

(No Model.)

W. H. MATTSON.
RAILWAY RAIL CHAIR.

No. 469,485.

Patented Feb. 23, 1892.

FIG. 1.

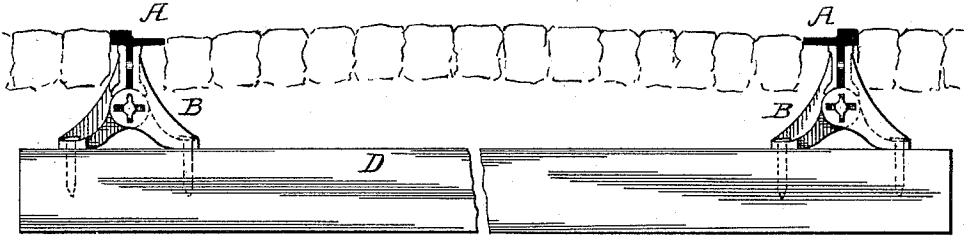


FIG. 2.

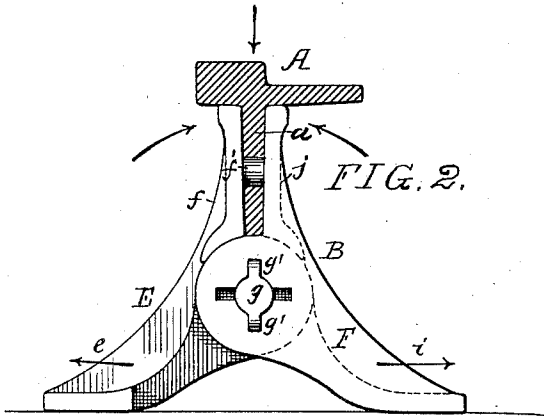


FIG. 3.

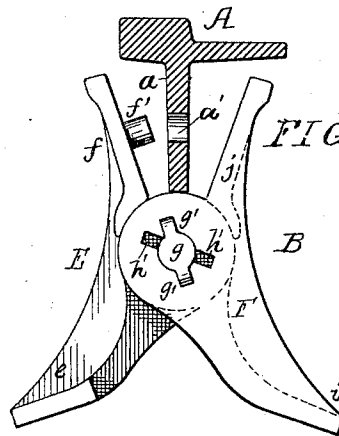


FIG. 4.

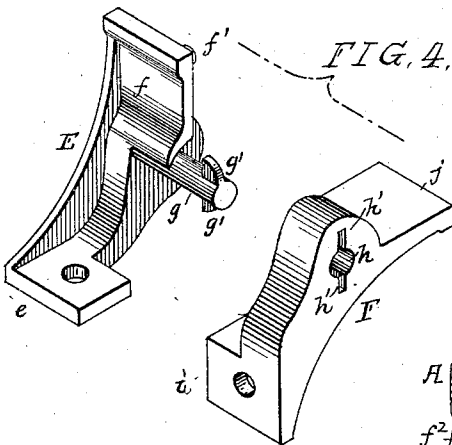


FIG. 5.

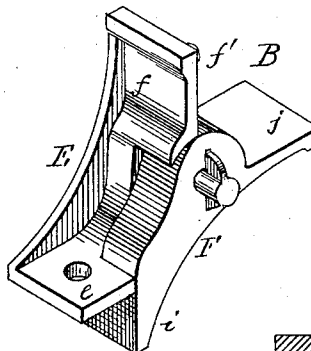


FIG. 6.

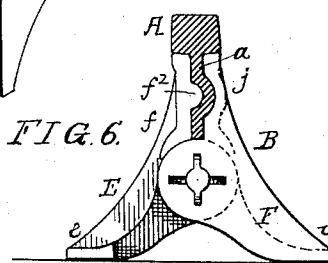
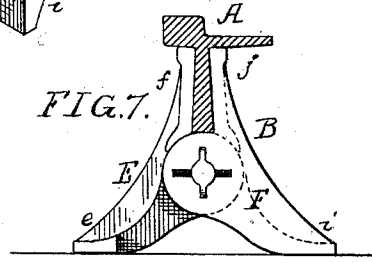


FIG. 7.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM HARRY MATTSON, OF PHILADELPHIA, PENNSYLVANIA.

RAILWAY-RAIL CHAIR.

