

D. W. JAMES.
RAIL JOINT.
APPLICATION FILED MAR. 20, 1912.

1,037,774.

Patented Sept. 3, 1912.

Fig. 1

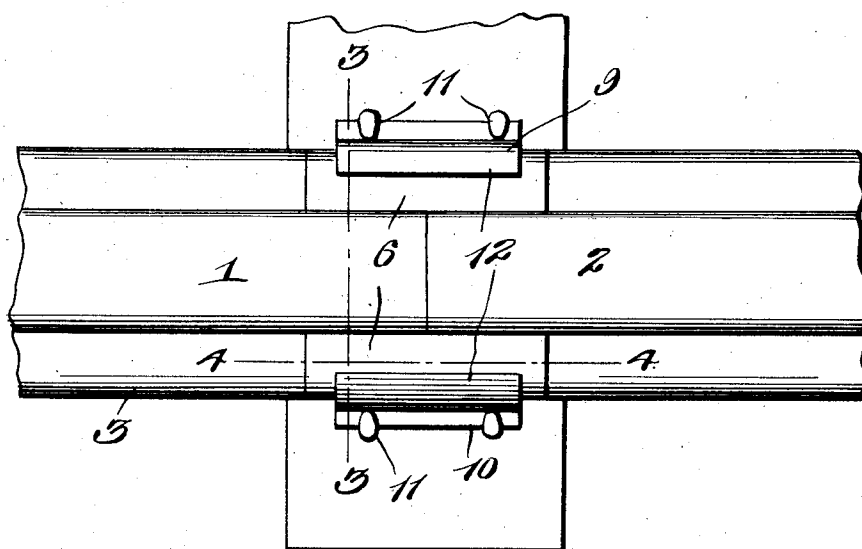


Fig. 2

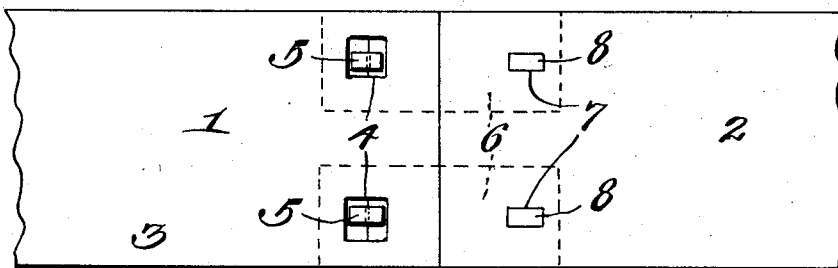


Fig. 3

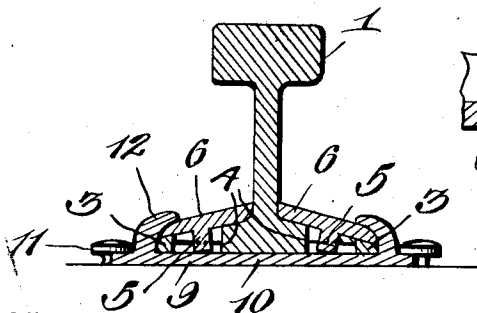
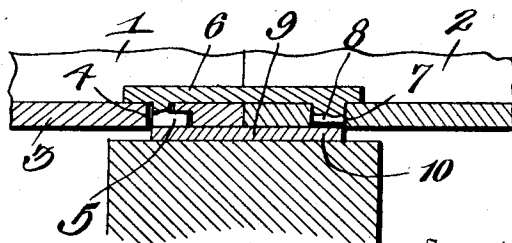


Fig. 4



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DAVID WESLEY JAMES, OF DESMET, IDAHO.

RAIL-JOINT.

1,037,774.

Specification of Letters Patent.

Patented Sept. 3, 1912.

Application filed March 20, 1912. Serial No. 685,015.

