

(No Model.)

R. ROXBY.
RAIL JOINT.

No. 477,156.

Patented June 14, 1892.

Fig. 1.

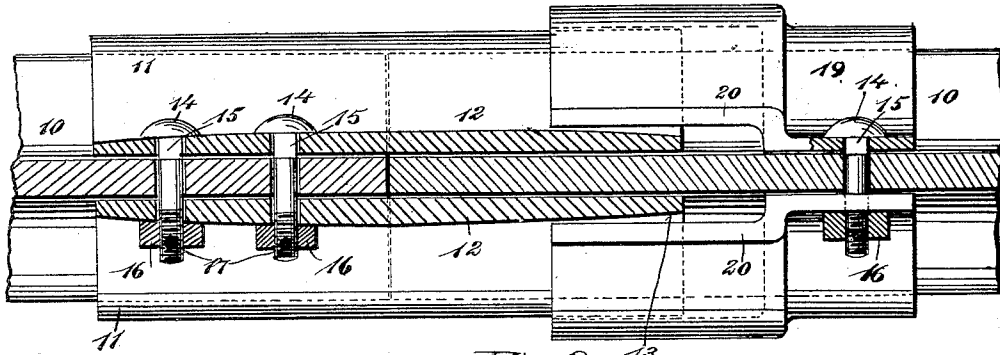


Fig. 2.

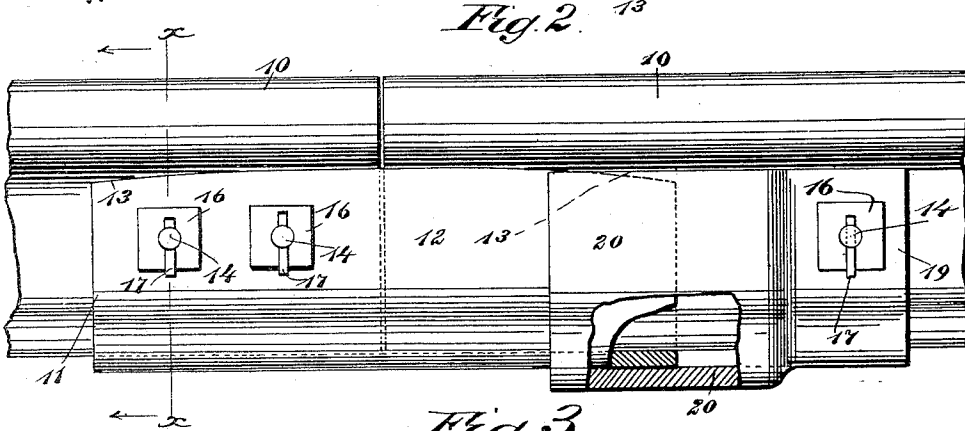


Fig. 3.

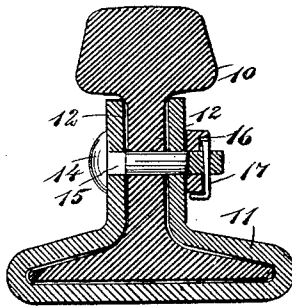


Fig. 4.



WITNESSES:

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RICHARD ROXBY, OF DARTMOUTH, CANADA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 477,156, dated June 14, 1892.

Application filed December 9, 1891. Serial No. 414,464. (No model.)

To all whom it may concern:

Be it known that I, RICHARD ROXBY, of Dartmouth, in the county of Halifax, Province of Nova Scotia, and Dominion of Canada, have invented a new and Improved Rail-Joint, of which the following is a full, clear, and exact description.

My invention relates to improvements in rail-joints; and the object of my invention is to produce a simple and comparatively cheap device, by means of which the meeting ends of railway-rails may be held together, so that they cannot move either laterally or vertically in relation to each other, but may have the necessary longitudinal play to allow for expansion and contraction under the influence of heat or cold, and also to construct a device which may be used to unite the ends of rails without regard to whether or not the joint comes above a supporting-tie.

To this end my invention consists in a rail-joint, the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a broken sectional plan of the joint embodying my invention. Fig. 2 is a broken side elevation, partly in section, of the same. Fig. 3 is a cross-section on the line x x in Fig. 2; and Fig. 4 is a detail perspective view of the pin which is used to lock the fastening nuts and bolts together.

The rails 10 are of the usual form, and they are enveloped by a sheath 11, which is shaped to fit snugly upon the rail, the sheath completely enveloping the lower portion of the rail and having vertical sides 12, which are adapted to fit snugly against the web of the rail and beneath the shoulders of the same, thus forming a support for it, and these side pieces of the sheath are preferably thinned at the ends and rounded slightly at the top corners, as shown at 13 in Figs. 1 and 2, so that the sheath may be easily slipped to place and may also be easily made to enter the fastening sheath or jaw on the opposite rail. The sheath 11 is intended to envelop

the meeting ends of the two rails, but it is fastened to one rail only, and the fastening is effected by means of bolts 14, which extend transversely through the side pieces of the sheath and through the web of the rail, the bolt having the part 15 next its head squared, so as to fit in a square hole in the sheath and prevent it from turning, and nuts 16 are fastened to the bolt, so as not to be accidentally removed, by means of pins 17, which are driven through a slot in the bolts and fit in a recess or groove in the front side of the nut, as best shown in Fig. 3, one end of the pin being preferably doubled under, as shown, and it will thus be seen that the nut cannot possibly be accidentally removed.

On the rail opposite that to which the sheath 11 is secured is fastened a sheath 19, the fastening being effected by a bolt or bolts 14 in the manner already described, and this sheath is enlarged at its free end, as shown at 20 in Figs. 1 and 2, and this enlarged portion fits snugly upon one end of the sheath 11, and it will thus be seen that the two sheaths and the rails will be held so firmly together that the rails will form practically a continuous rail and cannot have any movement in relation to each other except longitudinally.

It will be seen that this joint may be very easily made, as it is only necessary to fasten the sheaths to the rails and slip one within the other, and this is easily effected on account of the thin or tapering ends of the sheath 11.

It will be understood that the sheath 19 can be made so as to fit against the web of the rail to which it is secured and not extend beneath the same; but it is desirable that the two sheaths be made as described, so as to form a strong joint.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A rail-joint comprising overlapping sheaths adapted to be secured to the meeting ends of railroad-rails, the sheaths being disconnected at their overlapping ends from

each other to form a sliding joint and shaped to fit the lower portions of the rails, substantially as described.

- 5 2. A rail-joint comprising sheaths adapted to be secured to the meeting ends of railroad-rails, one of said sheaths having thinned ends and the opposite sheath having an en-

larged portion to fit over the adjacent sheath, substantially as described.

RICHARD ROXBY.

Witnesses:

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