(No Model.)

I. LYND.

RAIL JOINT.

No. 418,374. Patented Dec. 31, 1889.

Fig. 1.

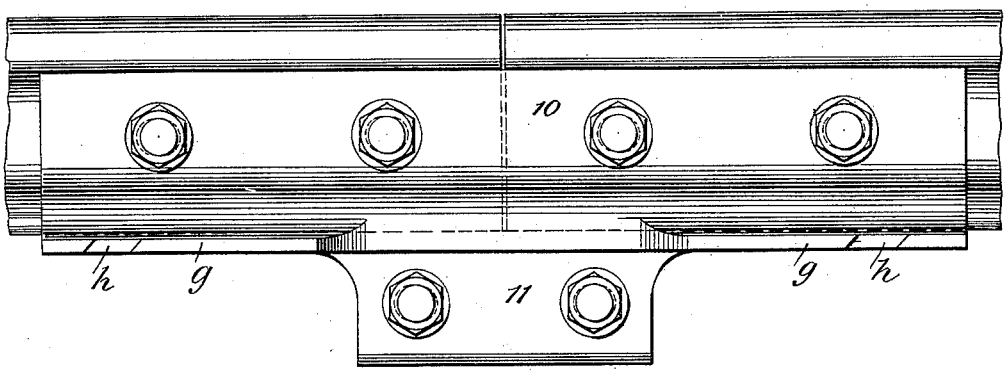


Fig. 2

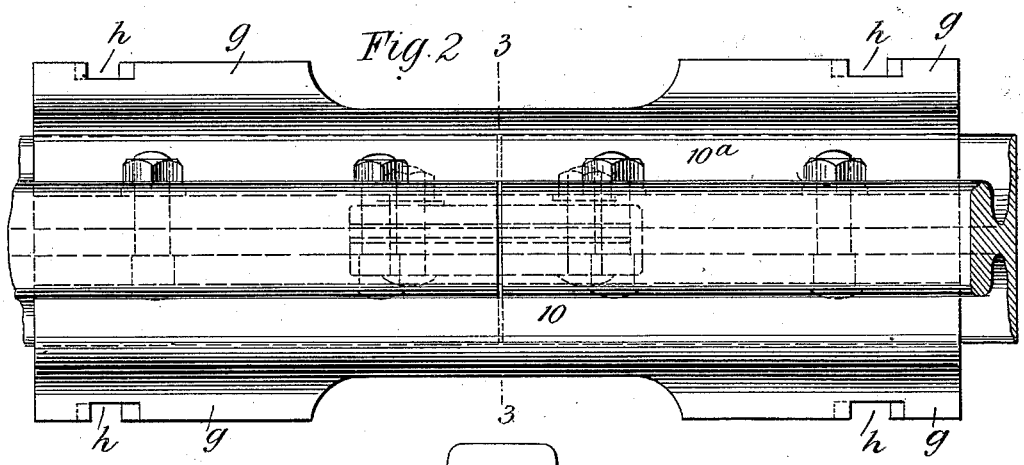
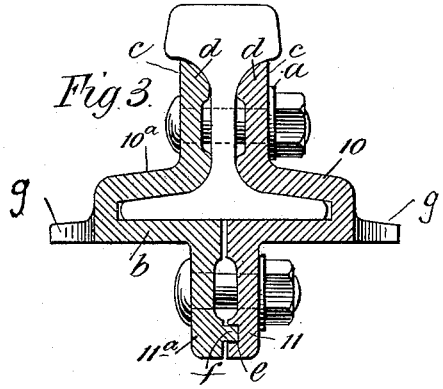


Fig. 3.



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RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 418,374, dated December 31, 1889.

Application filed August 17, 1889. Serial No. 321,126. (No model.)

To all whom it may concern:

Be it known that I, IVES LYND, of Troy, in the county of Rensselaer and State of New York, have invented a new and Improved Rail-Joint, of which the following is a full, clear, and exact description.

This invention relates to rail-joints, the object of the invention being to provide for the rigid support of the abutting ends of the rails that are to be joined, and to the end named in the construction and arrangement of parts, all as will be hereinafter fully explained and specifically pointed out in the claim.

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

Figure 1 is a side view of my improved rail-joint. Fig. 2 is a plan view thereof, and Fig. 3 is a cross-sectional view on line 3 3 of Fig. 2.

In constructing the joint forming the subject-matter of this application I form two sections 10 and 10^a, each of said sections being shaped to receive one-half of the base of a rail and to abut against a rail-web and the under side of a rail-tread, as is clearly shown in Fig. 3—that is, I form each section with a horizontal flange *b* and with a vertical flange *c*, the horizontal flange fitting beneath the rail-base, while the vertical flange is provided with a projection *d*, which abuts against the web and the under side of the rail-tread.

The sections 10 and 10^a are formed, respectively, with downwardly-extending vertical flanges 11 and 11^a, there being a groove *e* in the flange 11, and a tongue *f* upon the flange 11^a, the arrangement being such that the tongue will enter the groove and the parts will be held against vertical displacement.

In practice the sections 10 and 10^a would be rolled to form and cut out to proper length, after which the flanges 11 and 11^a would be cut away from the ends of the sections, as shown in Fig. 1, thus giving a broad tie-bearing at each end of either section; and, further, in practice the sections would be formed with laterally-extending flanges *g*, and these flanges would be recessed, as at *h*, to receive the spikes. The flanges *g* may be continuous, or they may be cut away, as shown in the drawings. The flanges 11, 11^a, and *c* are apertured to receive the retaining-bolts, the apertures in the flanges *c* being placed so that they will register with the apertures in the rail-webs.

After the sections 10 and 10^a have been adjusted to place, as represented in the drawings, the two sections will form a bridge and vise and will prevent the depression of the end of one rail below the end of the abutting rail, whereby all pounding of the rail will be avoided, the sections being materially strengthened just beneath the rail-joint by the vertical flanges 11 and 11^a, which form what might be termed a "bridge" and "vise."

In addition to the rigid support of the rail ends, a material advantage arises from this form of joint, in view of the fact that should a train jump the track and strip or shear off the upper nuts and bolts the lower bolts which pass through the flanges 11 and 11^a would hold the sections 10 and 10^a to place, and all spreading of the rails would be prevented.

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

A rail-joint formed of two sections, shaped to embrace the bases and webs of the abutting ends of two rails, and each formed at its ends with a horizontal portion *b* and notched flange *g h* to rest on two ties, and intermediate of their lengths with downwardly-extending apertured flanges 11 to pass between the ties and having interlocking tongue and groove, substantially as set forth.

IVES LYND.

Witnesses:
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