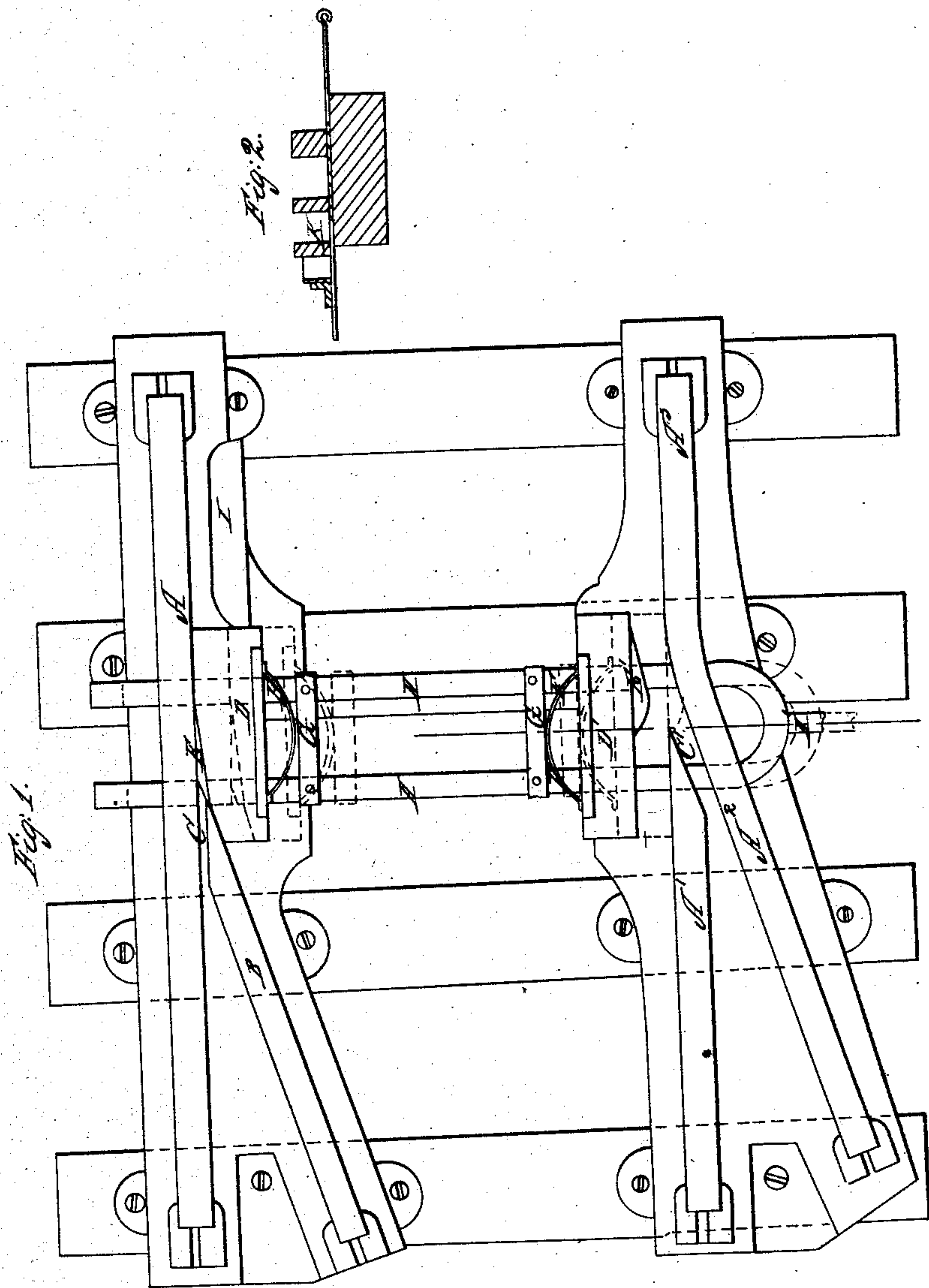


W. H. Staats.

Railroad Switch.

N^o 69,945.

Patented Oct. 15, 1867.



Witnesses:

Chas. H. Wilson,
Lawrence Murphy

Inventor:

W. H. Staats

United States Patent Office.

WILLIAM H. STAATS, OF CRESCENT, NEW YORK.

Letters Patent No. 69,945, dated October 15, 1867.

IMPROVED RAILWAY SWITCH.

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 useful Improvement in Railway 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 view, and

Figure 2 is a cross-section.

My improvement consists in introducing a laterally sliding connecting-bar, to turn the cars upon a siding, or retain them on the main track, operating in connection with the rails of the two tracks, all of which are permanent, instead of the oscillating rail ordinarily used for forming a railroad switch.

On one side the main track is formed by the continuous rail A, on the other it is formed of the rails A¹ A², in connection with one another. One of these rails is bent outwards at A², to form the siding; the other track is formed by the rail B. Spaces are left between the rails at C C' sufficient to permit the flanges of the car-wheels to pass either on the main track, as at C, or on to the siding, as at C'. D and D' are blocks, fixed upon the U-formed shifting-bar H, the arms of which and the plate K are passed under the rails, and through an opening in which they slide freely, being actuated by a switch-lever attached at H'. These blocks are fastened upon the arms of the shifting-bar which pass through them, allowing a lateral play, which is regulated by the springs F, bearing against the blocks, and the braces G attached to the shifting-bar H. E and E' are parts of the blocks D and D', forming what I will call the connecting-bars. E is inclined upon the face towards the centre of the track, and straight upon the back, which is parallel to the rail A. The inclined face, when the parallel back is pressed against the rail, forms a diagonal line from the inner edge of the rail A to the inner edge of the rail of the siding B. The connecting-bar E' is the reverse of this in construction. It is straight on the inner face, to form a straight connection with the rails of the main track A¹ A², and inclined on the opposite face to fit against the inner face of the rail A² of the siding. The connecting-bars are raised above the upper faces of the blocks D D' to permit the flanges to pass over the latter. The switch cannot shift when a train is passing, as, when passing over the main track, the flanges on one side will press the connecting-bar E against the rail A, and when passing on to a siding, the flanges on the other side will press the bar E' against the rail A². I is a guard to hold the flange to the rail A as the train is passing. The plate K is intended to prevent the accumulation of ice and snow under the shifting-bar.

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

1. The laterally sliding connecting-bars E E', actuated on lines perpendicular to the course of the main track, to retain the train on the main track, or divert it to the siding, substantially in the manner set forth.
2. The combination of the rails A A¹ A² A³, with the shifting-bar H, blocks D and D', and connecting-bars E E', substantially as and for the purpose set forth.
3. The rails A A¹ A² A³, permanently fixed, in combination with connecting-bars E E', sliding between the rails, to connect alternatively with the main track or siding, substantially in the manner set forth.

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

WM. H. STAATS,

Witnesses:

J. H. GODFREY,

JOHN STAATS.