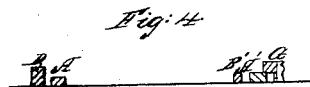
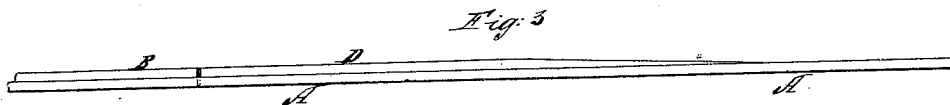
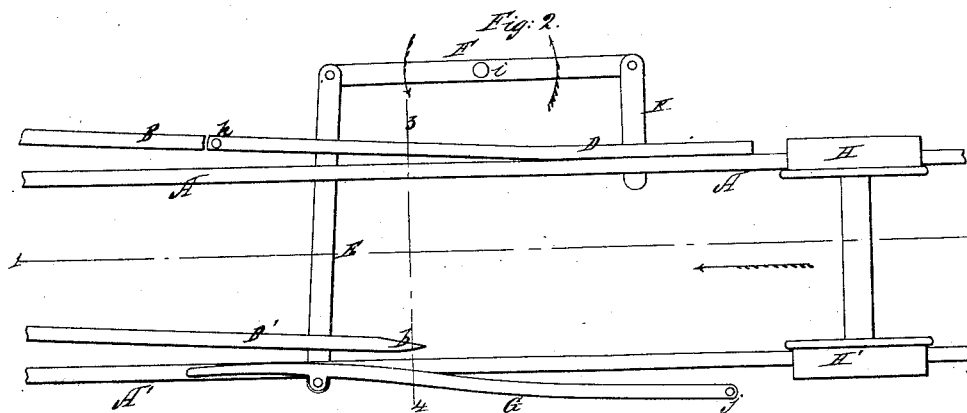
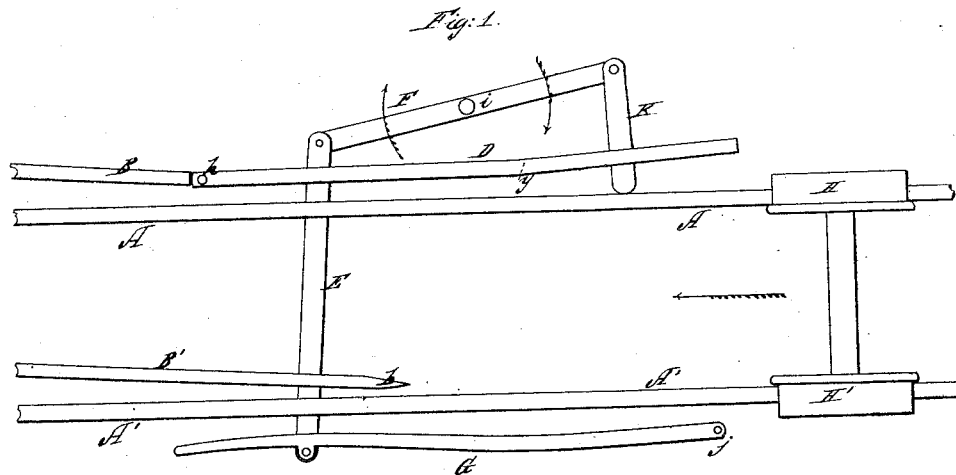


W. Wharton, Jr.

Railroad Switch.

N^o 49, 668.

Patented Aug. 29, 1865.



Witnesses:

Wm. Albert Steel
W. R. Bellamy.

