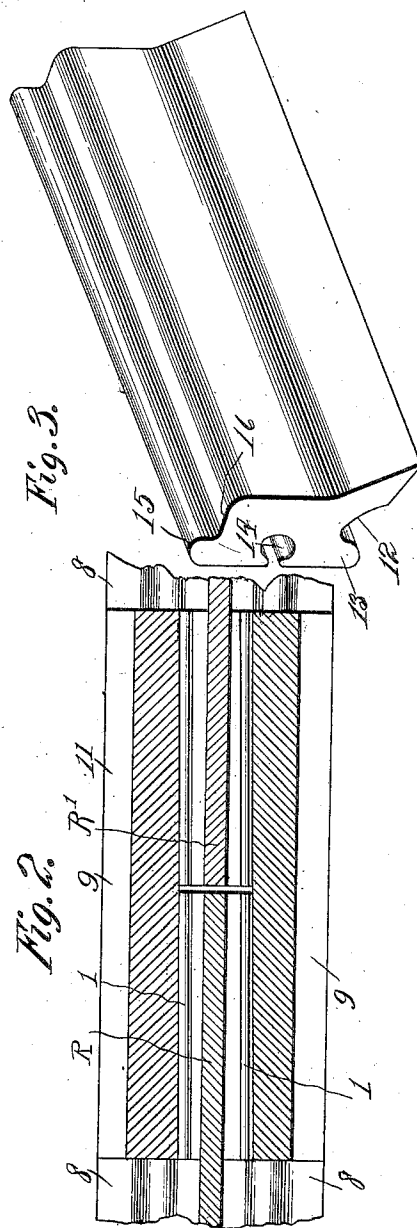
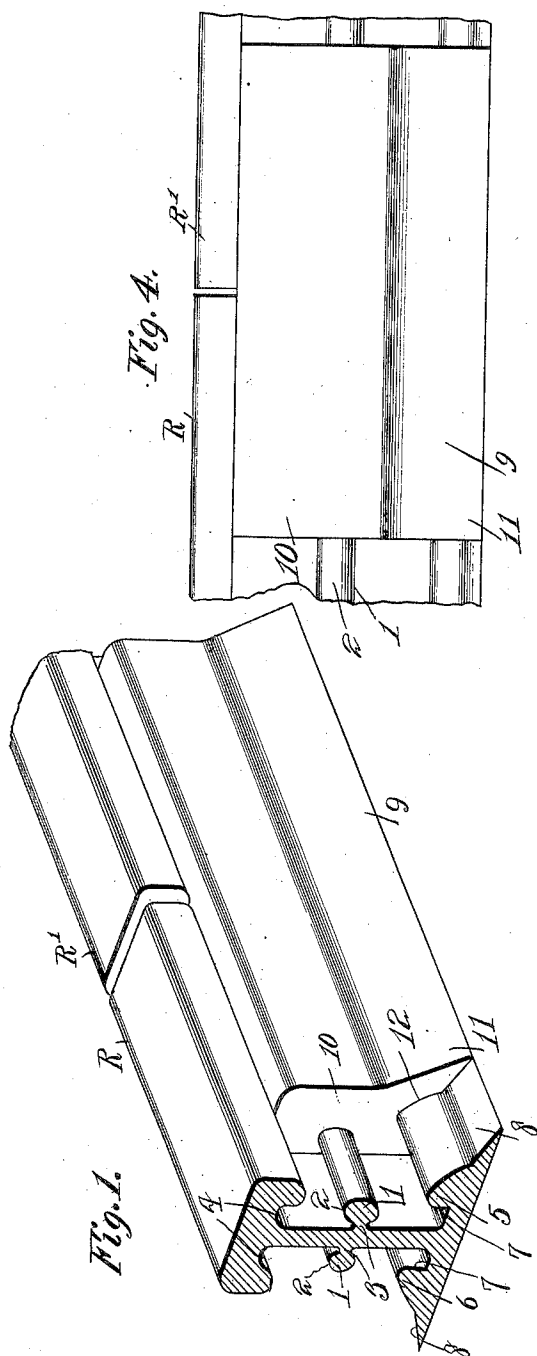


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RAIL SPLICE.
APPLICATION FILED MAY 22, 1913.

1,089,280.

Patented Mar. 3, 1914.



Witnesses

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RAIL-SPLICE.

1,089,280.

Specification of Letters Patent.

Patented Mar. 3, 1914.

Application filed May 22, 1913. Serial No. 769,288.

To all whom it may concern:

Be it known that I, WARREN SLATER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Rail-Splices, of which the following is a specification.

The present invention relates to means for securing the meeting ends of railway rails without the employment of the usual bolts and nuts which necessitates the openings in the webs of the rails and therefore weakens the rails at their ends.

