

(No Model.)

J. N. LEWIS.
RAIL JOINT.

No. 476,753.

Patented June 7, 1892.

Fig. 1.

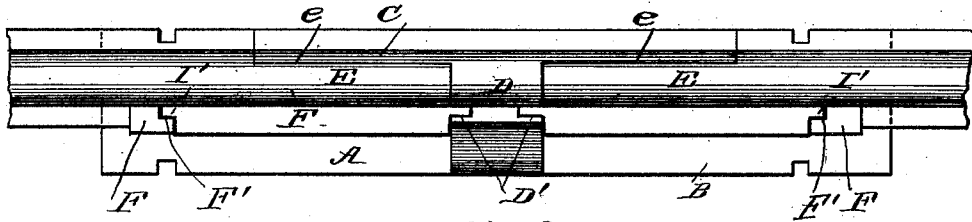


Fig. 2.

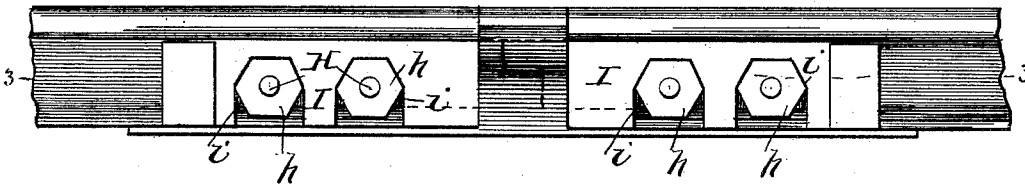


Fig. 3.

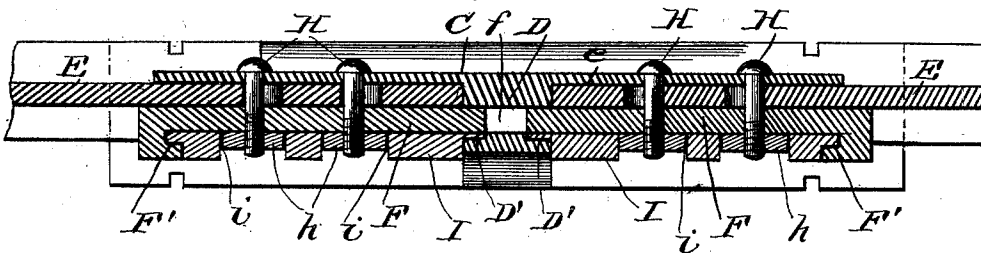


Fig. 4.

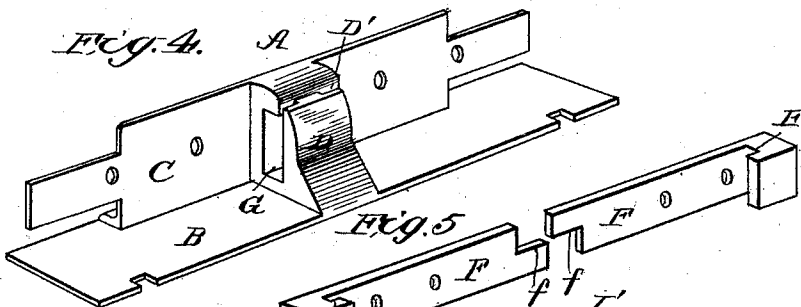


Fig. 5.

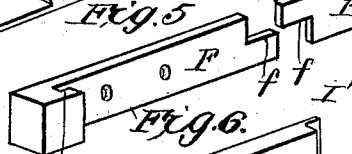
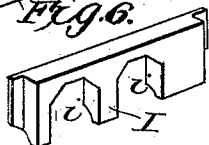


Fig. 6.



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JOHN N. LEWIS, OF COULEE CITY, WASHINGTON.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 476,753, dated June 7, 1892.

Application filed December 29, 1891. Serial No. 416,482. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. LEWIS, of Coulee City, in the county of Douglas and State of Washington, have invented a new and useful Improvement in Rail-Joints, of which the following is a specification.

My invention is an improvement in rail-joints; and it consists in certain novel constructions and combination of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view, and Fig. 2 a side elevation, of my rail-joint, the meeting ends of the fish-plate sections being indicated in dotted lines. Fig. 3 is a horizontal section on about line 3 3 of Fig. 2. Fig. 4 is a detail view of the chair. Fig. 5 is a detail view of the fish-plate, and Fig. 6 is a detail view of one of the locking-plates.

The chair A is formed with a base-plate B, a side plate C, and a transverse portion D, arranged to form an abutment for the adjacent ends of the two joined rails. This transverse portion D projects laterally from the side plate C and upward from the base-plate B. The rails E fit alongside the plate C and up against the portion D, being cut out on one side at e, so that the plate C may set in the rails with its edge flush with that of the rails, as shown most clearly in Fig. 1. The plate C forms a fish-plate for one side of the rails, the fish-plate for the other side being formed in sections F F, fitted at their meeting ends in a seat G, formed in the transverse portion D, and at such end the sections F are formed to lap at f, as clearly indicated in Fig. 2, so that such seat G and the inner adjacent ends of the sections F are securely engaged. The sections F are further held by the bolts H, passing through and uniting the plate C, rail, and fish-plate F, the bolt-holes in the rails being elongated to permit the expansion and contraction of the rails. Near their outer ends the fish-plate sections are provided with seats F', similar to seats D' in the portion D, such seats F' D' being in the nature of vertical grooves open at their upper ends. The lock-plates I, having openings i to fit over and lock the nuts h, are formed at their ends I' to fit in the seats F' and D', so that the transverse portion D and the fish-plate sections F serve to hold the lock-plates I in position, and such

lock-plates operate to prevent the nuts from jarring loose, the whole forming a strong secure rail-joint.

Having thus described my invention, what I claim as new is—

1. In a rail-joint, the improved chair A, formed with a base-plate B, a side plate C, and a transverse portion D within the hollow formed by the juncture of said plates B and C and provided with a seat for the fish-plate, substantially as described, and for the purposes set forth.

2. In a rail-joint, the combination, with the chair having a transverse portion provided with a seat for the fish-plate, of the fish-plate formed in sections fitted at their adjacent ends in said seat, substantially as described.

3. In a rail-joint, a chair having a transverse portion D, such portion D being provided in its opposite edges with vertical grooves forming seats for the nut-locking plates, substantially as set forth.

4. An improved rail-joint comprising the chair having the transverse portion provided with seats for the nut-locking plates, the fish-plate having near its outer ends seats for the nut-locking plates, and the locking-plates fitted and held in said seats, substantially as set forth.

5. The combination, in a rail-joint, with the chair having a transverse portion and the bolts and their nuts, of the locking-plates for said nuts, such plates being engaged with the transverse portion of the chair, all substantially as set forth.

6. In a rail-joint, the combination of the chair having a transverse portion provided with seats for the fish-plate sections and for the locking-plates, the rails fitted in said chair, the fish-plate sections fitted at their inner ends in the seat in the transverse portion and provided near their outer ends with seats for the lock-plates, and the lock-plates fitted at their ends in the seats in the transverse portion of the chair and of the fish-plate sections, substantially as set forth.

7. The improvement in rail-joints, substantially as described, consisting of the chair having a base-plate, a side plate, and a transverse portion, the latter being provided with seats for the fish-plate sections and for the lock-

plates, the fish-plate sections having near their outer ends seats for the lock-plates, and the lock-plates, substantially as described and shown.

- 5 8. In a rail-joint, substantially as described, the combination of the chair, the fish-plate sections, and the locking-plates held by the

said chair and sections, substantially as set forth.

JOHN N. LEWIS.

Witnesses:

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