W. H. Staats.

Railroad Switch.

No. 71807 Patented Dec. 3, 1867.

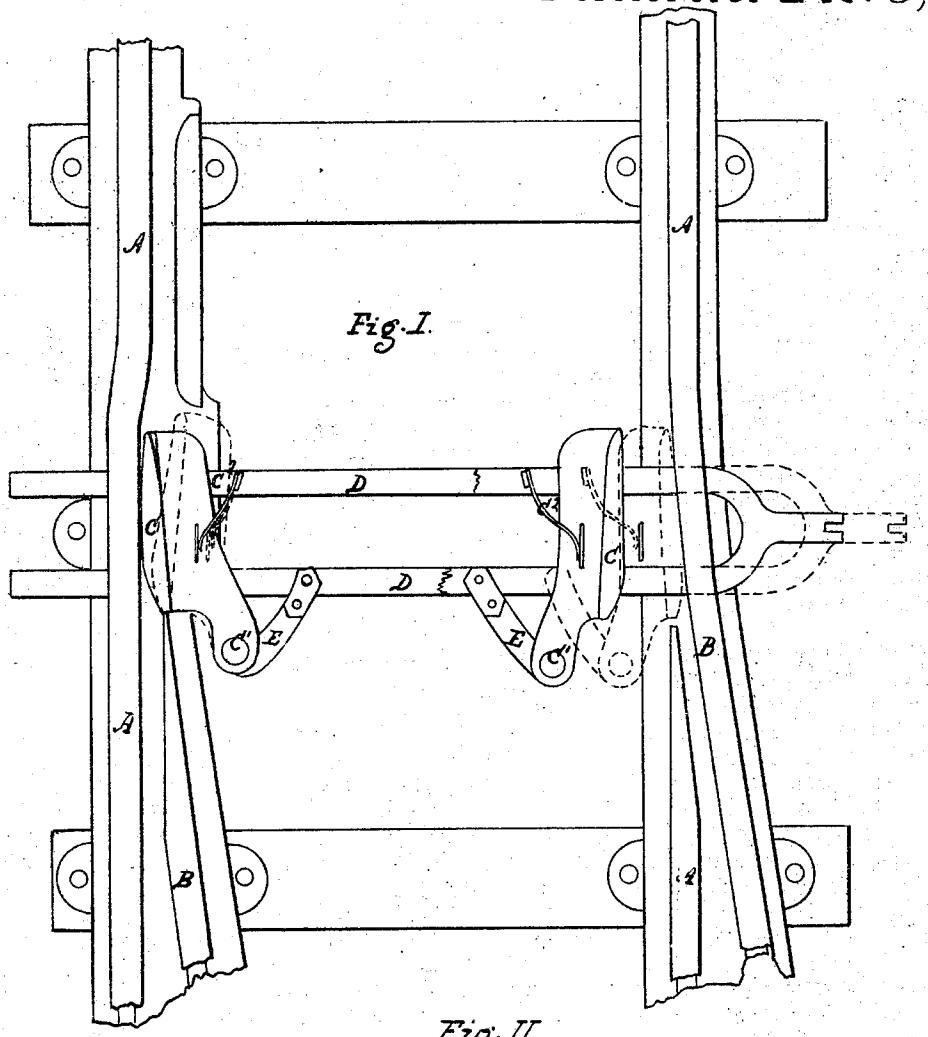

Fig. I.

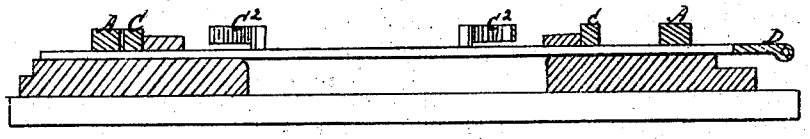

Fig. II.

Witnesses
Chas. F. Blanchard
Lawrence Murphy

W. H. Staats
Inventor
by
D. P. Holloway & Co
his Attys.

UNITED STATES PATENT OFFICE.

WILLIAM H. STAATS, OF CRESCENT, NEW YORK.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. **71,807**, dated December 3, 1867.

To all whom it may concern:

Be it known that I, W. H. STAATS, of Crescent, in the county of Saratoga, and State of New York, have invented a new and useful Improvement in Railroad-Switches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a plan, and Fig. 2 is a vertical cross-section.

The same letters are employed in both figures in the indication of parts which are identical.

My improvements relate to the railroad-switch invented by me, and upon which an application for Letters Patent is pending in the Patent Office of the United States at the time of filing this my second application; and consists in so hinging the switch-bar that, when the switch has been shifted by the mechanism set forth in my former application, a train may pass over the main track from the opposite direction to that entering the siding without shifting the shifting mechanism, or the train may run from the siding onto the main track after the switching mechanism has been shifted back to form connection with the main track, and also in changing the position of the shifting-bar in relation to the rail.

In the annexed drawings, A A represent the rails of the main track; B B, the rails of the siding. C C are the switch-bars attached to a U-formed shifting-bar, D. The switch-bars C are of the proper length to connect on one side the rails forming the main track, and on the other side to connect the rail A of the main track with the rail B of the siding. In the case illustrated in the drawings, the main track on the left-hand side is continuous, and the rail on the right-hand side is bent at the middle, one-half belonging to the rail of the main track, the other half belonging to the rail of the siding. The shifting-bar D, as I now propose to arrange it, is passed through notches cut in the base of the rail, sliding on or in grooves in the timber on which the switch rests. The switch is shifted from side to side by the shifting-bar, attached by a lever or other convenient power. The switch-bars C are so formed that their bases may be hinged, as at C^1, to arms extending from the shifting-bar D. They are, respectively, pressed outwardly by springs C^2 attached to the shifting-bar, and pressing against some part of the switch-bar. These springs press the switch-bars against the face of the outer rail on one side or the other, as the switch may be arranged. The heel of the bar is rounded from the part where it comes in contact with the inner rail.

If a train should be shifted to the siding, and, before the switch is reversed, another train should pass from the opposite direction, it will be seen by the drawings that the track on the right-hand side is open, and the switch-bar on the left-hand side would be turned aside by the flange of the wheel, so that the train would pass over the main track without interruption. So, if the switch is shifted to the main track after the train has been run on the siding, the train may pass out without shifting back the switch, the switch-bar yielding to the flanges to let the wheels pass, and instantly resuming its position by the action of the spring against it.

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

The combination of the shifting-bar D and hinged switch-bars C, arranged to operate in relation to the rails of the track and siding, substantially as set forth.

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

WM. H. STAATS.

Witnesses:
WM. LAPE,
JOHN A. WALDRON.