted V-shaped openings 5, the lower ends of said openings being rounded, as at 6, while the side walls of each opening converge toward the head 1 of the rails. Bracing the webs 3 of said rails are splice bars 7 adapted to rest upon the base flanges 4 and assist the webs 3 in supporting the heads 1. The splice bars 7 are provided with inverted V-shaped openings 8 similar to the openings 5, the openings 8 being adapted to register with the

openings 5, whereby the fastening devices can be easily placed in position to connect the splice bars 7 to the rails.

A plurality of fastening devices can be used to connect the splice bars to the rails, the number of devices employed depending upon the length of the splice bars and the number of openings provided therefor. Each fastening device comprises a bolt having a rectangular head 10 at one end thereof, while the opposite end is provided with a radially disposed V-shaped enlargement 11, said enlargement having the rear end thereof beveled, as at 12. The enlargement 11 together with the bolt 9 in cross section are slightly smaller than the openings 8 and 5, whereby the fastening devices can be easily placed in said openings. After the devices have been inserted in the openings they are rotated a quarter or half of a revolution, whereby the beveled ends 12 of the enlargements 11 will contact with the splice bars 7 and bind each fastening device in the openings 5 and 8, besides drawing the splice bars 7 into engagement with the rails.

The fastening devices are alternately arranged, with an equal number of the heads 10 upon one side of the joint as upon the other side, thereby causing one of the splice bars to be held just as firmly in engagement with the rails as the other.

While in the drawing there is illustrated a preferred embodiment of the invention, nevertheless, I reserve the right to make such changes in the details of construction as fall within the scope of the appended claim.

Having now described my invention what I claim as new, is:—

In a rail joint, the combination with rails having the webs thereof formed with vertically arranged inverted V-shaped openings with the lower walls thereof rounded and extending below the longitudinal center of the webs, of splice bars adapted to brace said rails and be connected to the webs thereof, each of said bars having its outer face inclined toward the top of the web and each further provided with a series of vertically arranged inverted V-shaped openings extending below the longitudinal center thereof and adapted to register with the openings of said rails and being of the same identical size and shape as said rail openings, oppositely disposed headed bolts ex-

tending through the registering openings
and each provided upon one side of the bolt
and extending longitudinally thereof and at
one end thereof with a V-shaped enlarge-
5 ment having its inner face inclined and en-
gaging with the inclined outer face of a
splice bar for binding the splice bar against
the rails when the enlargement projects
through said opening and is rotated toward

the lower longitudinal edge of the splice 10
bar when the parts are assembled.

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

FRANK HOLMES LOOKABAUGH.

Witnesses:

JOHN H. SMITH,
GEORGE S. BREWER.