C. S. BASTRIGHT.

RAILROAD SWITCHES.

No. 182,793. Patented Oct. 3, 1876.

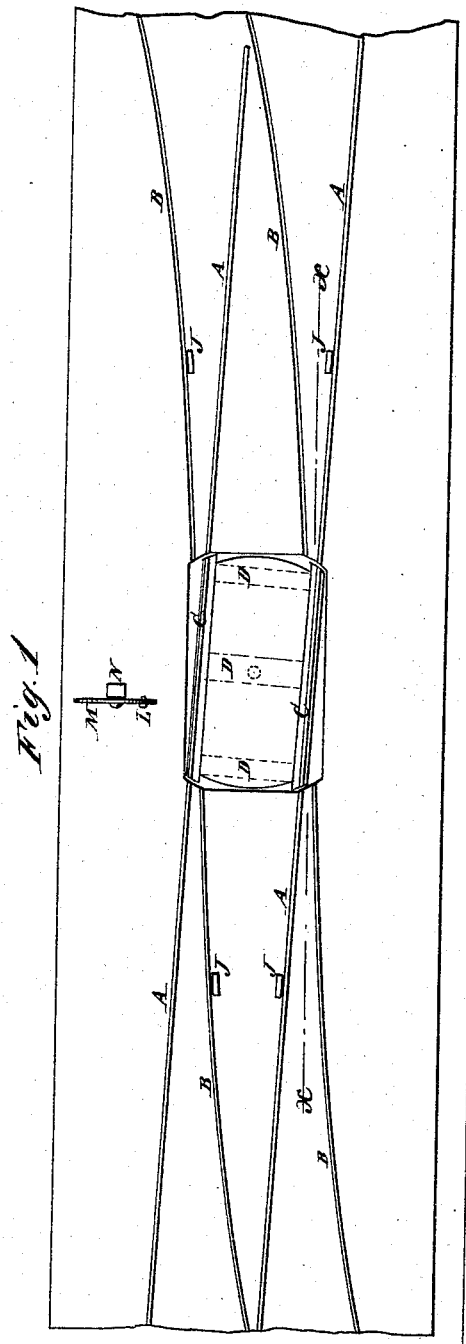

Fig. 1

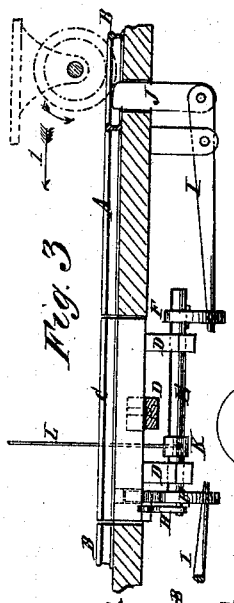

Fig. 3

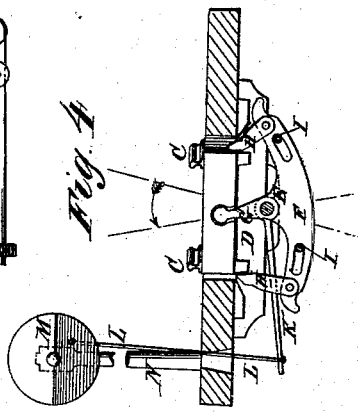

Fig. 4

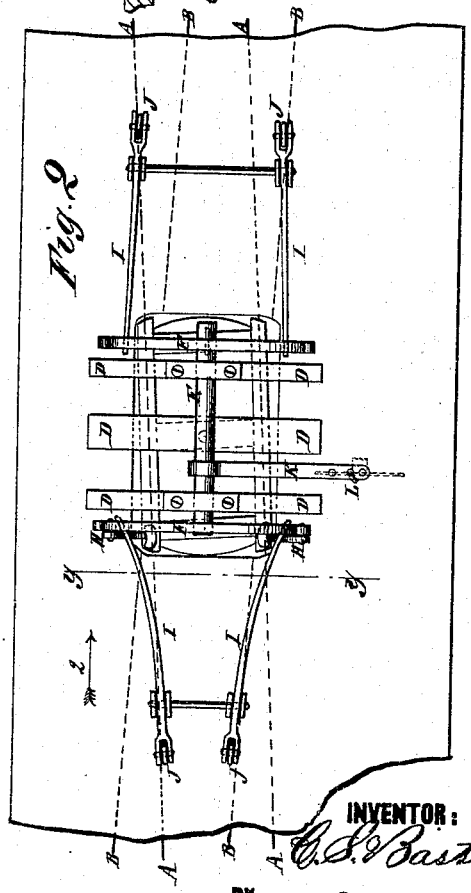

Fig. 2

WITNESSES:

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CONZAC S. BASTRIGHT, OF LEBANON, NEW HAMPSHIRE.

IMPROVEMENT IN RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. **182,793**, dated October 3, 1876; application filed August 7, 1876.

To all whom it may concern:

Be it known that I, CONZAC S. BASTRIGHT, of Lebanon, in the county of Grafton and State of New Hampshire, have invented a new and useful Improvement in Self-Adjusting Railroad-Switch, of which the following is a specification:

Figure 1 is a plan view of a portion of the main and side tracks of a railroad, to which my improved switch has been applied. Fig. 2 is an under-side view of the same. Fig. 3 is a detail longitudinal section of the same, taken through the line *x x*, Fig. 1. Fig. 4 is a cross-section of the same, taken through the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved railroad-switch, which shall be so constructed that the movable rails may be adjusted into the required position by the wheels of the advancing engine, so that there can be no running off the track from a misplaced switch.

The invention will first be described in connection with the drawing, and then pointed out in claims.

A are the rails of the main track. B are the rails of the side track, and C are the movable or switch rails. The rails C are connected by a plate or frame, which is pivoted at its center to the central one of the three or more bars or ties D, upon which the said rails C rest and slide.

In bearings attached to the end bars D works a shaft, E, to which, at or near its ends, are rigidly attached two cross-bars, F, which are curved like rockers.

To the middle part of one of the cross-bars F is rigidly attached, or upon it is formed, an upwardly-projecting arm, G, the end of which is rounded off, or has a rounded head formed upon or attached to it.

The head of the arm G enters a socket in the end bar of the frame that connects the rails C, so that the rails C may be moved by rocking the shaft E.