To all whom it may concern:

Be it known that I, DAVID WESLEY JAMES, a citizen of the United States, residing at Desmet, in the county of Kootenai and State of Idaho, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in rail joints and has for its object to provide an improved rail joint by means of which the meeting ends of the rails are effectually connected together without the use of the customary bolts, the necessity for forming bolt holes in the ends of the rails being thus obviated and the cost of construction of the track being reduced to a minimum.

20 Another object of the invention is to provide a device of this character which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

25 With the above and other objects in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter more fully described, pointed out in the claims and shown in the accompanying drawings in which,

30 Figure 1 is a top plan view; Fig. 2 is a bottom plan view; and Fig. 3 is a sectional view on the line 3—3 of Fig. 1; and Fig. 4 is a sectional view on the line 4—4 of Fig. 1.

Referring more particularly to the drawings, 1 and 2 indicate the abutting ends of the two rails. The flanges 3 on the end of the rail 1 are provided near their ends with the transverse elongated openings 4 adapted to receive the hooks 5, formed on one end of the locking plates 6. The flanges on the rail 2 are provided near their ends with the elongated openings 7 adapted to receive the lug 8 formed on the end of the locking plates opposite the hooks 5. It will be readily seen that the hooks 5 are disposed longitudinally with respect to the locking plates, therefore in order to insert the hooks within the transverse openings 4 the plates are arranged so that their ends are disposed transversely of the flanges 3. After inserting the hooks in this manner the plates 6 are swung and disposed over the ends of the flanges on the rail 2, the lugs 8 are then inserted in the

openings 7 to lock the ends of the rails securely together. When the locking plates are in their effective position the hooks 5 are disposed transversely of the openings 4 to hold the plates securely in place upon the flanges of the rails. These locking plates may be further held in place by driving spikes in the tie at the edge of the flanges and having their heads engaging over the outer edges of the plates 6. But in place of these spikes I preferably use a clamping member 9 which comprises a base 10 that rests upon the tie and is rigidly secured thereto by means of the spikes 11 embedded in the tie and engaging the longitudinal edges of the base. Inwardly extending flanges 12 are formed on the edges of the clamping member and adapted to engage over the flanges of the rails to hold the locking plates securely in place. By the use of this clamping plate the ends of the rails are prevented from wearing into the ties which causes low joints, that is if the end of one of the rails wears into the tie faster than the end on the other rail.

With the foregoing description taken in connection with the accompanying drawing it will be apparent that I have provided an improved rail joint in which the rail ends are firmly connected together without the use of the customary bolts.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

What I claim is:—

1. In a device of the character described, the combination of the meeting ends of the rails, the flanges on said rails having openings formed in their ends, locking plates, projections formed on said plates at each end thereof and adapted to engage in said openings to lock the ends of the rails together, and a clamping member having flanges formed thereon to engage over the locking plates to hold the same in an effective position, and means for securing said clamping member to the ties.
2. In a device of the character described, the combination of the meeting ends of the rails, the flanges on the end of one of said rails having transverse openings formed

therein, the flanges on the end of the other of said rails having longitudinal openings formed therein, locking plates, hooks formed on one end of said plates, said hooks being
5 disposed in said transverse openings and arranged thereacross, lugs formed on the other end of said plates and disposed in said longitudinal openings to lock the ends of the rails together, a clamping member having
10 flanges formed thereon to engage over the locking plates to hold the same in an effective position, and means for securing said clamping member to the ties.

3. In a device of the character described,
15 the combination of the meeting ends of the rails, the flanges on the end of one of said rails having transverse openings formed

therein, the flanges on the end of the other of said rails having longitudinal openings formed therein, locking plates, hooks formed 20 on one end of said plates, said hooks being disposed in said transverse openings and arranged thereacross, lugs formed on the other end of said plates and disposed in said longitudinal openings to lock the ends 25 of the rails together, and means for holding said plates in effective position.

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

DAVID WESLEY JAMES.

Witnesses:

W. B. WEATHERFORD,
B. R. SVENSGAARD.

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