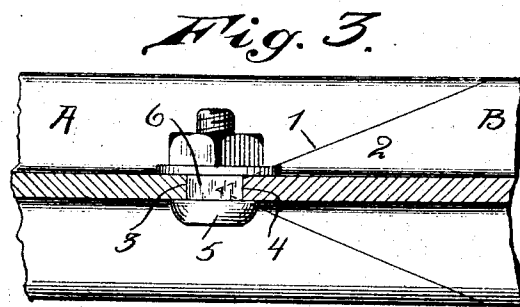
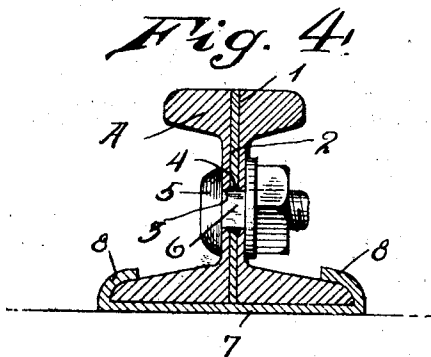
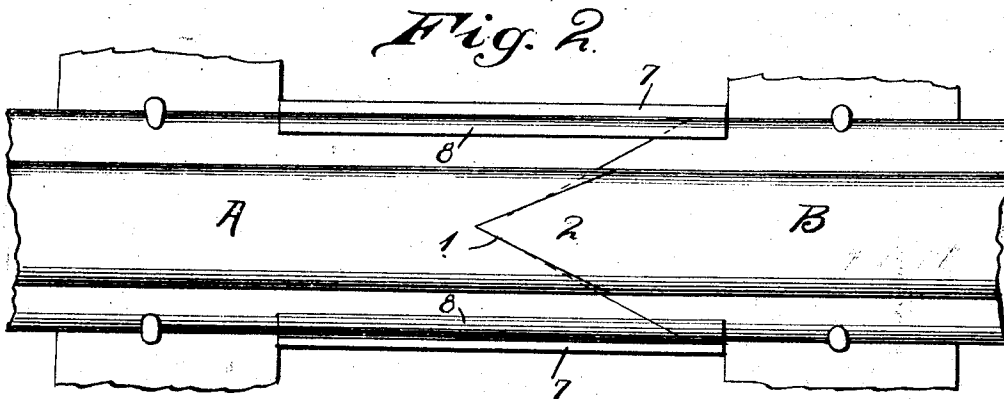
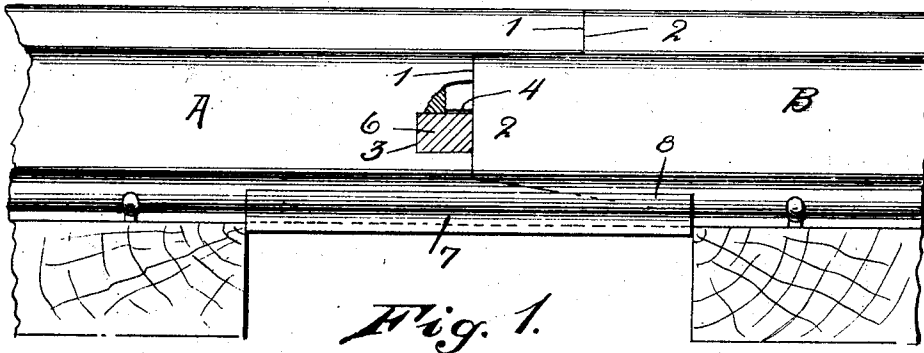


S. P. WATTS.
RAIL JOINT AND FASTENER.
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1,038,035.

Patented Sept. 10, 1912.



Inventor

Witnesses

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SEABORN PENDLETON WATTS, OF ABBEVILLE, LOUISIANA.

RAIL JOINT AND FASTENER.

1,038,035.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Application filed May 2, 1911. Serial No. 624,622.

To all whom it may concern:

Be it known that I, SEABORN P. WATTS, a citizen of the United States, residing at Abbeville, in the parish of Vermilion and State of Louisiana, have invented certain new and useful Improvements in Rail Joints and Fasteners, of which the following is a specification.

My invention relates to improvements in railway rail joints and has for its object the provision of a joint so constructed that the rails are adapted to be connected together in such a manner as to obviate any independent lateral or vertical displacement of the rails.

My invention will be described in detail hereinafter and illustrated in the accompanying drawings in which—

Figure 1, is a side view of my improved rail joint, showing the key bolt in section, Fig. 2, a top plan view of the joint, Fig. 3, a fragmental horizontal sectional view through the key bolt, and Fig. 4, a cross section of the rail and supporting plate.

In the drawings similar reference characters will be used to designate corresponding parts in the several views.

My improved joint consists in forming one end of the rail tread, web and base with a V-shaped recess and the other end of the rail with a V-shaped point to engage the V-shaped recess in the end of an adjoining rail, and in the drawings I show the meeting ends of two rails A and B constructed as described, the rail A having its end formed with a V-shaped recess 1, the angle of the sides of the V increasing from the top of the rail downward and the end of rail B with a V-shaped point 2 that is shaped to fit said V-shaped recess.

The webs of the rails A and B are formed with rectangular notches 3 and 4, respectively, so that when the rails are assembled, as shown in the drawings, they form an elongated rectangular opening in the joint

to receive a key bolt 5 having a laterally elongated shank 6 that engages said notches 3 and 4 and operates to hold the ends of the rails from relative vertical movement.

In the preferred embodiment of my invention the notch 3 is made slightly narrower than the notch 4 so that when the key bolt 5 is in position the shank 6 is firmly held in notch 3 to prevent accidental displacement of the key bolt when the rail ends are separated.

7 indicates a supporting plate, having its side edges bent upwardly and toward one another as shown at 8, that receives the meeting ends of the bases of the rails A and B, and holds them from relative lateral displacement.

It will be apparent that rails joined by my improved joint are not weakened by the bolt holes usually employed to secure fish plates to the meeting ends of the rails, and also that the rails have the maximum freedom of movement caused by changes of temperature. By employing the V-shaped joint the wheels of a car in crossing the joint are always on both rails so that there is no shock or jar to the car or joint and the ends of the two rails will wear evenly.

Having thus described my invention what I claim is:—

In a rail joint, a pair of abutting rail ends, one of said ends being provided with a notch V-shaped in horizontal section, the angle of the sides of the V increasing from the top of the rail downward, the remaining end being provided with a V-shaped projection closely fitting the notch, and means to hold said ends together.

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

SEABORN PENDLETON WATTS.

Witnesses:

ROM. T. LEREW,
J. I. BONDREAU.

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