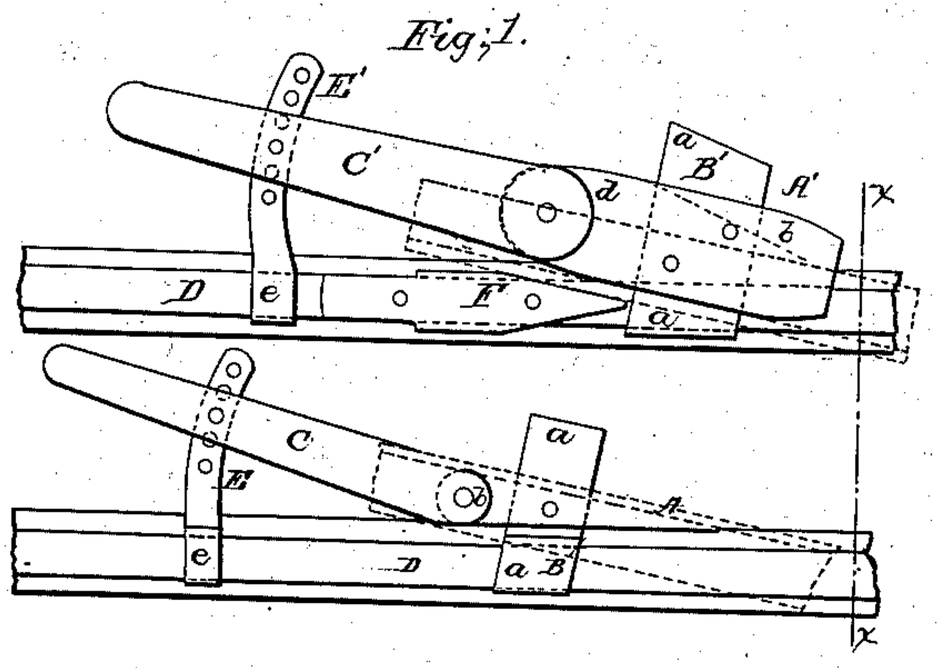
P. Daniels,

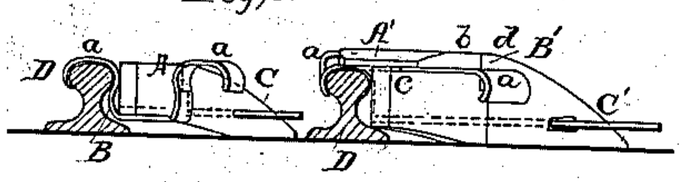
Car Replacer,

No. 43,103, Patented June 14, 1864.

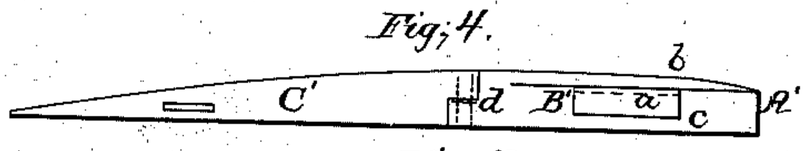
Fig; 1.



Fig; 3.

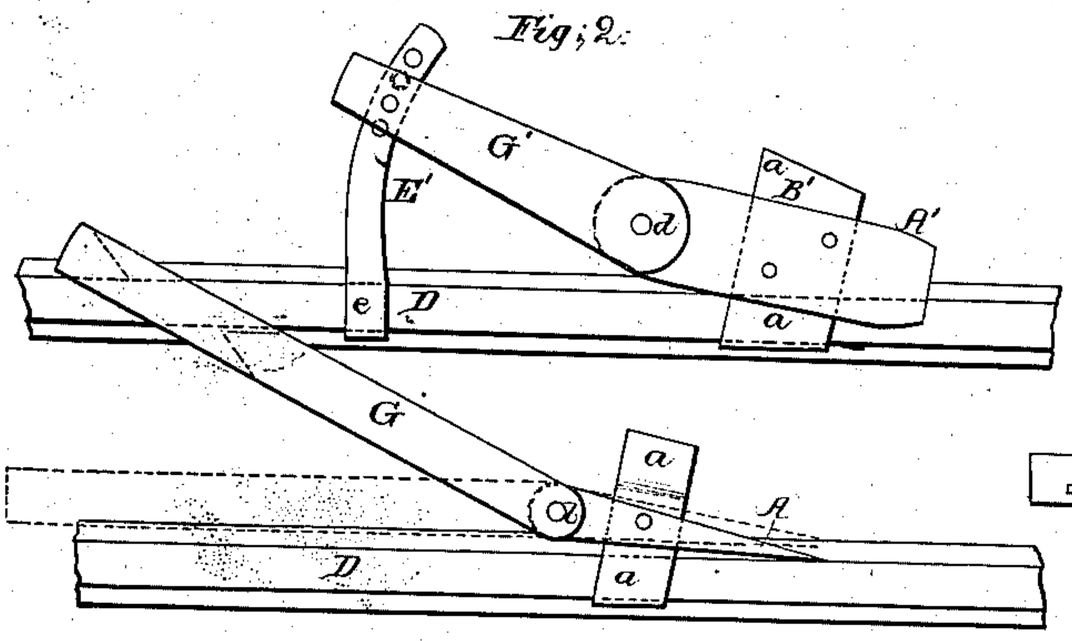


Fig; 4.

