

J. M. COLLINS.
CAR BRAKE.

No. 46,642.

Patented Mar. 7, 1865.

Fig. 1.

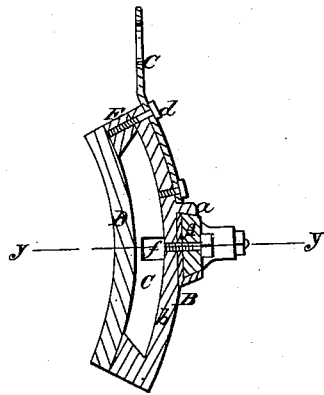


Fig. 2.

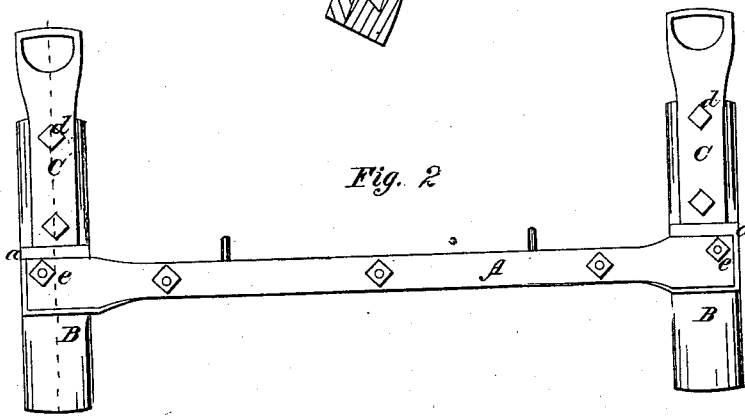
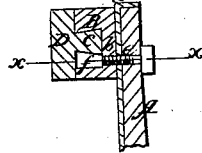


Fig. 3.



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J. M. COLLINS, OF NEW BEDFORD, MASSACHUSETTS.

IMPROVEMENT IN CAR-BRAKES.

Specification forming part of Letters Patent No. 46,642, dated March 7, 1865.

To all whom it may concern:

Be it known that I, J. M. COLLINS, of New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Brake-Fixtures for Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a section of my invention taken in the line *x x*, Fig. 3; Fig. 2, an outer view of a shoe-bar with its heads attached; Fig. 3, a horizontal section of the same taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and useful improvement in attaching the shoes of the brake to the brake-heads, and also in attaching the brake-bar to the heads, as hereinafter fully shown and described, whereby the shoes are firmly attached to the heads and at the same time rendered capable of being readily detached to be replaced by new ones when required, and the brake bar and fixtures attached to it rendered more durable than those as at present constructed.

A represents the shoe-bar, which is constructed of cast-iron, and has the upper and lower surfaces near its ends beveled to fit into dovetail sockets *a* at the outer sides of cast-iron heads B B. (See more particularly Fig. 1.) The shoe-bar A is suspended from the upper part of the car-truck by hangers C C, and the heads B B are of curved or segment form, corresponding to the curvature of the car-wheels. These heads B B have each a dovetail-groove, *b*, made in their face sides, extending nearly their whole length, and into these grooves dovetail projections *c* at the rear sides of the shoes D D are fitted, the shoes D D corresponding in curvature to the heads B B.

The dovetail projections *c* of the shoes D D are not quite equal in length to the dovetail-grooves *b* in the heads B, and the space above said projections are filled by dovetail-plugs E, into which the upper screws, *d*, of the hangers C C pass and secure said plugs in the grooves. (See Fig. 1.)

The dovetail-grooves *b* do not extend down to the lower ends of the heads B B, and the bottoms of the projections *c* rest upon the bottoms of said grooves, the plugs E preventing any upward movement of the shoes, which, like the heads B, are of cast iron.

The shoe-bar A is retained in the sockets *a* by bolts *e*, the heads *f* of which are dovetail form and are within the dovetail-grooves *b*, as shown clearly in Fig. 3, and it will be seen by reference to this figure that by screwing up the nuts of these bolts the dovetail-heads *f* will draw back the dovetail projections *c* of the shoes firmly in the grooves *b* of the heads, thereby preventing any forward and backward play or movement of the same.

The whole arrangement is extremely simple and efficient, and forms a very durable brake-fixture.

I claim as new and desire to secure by Letters Patent—

1. The mode of securing the shoes D D to the heads B B by means of the dovetail projections *c* on the shoes fitted in the dovetail-grooves *b* in the heads when combined with the dovetail-plugs E and the bolts *e*, provided with the dovetail-heads *f*, all arranged as set forth.

2. The cast-iron shoe-bar A, when attached or fitted to the heads B B, when constructed in the manner substantially as herein shown and described.

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Witnesses:

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