SPECIFICATION forming part of Letters Patent No. 469,485, dated February 23, 1892.

Application filed July 24, 1891. Serial No. 400,534. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HARRY MATTSON, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have
5 invented certain Improvements in Railway-Rail Chairs, of which the following is a specification.

The object of my invention is to construct
10 an improved railway-rail chair which can be readily applied to the rail and which will hold the rail firmly in position, as fully described hereinafter.

In the accompanying drawings, Figure 1 is a transverse sectional view of a railway-track,
15 showing my improved rail-chairs. Fig. 2 is an enlarged side view of the improved chair, showing the rail in section. Fig. 3 is a side view of the chair, showing the same open ready to receive the rail. Fig. 4 is a detached
20 perspective view of the two parts of the chair. Fig. 5 is a perspective view showing the chair open, and Figs. 6 and 7 are views illustrating modifications of my invention.

A is a rail, which may be of any form for
25 use either on steam or street roads, the web *a* of the rail having a series of orifices *a'* at intervals throughout its length.

B is the chair, which is mounted on a cross-tie D, as shown in Fig. 1, and consists of two
30 castings or forgings E F, the part E having a foot portion *e*, a head portion *f*, adapted to one side of the web of the rail, and a pin *f'* on said head portion for entering one of the orifices *a'* in the web of the rail. In the present
35 instance I have only shown one pin on the head; but it will be understood that more than one pin may be used without departing from my invention, and both the base and the head may be extended as circumstances
40 require, so as to constitute fish-plates for the joints of the rails, for instance. The portion E of the chair also has a pivot-pin *g*, which passes through an orifice *h* in the portion F, projections *g'* on this pin passing through
45 slots *h'* in the portion F, so that when said portion F is mounted on the pin, as shown in Fig. 5, and then moved to the position shown in Fig. 2, it will be locked to the portion E. The portion F of the chair has a base *i* and a
50 head portion *j*, extending up against the side of the web of the rail opposite the head *f*, and

it will be noticed, on referring to Fig. 4, that the portion E is cut away to receive the hub of the portion F, and the latter is likewise cut away to receive the hub of the portion E.
55 The bolt *g*, instead of being cast with the portion E, may be cast with the portion F, or may be independent of either portion and provided with a nut. Any downward pressure on the rail, as indicated by the arrow, Fig. 2,
60 will tend to force the bases *e* and *i* outward, and the heads *fj* will therefore bind tightly against the web of the rail, as also indicated by the arrows in Fig. 2. The chair is secured to the tie by spikes or other suitable means.
65 The pin passing through the orifice in the rail prevents the rail from lifting and also prevents any excessive longitudinal motion of the rail, and when the rail is specially made the pins may be formed on the rail and
70 the chair recessed.

In Fig. 6 I have shown a chair in which I have substituted for the pin *f'* a rib *f²*, extending into a groove in the web of the rail,
75 and in Fig. 7 I have shown a rail having the web tapered from the base to the head of the rail, the heads of the chair-sections being tapered to correspond with the taper of the web, which is sufficient to prevent the rail
80 from being lifted from the chair.

I claim as my invention—

1. In a rail-chair, the combination of the two sections E and F, pivoted together, each having a base portion and a head portion, said head portions extending up on each side of the
85 web of the rail, the head portion of the section E having a pin cast thereon adapted to engage with an orifice in the web of the rail, whereby the rail is locked to the chair, substantially
90 as specified.

2. The combination of the rail having a perforated flange, a rail-chair formed of two sections pivoted together and each having base portions and head portions, with a pin on one of the head portions extending through
95 the perforated flange of the rail, whereby the rail is prevented from being lifted from the chair or moving longitudinally therein, substantially as described.

3. The combination, in a rail-chair, of the
100 sections, each having a base and head portion and each recessed to receive the hub of

the other section, one of said sections having a flanged pivot-pin and the other having a slotted orifice for the passage and reception of said pin, substantially as specified.

- 5 4. The combination, in a rail-chair, of the sections, each having a base and head portion and each recessed to receive the hub of the other section, one of said sections having a flanged pivot-pin and the other having a

slotted orifice for the passage and reception of said pin, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM HARRY MATTSON.

Witnesses:

EUGENE ELTERICH,

HENRY HOWSON.