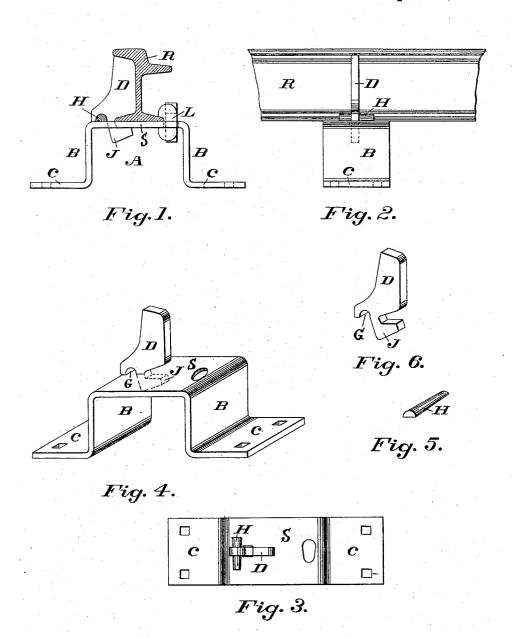
G. MURRAY. BRACE CHAIR FOR RAILROADS.

No. 482,807.

Patented Sept. 20, 1892.

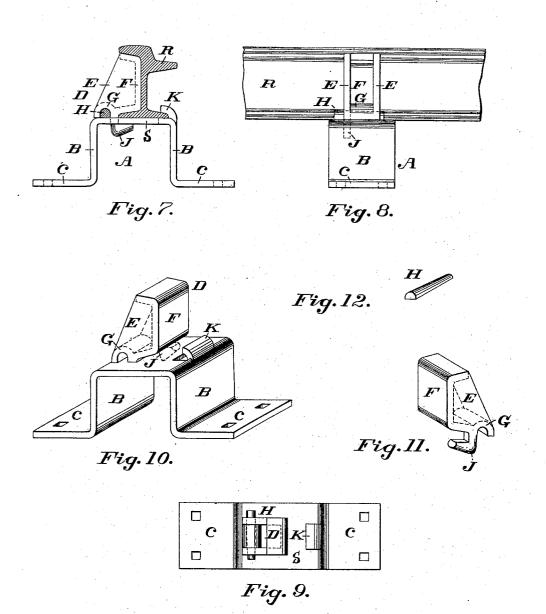


ATTORNEY

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United States Patent Office.

GEORGE MURRAY, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE JOHNSON COMPANY, OF SAME PLACE.

BRACE-CHAIR FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 482,807, dated September 20, 1892.

Application filed May 5, 1890. Serial No. 350,626. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MURRAY, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and use-5 ful Brace-Chair for Railroad-Rails, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is sufficiently

10 indicated by its title.

The invention will first be described in detail

and then particularly set forth in the claims. In the accompanying drawings, Figure 1 shows one form of chair in end elevation hav-15 ingarail, shown in cross-section, in place thereon. Fig. 2 is a side elevation of Fig. 1, looking from the left. Fig. 3 is a view in plan, and Fig. 4 a view in perspective, of the chair shown in Fig. 1, the rail being omitted. Fig. 20 5 is a view in perspective of the wedge used to clamp the brace to the chair. Fig. 6 is a view in perspective of the brace portion of the chair shown in Fig. 1 detached. Fig. 7 shows in end elevation a modified form of chair hav-25 ingarail, shown in cross-section, in place thereon. Fig. 8 is a side elevation of Fig. 7, looking from the left. Fig. 9 is a view in plan, and Fig. 10 a view in perspective, of the chair shown in Fig. 7, the rail being omitted. Fig. 30 11 is a view in perspective of the brace portion of the chair shown in Fig. 7 detached. Fig. 12 is a view in perspective of the key or wedge used to clamp the brace to the chair, being similar in form to that shown in Fig. 5.

In said figures the several parts are respectively indicated by letters of reference, as fol-

The letter A indicates the lower box portion of the chair; B B, its vertical sides; C C, its 40 feet; D, the brace portion of the chair; R, the

rail; S, the rail-seat.

In Figs. 1 to 6, inclusive, (excepting Fig. 5,) the brace portion D of the chair is shown stamped out of a single thickness of metal and 45 provided at its lower portion with a hook J and at its outer edge with a recess or keyway G for the key H. (See Figs. 1 and 6.) A hole being punched in the upper portion of railseat S of the chair, the hook portion J of the 50 brace is inserted through said hole and the brace then turned to a right angle with the

rail to fit the same, when the key or wedge H is driven in to clamp the brace firmly to the chair.

The brace portion of the chair shown in Figs. 7 to 11, inclusive, and the method of fas- 55 tening it to the chair are the same as that just described for Figs. 1 to 6, except that in Figs. 7 to 11 the brace portion of the chair consists of a face-bearing F for the side of the rail and vertical ribs E E.

It is evident that the form of brace portion herein described may be varied in shape to fit various forms of rail that may be used, the shape of the rail being immaterial, and it is also evident that the portion of the chair be- 65 low the rail-seat may be varied to suit particular conditions without departing from this in-

Any suitable means may be employed for securing the rail to the chair on the side oppo- 70 site to the brace portion D. In Fig. 1 a clip and key L and in Fig. 7 a lug K, stamped out of the chair, are shown for this purpose.

Having thus fully described my said inven-

tion, I claim-1. A rail-chair having a brace on one side bearing against the side of the rail and provided with a hook in its lower portion, in combination with a key inserted in a keyway between the lower surface of said brace and the 80 top surface of the chair.

2. A rail-chair having a brace on one side bearing against the under side of the head of the rail and provided with a hook passing through a slot in the rail-seat, in combination 85 with a key inserted in a keyway between the lower surface of said brace and the top surface of the chair.

3. A rail-chair having on one side a clamp for the foot of the rail and on the opposite 90 side a brace bearing against the side of the rail and provided with a hook in its lower portion, in combination with a key inserted between the lower surface of said brace and the top surface of the chair.

4. A rail-chair of box form, having a brace on one side bearing against the side of the rail and provided with a hook in its lower portion, in combination with a key inserted between the lower surface of said brace and 100 the top surface of the chair.

5. A rail-chair of box form, having a rail-

brace on one side provided with a hook passing through a slot in the rail-seat, in combination with a key inserted between the lower surface of said brace and the top surface of the chair

6. A rail-chair of box form, having a rail-brace on one side bearing against the under side of the head of the rail and provided with a hook passing through a slot in the rail-seat,
10 in combination with a key inserted between the lower surface of said brace and the top surface of the chair.

7. A rail-chair provided with a rail-brace

having vertical ribs and a face bearing against one side of the rail and secured to the chair 15 by a hook and key.

8. A rail-chair having a rail-brace on one side secured thereto by a hook and a key and provided on the opposite side with a clamp for the foot of the rail stamped out of the 20 rail-seat.

GEORGE MURRAY.

Witnesses:

W. McLain, R. S. Murphy.