(No Model.)

T. DAVIES.

RAILWAY CHAIR.

No. 454,834. Patented June 23, 1891.

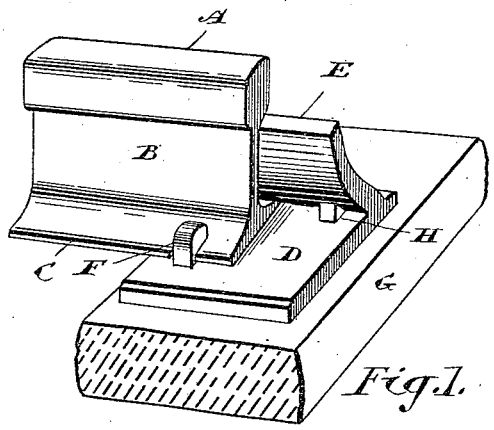

Fig. 1.

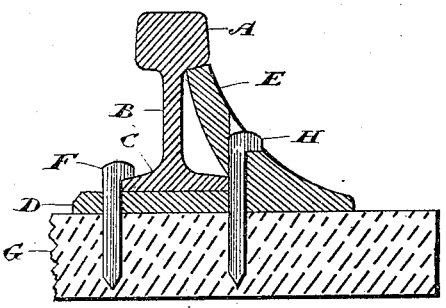

Fig. 2.

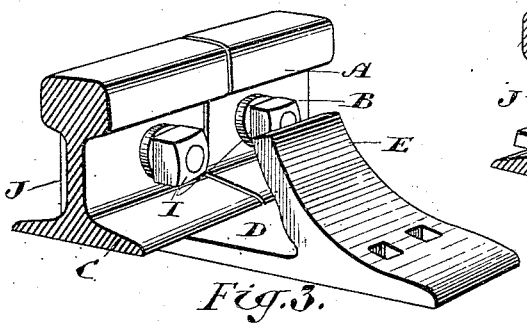

Fig. 3.

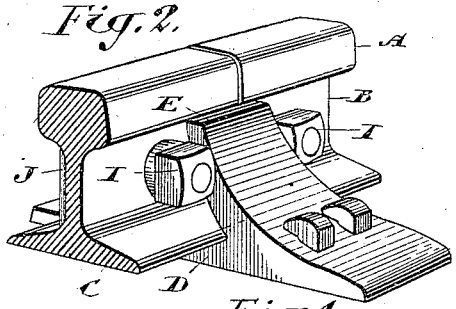

Fig. 4.

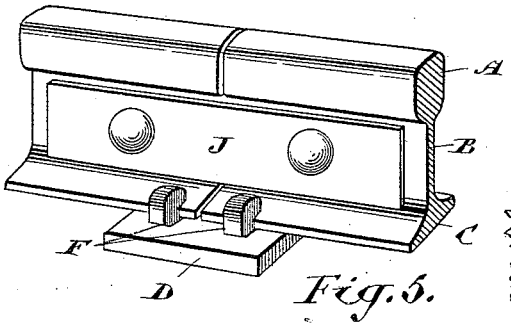

Fig. 5.

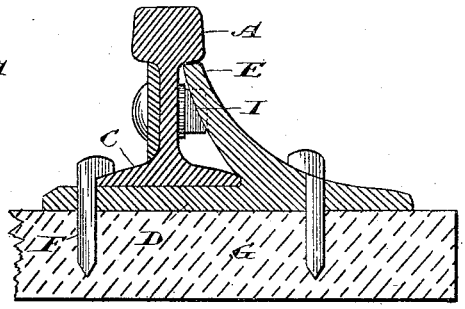

Fig. 6.

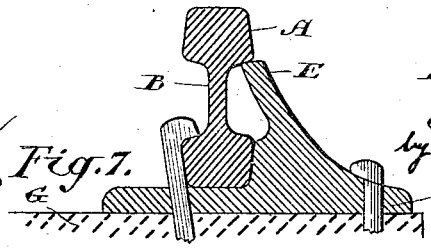

Fig. 7.

