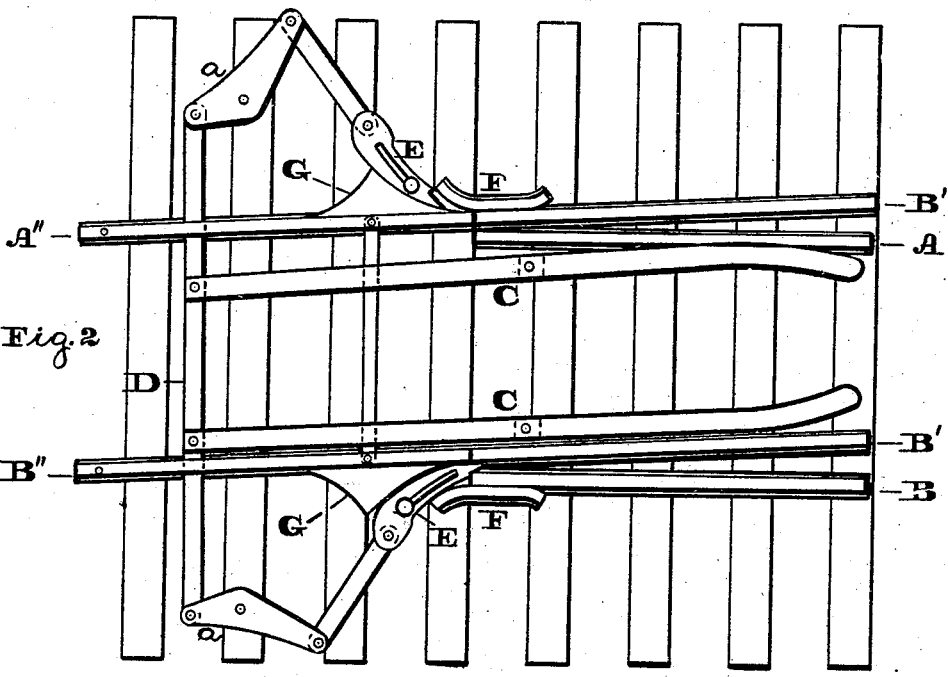
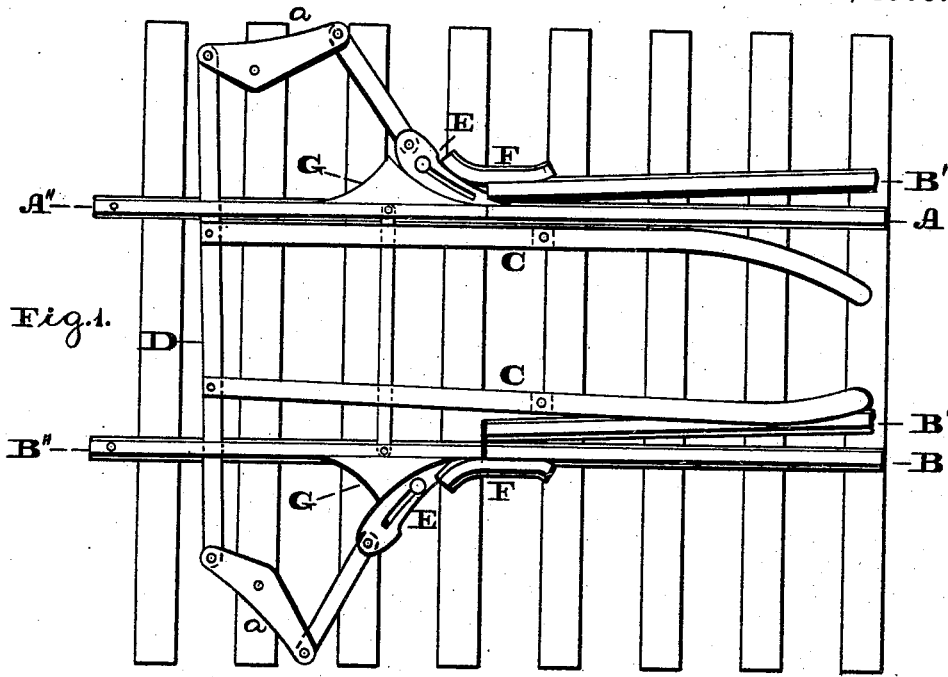


J. S. WILLIAMS.
RAILROAD SWITCH.

No. 183,438.

Patented Oct. 17, 1876.



Witnesses:
Levy C. Brown,
Ro. P. Grant.

Inventor:
Jos. S. Williams,
by *John A. Diederichs,*
Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH S. WILLIAMS, OF RIVERTON, NEW JERSEY.

IMPROVEMENT IN RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. **183,438**, dated October 17, 1876; application filed August 23, 1876.

To all whom it may concern:

Be it known that I, JOSEPH S. WILLIAMS, of Riverton, in the county of Burlington and State of New Jersey, have invented a new and useful Improvement in Railroad Switches and Crossings; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which the figures are face or plan views.

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

My invention consists of a switch in which the main-line rails are moved automatically or otherwise, and provided with movable plates, rails, or fillings, to take the bearings of the wheels at the end of the switch-rails, or to lock the same either to the main line or side track.

Referring to the drawings, A B represent the rails of the main track, and B' the rails of the side track. A'' B'' represent movable rails, the rail A'' being adapted to join the rail A or rail B', and the rail B'' to join the rail B or rail B'. C represents plates which extend longitudinally and adjacent to the rails A.B', and they are pivoted near the head ends of the movable rails A'' B''. The plates C, at the ends adjacent to the butt-ends of the movable rails A'' B'', are pivoted to a transverse bar, D, to the ends of which are pivoted swinging levers *a*, arranged outside of the tracks. To the levers *a* there are pivoted pieces E, which may be termed "fillings," plates, or rails which slide in the direction of the length of the tracks, between guards F and abutments

G of the movable rails A'' B'', and they are also adapted to enter the throats of either the rails A B' or B B'.

It will be seen that by this construction I provide a switch in which the main-line rails are moved, with plates, rails, or fillings to take the bearing of the wheels at the ends of the switch-rails, either on the main line or side track.

The plates or fillings are automatically operative, to take the bearings of the wheels either on the main line or side track at the end of the switch-rails, or to lock the same. The operative plates or fillings lock the switch rail or rails in any desired position.

The plates or fillings effect the shifting of the switch-rails. The plates or fillings take a reverse direction, operating the switch-rails or locking them.

The main-line rails are movable, and have plates to take bearing of wheels at ends of switch-rails, either on the main line or side track. I transfer the cars from the main line to the side by both main-line rails being movable, and a shifting rail or rails to effect crossing at the frog, with bearings for wheels at the ends of switch-rails operated by levers.

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

Plates or fillings E, automatically or otherwise operative, to take the bearings of the wheels either on the main line or side track at the end of the switch-rails, or to lock the same, substantially as set forth.

JOS. S. WILLIAMS.

Witnesses:

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