Inventor:

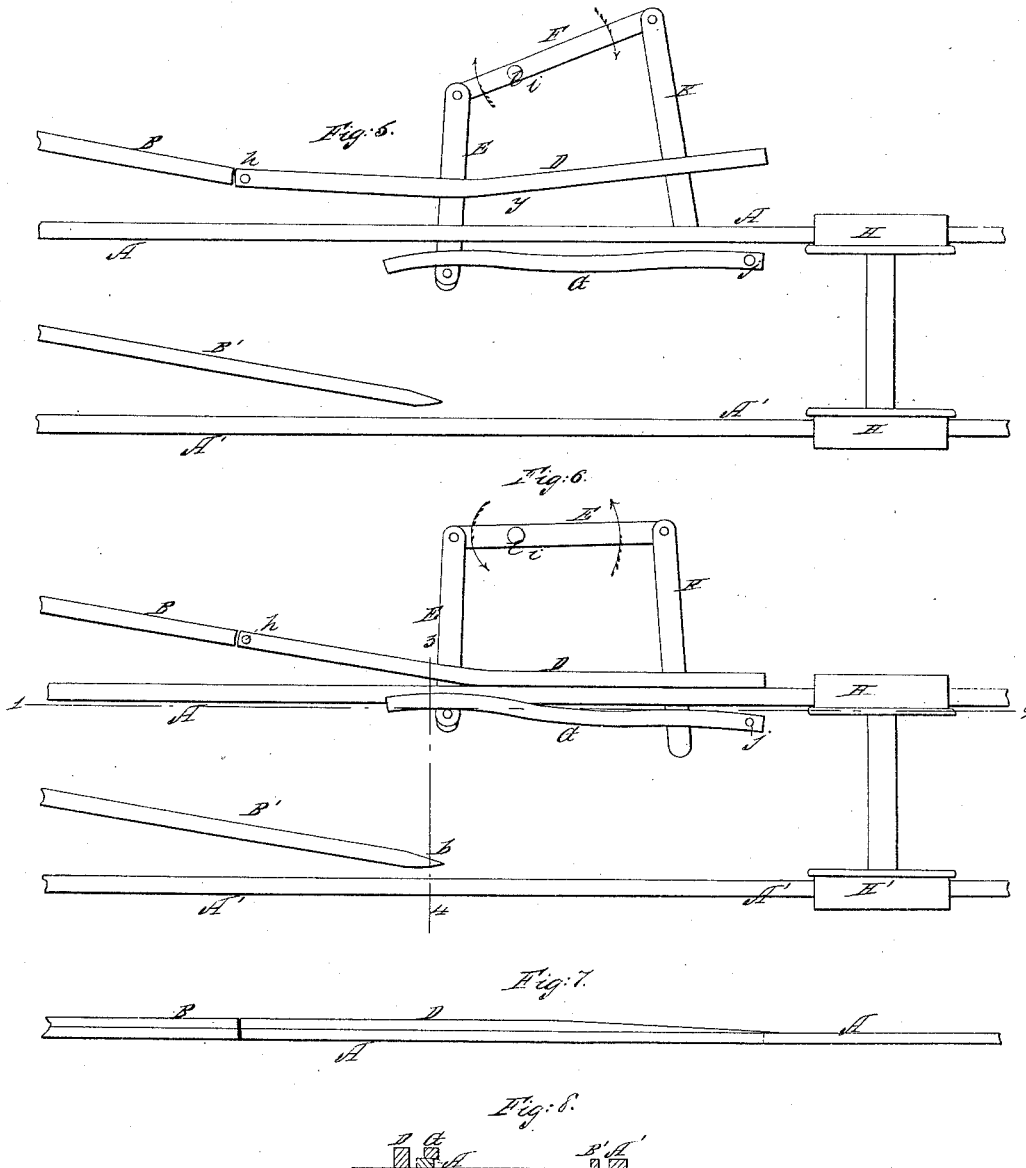
Wm. Barton Jr

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Witnesses:
Wm. Albert Steel
Wm. R. L. Lacey

Inventor:
Wm. Wharton Jr.

UNITED STATES PATENT OFFICE.

WM. WHARTON, JR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. 49,668, dated August 29, 1865.