Witnesses.
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Attys

UNITED STATES PATENT OFFICE.

THOMAS DAVIES, OF TORONTO, CANADA.

RAILWAY-CHAIR.

SPECIFICATION forming part of Letters Patent No. 454,834, dated June 23, 1891.

Application filed January 16, 1891. Serial No. 378,011. (No model.) Patented in England November 7, 1890, No. 17,930, and in Belgium November 7, 1890, No. 56,624.

To all whom it may concern:

Be it known that I, THOMAS DAVIES, brewer, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented a certain new and useful Improvement in Railway-Chairs, (for which Letters Patent have been granted in England, dated November 7, 1890, No. 17,930, and in Belgium November 7, 1890, No. 69,624, and patents have been applied for in France November 14, 1890, No. 196,392; in Germany November 7, 1890, No. 5,106, and in Austria-Hungary November 7, 1890, No. 5,118,) of which the following is a specification.

The object of the invention is to provide a chair for railroad-iron which will effectually prevent the rail tilting, spreading, or being displaced on curves, and when used in connection with a fish-plate will act as an effective nut-lock; and it consists in the peculiar construction, arrangement, and combinations of parts, hereinafter more particularly described, and then definitely claimed.

Figure 1 is a perspective view of my improved chair applied to a rail without a fish-plate. Fig. 2 is a cross-section of same. Fig. 3 is a perspective view of my improved chair as it will appear in the act of being applied to a rail-joint secured by a fish-plate. Fig. 4 is a similar view, but showing my chair in position to brace the rail and act as a nut-lock. Fig. 5 is a view of the opposite side of the rail-joint shown in Fig. 4. Fig. 6 is a cross-section of Fig. 4. Fig. 7 is a cross-section of my improved chair applied to a double-headed rail.

In the drawings, A represents the head of the rail; B, the web or stem connecting the head A to the base or foot C of the rail, and D is the base of my improved chair designed to fit below the foot C of the rail.

E is an upwardly-projecting flange extending from the base D to the bottom of the head A, forming a lateral brace for the rail, which is further securely held to the chair B by the side of the foot C fitting closely into the recess formed by the junction between the flange E and base D, as indicated.

F represents spikes driven into the tie or sleeper G through holes made in the base D and fitting into a notch made in the foot C of the rail.

H represents other spikes driven into the tie or sleeper G, through holes made in the flanged side of the chair.

By the adoption of my invention fish-plates may be dispensed with, and at the same time the rails will be very securely braced.

My improved chair is also applicable to the joints of rails secured together by fish-plates, and, as a rule, it will be found that by the adoption of my improved chair a fish-plate on one side of the rail only will be found sufficient.

When my improved chair is made to be used in connection with fish-plates, the upwardly-projecting flange E is designed to fit between the nuts I on the fish-plate bolts, the heads of which bolts are countersunk in the fish-plate J and shaped so that they will not revolve.

My improved chair may be made of any metal desired; but I prefer to make it of light steel.

When my improved chair is adapted to act in connection with a double-headed rail, as shown in Fig. 7, I arrange the chairs so that the bracing flange E of each chair shall be on alternate sides of the rail, first on the outside, then on the inside, and so on, forming a solid brace, which will effectually prevent the rail tilting toward either side. It will be observed in the application shown in Fig. 7 that it will be necessary to remove one spike F in each chair to permit the removal of the rail; or by removing the two spikes in the chair the latter may be removed without disturbing the rail.

What I claim as my invention is—

As an improved article of manufacture, the herein-described rail-chair, composed of a base-plate designed to fit below the foot of the rail and an upwardly-projecting flange designed to fit against the bottom of the side of the head of the rail and engage with the nuts of the fish-plate bolts and prevent them turning, the junction between the upwardly-projecting flange and the base of the chair being shaped to receive and grip one side of the foot of the rail, substantially as and for the purpose specified.

Toronto, February 14, 1890.

THOS. DAVIES.

In presence of—

CHARLES C. BALDWIN,

E. CUMMINGS.