

W. H. Stauts,

Railway Switch.

No. 102,724.

Patented May 3, 1870.

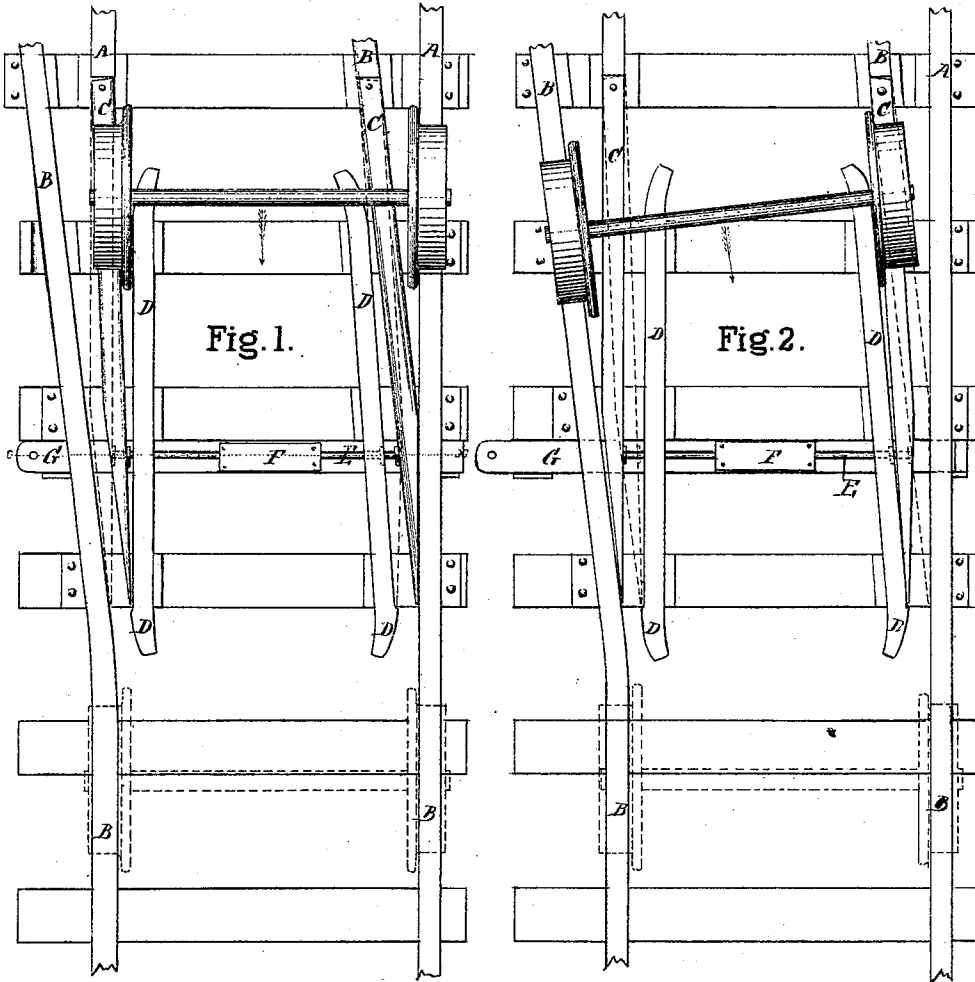
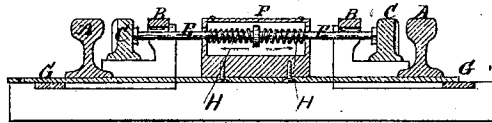


Fig. 1.

Fig. 2.

Fig. 3.



Witnesses:

Pred. Acton

Ch. Clauson

Inventor:

W. H. Stauts

Jr. Edwin Prother

his Atty.

United States Patent Office.

WILLIAM H. STAATS, OF CRESCENT, NEW YORK.

Letters Patent No. 102,724, dated May 3, 1870.

IMPROVEMENT IN RAILWAY-SWITCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM H. STAATS, of Crescent, in the county of Saratoga and State of New York, have invented a new and Improved Railroad-Switch; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Drawings.

Figure 1 is a plan view of a railroad-switch, having my improvement attached thereto, the switch being set to direct a car or train of cars approaching it upon the side track.

Figure 2 is a similar view, with the switch so set as to direct the approaching train upon the main track.

Figure 3 is a transverse vertical section on line $x x$ of fig. 1.

Corresponding letters denote corresponding parts in each of the figures.

A A, in the drawings, refer to the rails of the main track of a railroad, which are to be laid in the usual manner, and held in position by any of the approved methods in use for that purpose.

B B refer to the rails of the side track, which are of the usual form, and are to be arranged in the usual manner.

C C refer to the movable portions of the rails, which constitute what is termed the switch, they being pivoted to the block or chair which supports the end of the permanent rail, with which each one is joined.

D D represent guard-rails, which may be of the usual form, and be placed in the proper position to guide the wheels in the right direction.

E represents a rod or bar, of metal, which joins the outer ends of the bar C, which constitute the switch, together. This rod passes through said bars near their outer or beveled ends, it being firmly secured thereto, so that it cannot move therein, but so as to move on'y with them.

F represents a box, of metal, which incloses the central portion of the rod E, it being secured to the sliding plate G in such a manner as to move with it.

This box has a removable cap upon its upper surface, so that access may be had to its interior at any time by removing said cap.

G represents a plate, of metal, which extends across the track, and may rest in guides secured to a tie, or any other suitable portion of the track. The position of this bar is directly under the box F and rod E, its office being to communicate motion to such box and rod, through the medium of a lever attached to one of its outer ends.

H H represent spiral springs, which surround that portion of the rod E which is within the box F. One end of each of these springs rests against the inner end surfaces of said box, while their opposite ends both bear upon a collar formed or placed upon the rod E, at or near its center.

The arrangement of these springs is such, that the bar G, which moves the switch or changeable portions of the rails, may move through a greater distance than such movable portions of the rails, and thus insure the holding of their beveled portions firmly against the fixed rails, so as to prevent the possibility of the wheels or their flanges from entering between the movable and fixed rails, and thus guiding the car or train onto the wrong track.

I am aware that it is not new to connect switch-rails by means of springs, combined with the switch-rod in such a manner that the switch-rails can be moved without the action of the switch-lever.

Having thus described my invention,

What I claim is—

A railroad-switch, formed by the combination of the movable portions C C, connecting-rod E, box F, springs H H, sliding-bar G, and guard-rails D D, the springs H H, having their bearings within the box F, all being arranged to operate together, as shown and described.

Signed at Troy, New York, this 22d day of December, 1869, in the presence of two subscribing witnesses.

W. H. STAATS.

Witnesses:

A. FOWLER,
JACOB G. RUNKLE.