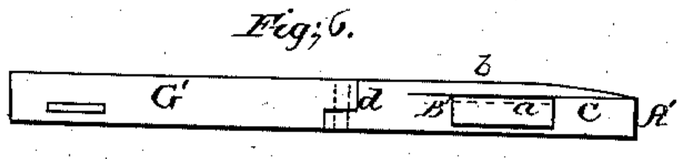


Fig; 5.

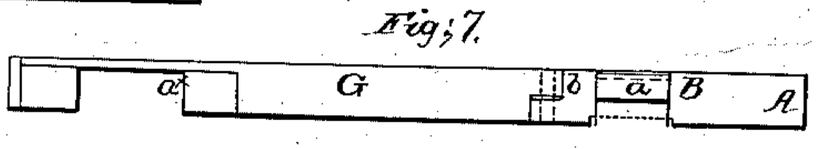
Fig; 2.



Fig; 6.



Fig; 7.



Witnesses;
L. P. Hall
Geo. W. Reed

Inventor;
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83

UNITED STATES PATENT OFFICE.

PHYLANDER DANIELS, OF LEROY, NEW YORK.

IMPROVEMENT IN PORTABLE RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. 43,103, dated June 14, 1864.

To all whom it may concern:

Be it known that I, PHYLANDER DANIELS, of Leroy, in the county of Genesee and State of New York, have invented a new and Improved Portable Railroad-Switch, the same being also applicable to the placing of cars on the track; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view of my invention, shown applied to a track as a means for placing cars thereon; Fig. 2, a plan or top view of the same adjusted to a track as a switch; Fig. 3, a section of Fig. 1, taken in the line *x x*; Figs. 4 and 5, detached side views of the two principal parts of the device shown in Fig. 1; Figs. 6 and 7, detached side views of the two principal parts of the device shown in Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in the employment or use of two jointed bars provided with clamps and fitted to the rails in such a manner that the device may be used as a temporary switch without disturbing the rails, and applied at any point, no frogs nor any other parts, except those pertaining to or forming a part of my invention, being required.

The invention is also applicable to the placing or adjusting of cars on the track, and may be applied to the rails with the greatest facility to answer that end.

To enable those skilled in the art to make and use my invention, I will proceed to describe it.

A A′ represent two bars, which may be constructed of wrought-iron—that at least would be preferable. The bar A is of V form, and it has a clamp, B, attached to it, said clamp being composed of a wrought-metal plate bolted transversely to the under side of A and bent upward at each side and then downward, as shown at *a* in Fig. 3, so as to fit over the rails of the track.

To the bar A there is connected by a joint, *b*, a taper or inclined bar, C, which is considerably longer than A. (See more particularly Fig. 4.) The bar A′ is rather broader at its upper surface, *b*, than the bar A, but it has a pivoted or V-shaped part, *c*, below *b*, like the bar A. The bar A′ has a clamp, B′, bolted to it, precisely similar to the clamp B of A, and said bar A′ also has a taper or inclined bar, C′, connected to it by a joint, *d*.

When the device is used to place or readjust cars upon the track, the bars A A′ are placed by the sides of the rails D D, the parts *a* of the clamps at one side of said bars being fitted over the rails, and the bars C C′ adjusted underneath the car-wheels which are off the track. The bars C C′, when thus adjusted, are secured in position by bolts passing vertically through them and through any of a series of holes made in bars E E′, which are bent at one end, *e*, to fit over the rails similar to the parts *a* of the clamps B B′.

In adjusting the car on the track the wheel which is off at the outer side of the same passes up the bar C′ and over the bar A′ upon the rail, while the other wheel, which is off of the track between the rails, passes up the bar C and over the bar A upon the other rail. The top or upper surface, *b*, of the bar A′ projects over the rail to which it is applied, in order to admit of the flange of the wheel passing over the rail to the inner side of the same. The upper surface of the bar A is flush with the upper surface of the rail to which it is applied.

On the rail which has the bar A′ applied to it there is fitted, just back of said bar, a plate, F, which extends forward about one-half the length of A′ at its inner side, so as to serve as a bridge for the back wheel of the car on the same rail and enable said wheel to pass on the top part, *b*, of A′ and clear the clamp B′. The front of *b* is inclined, as shown in Fig. 4, to allow the wheel to pass gently down on the rail.

In using the device as a temporary switch the bars C C′ are removed, and others, G G′, used instead. The bars G G′ are not inclined, as they are designed to match the rails of the turn-out or branch road. The bar G′, which is attached to the bar A′, is comparatively shut, and is secured in position by the bar E′, as shown in Fig. 2. The bar G, however, extends across the rail to which the bar A′ is applied, and it is notched at its under side, as shown at *a**, so as to fit on said rail and form a bridge, as shown in Fig. 2.

This device, when used for either of the purposes herein set forth, may be applied to either side of the track, as occasion may require.

The temporary switch will be found very important, as temporary tracks are frequently made for hauling gravel from pits, earth, &c., for the repairing of the main track, and by my improvement a connection can be formed without the trouble and expense attending the application of an ordinary switch.

In order to disconnect my switch from the turn-out or branch track all that is required is to remove the bar G from the rail on which it rests and turn the front of the bar A out from the rail to which it is applied, as shown in red in Fig. 2. The cars on the main track may then pass along. The switch may also be wholly removed, if desired, as it can readily be taken up and applied to the rails.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The two bars A A′, constructed as shown, and provided with the clamps B B′, in combination with the bars C C′ G G′, either or both pairs connected to the bars A A′ by joints and secured in position, substantially as and for the purposes set forth.

2. The plate F, when used in combination with the bars A A′ C C′, for the purpose set forth.

PHYLANDER DANIELS.

Witnesses:

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M. M. LIVINGSTON.