To all whom it may concern:

Be it known that I, WILLIAM WHARTON, JR., of Philadelphia, Pennsylvania, have invented certain Improvements in Railroad-Switches; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a combination of the permanent rails of a main track, the rails of a turn-out, a movable switch-rod with an inclined end, and a movable guide-rail, the whole being arranged and operating substantially as described hereinafter, for the purpose of transferring cars from the main track to a turn-out without wounding or disturbing the continuity or permanency of the rails of the said main track, my present invention possessing one feature similar to that described in my patent of June 27, 1865—namely, a movable inclined rail, by means of which the car-wheels which traverse one rail of the track are at the turn-out raised above and free from the control of the said rail.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figures 1 and 2, Drawing No. 1, are plan views of my improved railroad-switch; Fig. 3, Drawing No. 1, a longitudinal section of the track on the line 1 2, Fig. 2; Fig. 4, Drawing No. 1, a transverse section on the line 3 4, Fig. 2; Figs. 5 and 6, Drawing No. 2, plan views illustrating a modification of my invention; Fig. 7, Drawing No. 2, a longitudinal section of the track on the line 1 2, Fig. 6; Fig. 8, Drawing No. 2, a transverse section of the track on the line 3 4, Fig. 6.

Similar letters refer to similar parts throughout the several views.

A and A' are the two permanent rails of the main track—that is to say, the rails which the locomotives and cars for conducting the main transportation of the line have to traverse, and B and B' are the two permanent rails of the turn-out which the cars have to occasionally traverse.

The rail B' of the turn-out terminates in a comparatively sharp point, *b*, where it is at such

a distance from the rail A' of the permanent track that the flange of the car-wheel H' can pass freely between the two.

The movable switch-rail D, which is hinged at *h*, forms a continuation of the rail B of the turn-out, and this switch-rail D is bent to such an angle that for some distance from its outer end, and under the circumstances described hereinafter, it will fit snugly against the outer edge of the rail A, as seen in Fig. 2.

The switch-rail D is at its outer end of the same height as the rail A, but gradually increases in height from the said end to about the point *y*, from which point the rail is continued to any length desired at a uniform level, and then it may be gradually decreased in height until it is of the same altitude as the rail A.

The rail D is secured to a bar, K, which is jointed to one arm of the lever F, the latter having its fulcrum on a pin, *i*, and the other arm being jointed to a bar, E, which passes beneath the rails of the track, and is secured to the guide-rail G, which is hung to a pin, *j*. This guide-rail is of the form or approximating to the form represented in the drawings, a portion of it being made to overlap the rail A', as seen in Figs. 2 and 4, under the circumstances described hereinafter, for it should be understood that this guide-rail is much higher than the rail A' of the main track.

When the lever F has been operated so as to move the rail D and guide-rail G to the position shown in Fig. 1, the car-wheels, moving in the direction of the arrow, will traverse the rails A and A' of the main track. Should it be desirable, however, to transfer the cars from the main track onto the turn-out, the lever F is moved in the direction pointed out by the arrows, Fig. 1, when the rail D and guide-rail G will be moved simultaneously, the former against the outside of the rail A and the guide-rail, so as to overlap the rail A', all as illustrated in Fig. 2. As the wheels H and H' move in the direction of the arrow, Fig. 2, the wheel H will gradually ascend the inclined rail D until the flange of the wheel is raised above and free from the control of the rail A. In the meantime the rim of the wheel H' comes in contact with the curved edge of the guide-rail G, which pushes both wheels laterally, so that as the wheels continue to move in the direc-

tion of the arrow the wheel H' will pass from the rail A' of the permanent track to the rail B' of the turn-out, and the flange of the wheel H will cross the rail A of the permanent track and continue its course along the switch-rail D, and thence to the rail B of the turn-out.

It will be evident without further description that my invention obviates the necessity of cutting and disturbing the integrity and continuity of the main track.

The modification illustrated in Drawing No. 2 is too similar to the invention last described to need a lengthy explanation. The guide-rail G, instead of being situated on the outside of the rail A', as in the former case, is situated on the inside of the rail A, so that the side of the flange of the wheel H will come in contact with the curved edge of the rail G when it is nec-

essary to direct the cars from the main track to the turn-out.

I claim as my invention and desire to secure by Letters Patent—

The combination of the permanent rails A and A' of the main track, the rails B and B' of the turn-out, the movable switch-rail D, and the guide-rail G, the whole being arranged and operating substantially as and for the purpose herein set forth.

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

WM. WHARTON, JR.

Witnesses:

CHARLES E. FOSTER,
JOHN WHITE.