The invention resides in the construction, combination and arrangement of parts set forth in the following description and falling within the scope of the appended claims.

In the drawing: Figure 1 is a sectional perspective view of two rails constructed and connected in accordance with this invention, Fig. 2 is a central horizontal sectional view of the same, and Fig. 3 is a perspective view of one of the connecting plates. Fig. 4 is a side view of the connected rails.

Referring now to the drawings in detail, R—R' designate two rails which are adapted to have their ends connected. The bodies of the rails are of the ordinary construction, but each of the rail ends has its web centrally provided with longitudinally extending ribs 1. The ribs preferably comprise each a head 2 and a flange 3, the said flange being integrally formed with the webs of the rails, so that the ribs are substantially T-shape in cross section, and the heads preferably have their corners rounded. At the rails ends one of the heads of the ribs upon one of the sides of the rail is of a greater width than the head of the rib upon the opposite side, the reduced rib gradually increasing in width to its terminal, and the enlarged rib gradually decreasing in width to its terminal. Thus, it will be noted, the ribs are wedge-shape, but the reduced end of one of the ribs of one of the rails is adapted to contact with the rib upon the second rail end, and the enlarged rib is contacted by a similar enlarged rib upon the co-acting rail, so that when the rails are placed end to end, the heads of the ribs are gradually beveled throughout their length to the second rail end. Also, if desired, the registering ribs may increase in thickness from the connection of one of the flanges 3 of the head 2 to the terminal of the said head 2 of the rib of the adjacent rail.

The heads of the rails R and R' at their juncture with the webs are provided with longitudinal depressions or grooves 4—4, while integrally formed upon the base flanges of the rails at a suitable distance, each from one side of the webs of the rails, are longitudinally extending upturned flanges 5 and 6 respectively. These flanges have their inner walls vertically straight, as indicated by the numerals 7, and their top walls beveled or inclined, as at 8, to a suitable distance away from the longitudinal edges of the base flanges of the rails. The flanges 5 and 6 of the rails are adapted to register when the rails have their ends meeting, as are also the grooves 4 provided in the heads of the said rails.

The numerals 9—9 designate the connecting bars for the rail ends. The bars 9 each comprise a thickened body portion 10 which may have its outer face vertically straight and which has its lower extremity provided with an outwardly extending flange or foot 11 which has its underface shaped to agree with that of the base flanges of the rails beyond the inclined walls 8 provided by the members 5. The lower wall is further provided with an inclined depression 12 which terminates in a longitudinally extending lip 13. The wall 12 is adapted to conform in shape and size to the flange 8 and the bead 13 is adapted to be received within the space between the vertical inner walls of the flanges 5 and 6 and the webs of the rails. The inner and vertically straight faces of the members 9 are each centrally provided with a T-shaped slot 14 which extends longitudinally thereof the entire length of the said members, and which has its walls agreeing in size and shape to those of the T-shaped ribs 1 which are adapted to be received therein. The inner faces of the bodies 9, above the T-shaped slots 14 are formed with longitudinally extending beads 15 which are adapted to be received within the grooves 4 of the rails R—R', and the upper face of the body to the rear of its bead 15 is provided with an outturned portion forming a ledge or shelf 16 which receives the underfaces of the heads of the rails beyond the grooves of the said rails.

The rails are assembled by first inserting one of the connecting plates upon one of the sides of the rail, and the second connecting plate upon the opposite side of the rail. The rails are then moved toward each other, the

plates engaging with the members provided upon the sides of the rails to be fully received within the fishing spaces of the said rails.

Having thus described the invention, what I claim as new is:

1. In a rail joint, two rails having their webs at their ends provided with T-shaped ribs, the heads of which are beveled in opposite directions upon the opposite sides of the rails and which have their webs gradually increasing and decreasing respectively in width from their opposite terminals, connecting plates having T-shaped slots agreeing with the formation and adapted to receive the said ribs.

2. In a rail joint, two rails, each of said rails having its web, adjacent its end provided upon their opposite faces with registering substantially T-shaped ribs, the heads of the rails at the juncture of the webs being grooved, the base flanges of the rails

having longitudinally extending projecting flanges disposed adjacent the webs of the rails, connecting members, each of said connecting members comprising a body having its lower wall shaped to agree with the shape of the base flanges and projecting flanges of the rails, its inner face formed with T-shaped slots which are adapted to receive the T-shaped ribs of the rails and their upper inner portions provided with beads which are adapted to be received within the grooves of the rail, the top or edge of the boxes below the said bead having a ledge shaped to provide a seat for the underfaces of the heads of the rails.

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

WARREN SLATER.

Witnesses:

JAMES L. CLARK,
HOWARD C. MANSON.