To the end parts of the curved cross-bar F, that carries the arm G, are pivoted wedges or pawls H, which pass up between the vibrating frame, that carries the rails C, and the stationary frame that surrounds it, to steady and lock the said rails C in place.

In the end parts of the cross-bars F are formed short longitudinal slots, in which are placed the ends of the levers I, which are pivoted to the ties, or some other suitable supports, and to the outer ends of which are pivoted the lower ends of the trip-bars J.

The bars J pass up at the sides of the rails A B—one at the side of a rail of the main track A, and one at the side of a rail of the side track B, at each side of the switch.

With this construction, when an engine approaches the switch upon either the main or the side track, if the switch-rails are in connection with the rails of said track, the engine will pass on, and nothing will move; but if the switch-rails should be in connection with the rails of the other track, the flange of the wheels will strike a trip-block, J, and force it down, which shifts the said rails C into proper position instantly, so that it will be impossible for the engine to run off the track from a misplaced switch.

By pivoting the frame that connects the switch-rails C at one end, instead of at the center, the device may be used for connecting a single side track with the main track.

To the shaft E is rigidly attached an arm, K, with the outer end of which is connected the lower end of a rod, L. The upper end of the rod L is connected with a signal, M, pivoted to a post, N, and which, by its position, indicates the position in which the switch-rails C may be, so that the signal M may be shifted by shifting the rails C.

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

1. The combination, with rails A B, of switch-rails C, connected by a frame, centrally pivoted to the middle one of three ties, D, as shown and described.

2. The combination, with shaft E, arranged in bearings in the ties D, of the two cross-bars F, arm G, locking-pawls H, levers I, and bars J, as and for the purpose specified.

CONZAC S. BASTRIGHT.

Witnesses:

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