F. LUCHINI.

RAIL ROAD SWITCH.

No. 183,859. Patented Oct. 31, 1876.

Fig. 1

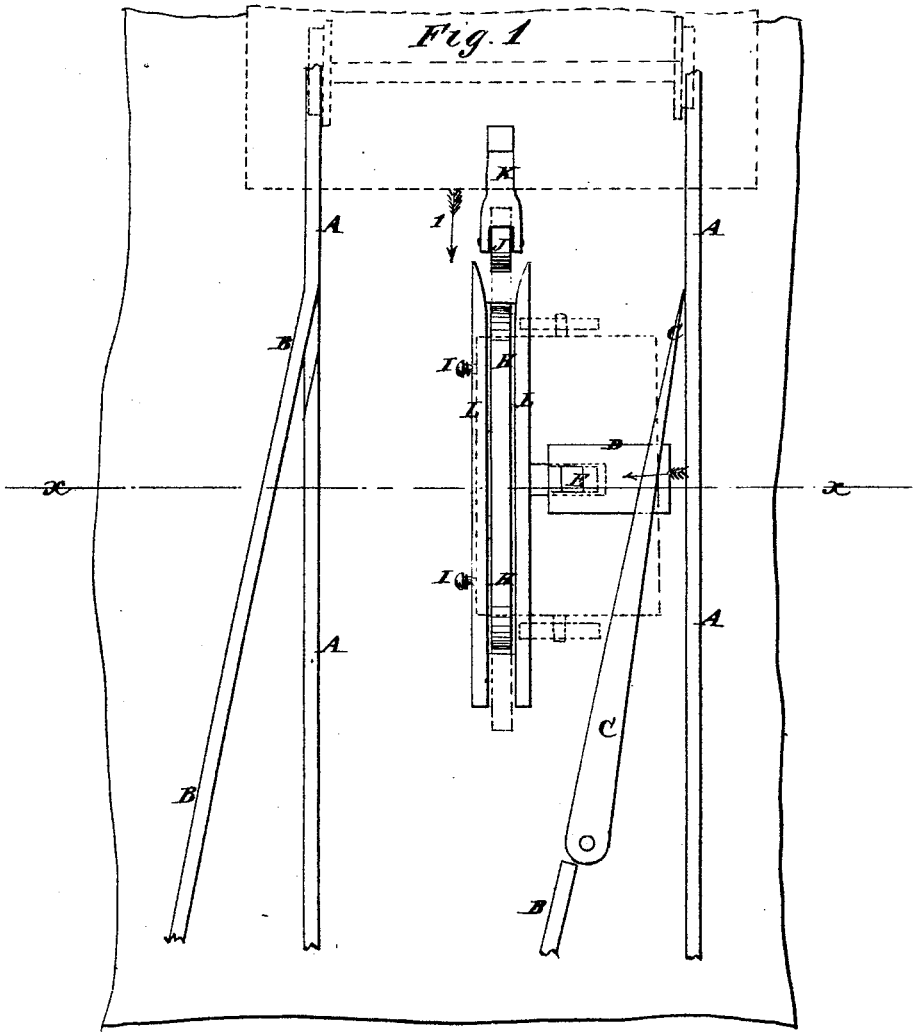
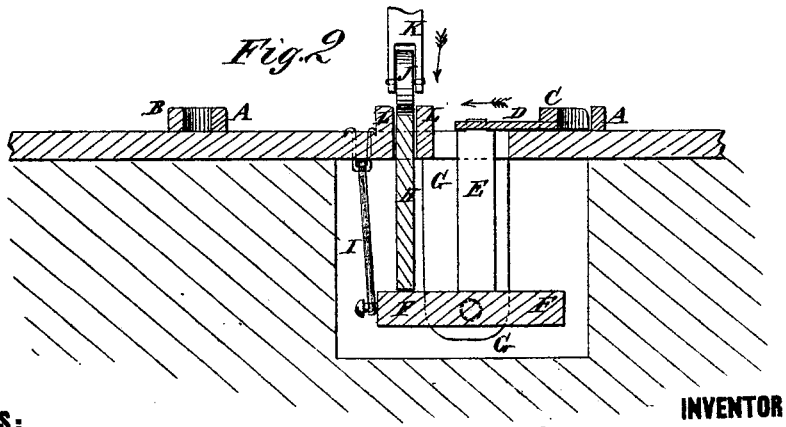


Fig. 2



WITNESSES:

A. W. Almqvist

J. W. Scarborough

INVENTOR:

Ferdinando Luchini

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

FERDINANDO LUCHINI, OF NATCHITOCHES, LOUISIANA.

IMPROVEMENT IN RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. **183,859**, dated October 31, 1876; application filed October 7, 1876.

To all whom it may concern:

Be it known that I, FERDINANDO LUCHINI, of Natchitoches, in the parish of Natchitoches and State of Louisiana, have invented a new and useful Improvement in Automatic Railroad-Switches, of which the following is a specification:

Figure 1 is a plan view of my improved switch. Fig. 2 is a cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The present invention relates to that class of railroad-switches in which the switch-rail is operated by devices located upon the car; and it has for its objeet to simplify the construction of a switch operating in such manner, and to render it less liable to get out of order.

The invention consists in the construction and combination of parts, which will be hereinafter more fully described and then set forth in the claim.

A represents the rails of the main track, and B represents the rails of the branch track. C is the movable or switch rail, which is pivoted at one end at the end of the rail B of the branch track, and its other end rests against the side of the rail A of the main track. To the switch-rail C is attached a sliding block or plate, D, to which is also attached the upper end of a bar, E. The bar E projects downward into a box or cavity beneath the road-bed, and its lower end is rigidly attached to a bar or plate, F, which is pivoted at its ends to hangers G projecting downward from the road-bed.

Upon the bar or plate F, near its edge, rests the lower edge of a plate or frame, H, which passes up through a slot in the road-bed, so that its upper edge may project. To the edge of the bar or plate F are attached the ends of springs I, the upper ends of which are attached to some support connected with the road-bed. The springs I hold the plate or frame H up, and hold the free end of the switch-rail C pressed against the side of the rail A of the main track.

J is a wheel, which is pivoted to a standard, K. The standard K is designed to be connected with the platform of the car—one at each end of said car—in such a way that it may be pressed down by the driver with his foot at the proper time to bring the wheel J in contact with the edge of the plate or frame H, and withdraw the switch-rail C from the main rail A. This is only necessary when the car is to continue upon the main track and is moving in the direction indicated by arrow 1.

When the car is upon the main track and is going in the opposite direction, the flange of the car-wheels will push back the switch-rail. When the car is passing from the main track to the side track or from the side track to the main track, no movement of the switch-rail is required.

L are guard-bars placed at the sides of the upper edge of the plate or frame H, to keep the wheel J in place upon it, and to protect it from the wheels of vehicles crossing the track. The plate or frame H must be of such a length that the wheel J will hold it down and hold the switch-rail C away from the rail of the main track until the rear wheel of the car has passed the end of the said switch-rail C.

I am aware of the existence of a railroad-switch in which the switch-rail is operated through the medium of a pivoted lever, which is arranged in a slotted rail placed between the track-rails and connected with the switch-rails, by means of a chain carrying a weight.

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

The combination of the vertically-movable bar H, guard-rails L, pivoted lever F, springs I, arm E, and sliding plate D, with the switch-rail C, and an attachment on the car for depressing the bar H, all constructed and relatively arranged as herein set forth.

FERDINANDO LUCHINI.

Witnesses:

JAMES T. GRAHAM,

C. SEDWICK.