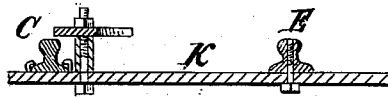
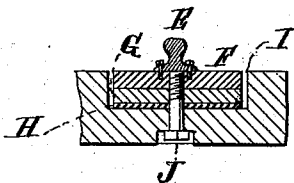
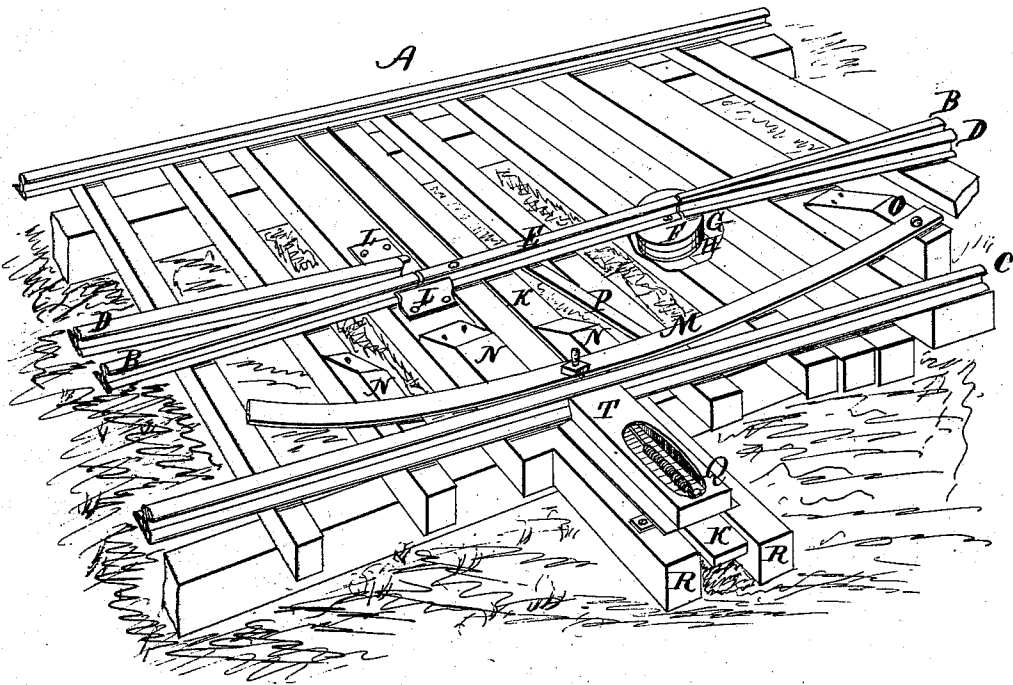


C. C. SHELBY.
Railway-Crossing.

No. 168,055.

Patented Sept. 21, 1875.



WITNESSES

M. Church
E. Harner.

INVENTOR

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UNITED STATES PATENT OFFICE.

CHRISTOPHER C. SHELBY, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN RAILWAY-CROSSINGS.

Specification forming part of Letters Patent No. **168,055**, dated September 21, 1875; application filed March 18, 1875.

To all whom it may concern:

Be it known that I, CHRISTOPHER C. SHELBY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and improved device for taking the place of a railroad-frog; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which the figures in the drawing show perspective and detached views of the invention.

Similar letters of reference in the drawing denote the same parts.

This invention has for its objects the production of a device for taking the place of the railroad-frog now used to permit railway-cars to pass the point where the rail of the main track is intersected by the rail of the side track, to obviate the jar occasioned to the cars by the use of the said frog, and to obviate the danger of breaking the flanges at said point of intersection; and to these ends it consists of a rail pivoted at one end to a tie, to form a continuation of the inner rails of both the side track and the main track, and secured at the other end to a sliding bar, operated by a spring, in combination with a curved guard-rail, pivoted at one end to a bearing, and connected near its longitudinal center with the sliding bar, to which the pivoted rail is secured in a position to partially cover the outer rail of the side track, the several parts being so arranged that the spring will hold the pivoted rail in a position causing it to form a part of the inner rail of the main track, and the guard-rail in a position to partially cover the outer rail of the side track, until a train passes either from the main track to the side track, or from the latter to the former, when the car-wheels will press against the curved guard-rail, and move the sliding bar, and carry one end of the pivoted rail over to the inner rail of the side track, thereby permitting the cars to pass over as if upon a continuous line of rail, and when the train has passed over, and the pressure of the wheels has been removed from the guard-rail, the spring will again draw the

pivoted rail back to form a part of the main track, all of which will hereinafter more fully appear.

In the accompanying drawing, the main track is composed of the outer rail A and the inner rail B. The side track is composed of the outer rails C and the inner rails D. The rail E is secured at one end to a plate, F, pivoted upon a plate, G, which rests upon a washer, H, of rubber or leather, the said plates and washer being let into a recess, I, in the tie, and the plate G and washer H spiked to the tie. A bolt, J, forms the pivot for the plate F, and the washer H prevents the jar that would occur without it at the junction of the rails B, D, and E. The rail E is secured at its other end to the sliding bar K, and its play is limited by the arms of the chair L, which seats the ends of the inner rails B and D of the two tracks. The curved guard-rail M is supported upon a series of rests, N, and pivoted to a bearing, O, the rests and bearing being sufficiently elevated to permit the guard-rail to move over, and, near its longitudinal center, partially cover the rail C. A bar, P, also connects the guard-rail M with the rail E, to give additional strength. A rubber or other spring, Q, is secured to the projecting ties R, and to the sliding bar K, and operates to hold the rail E in line with the inner rail B of the main track. The pivoted end of the rail E forms a continuation of both rails B and D. The movable end can be moved to form a part of the inner rail D of the side track by the pressure of the car-wheels of a train passing over the side track in either direction, and when the train has passed over the rail E will automatically resume its position as a part of the main track. A cap, T, is provided to cover and protect the spring Q. The flanges of the car-wheels meet no obstruction, as in the ordinary frog, and there is consequently neither jarring of the cars nor danger of breaking the flanges of the car-wheels.

Having thus described my invention, what I claim as new is—

1. The rail E, pivoted at one end to form

a continuation of the inner rails B D of both the main track and the side track, and secured at the other end to the sliding bar K, operated by the spring Q, in combination with the guard-rail M, pivoted to the bearing O, and secured to the sliding bar K, substantially as and for the purposes set forth.

2. In combination with the rail E, secured to the plate F, the plate G and washer H, substantially as and for the purposes set forth.

CHRISTOPHER C. SHELBY.

Witnesses:

GEO. F. MOORE,
WM. F. LETT.