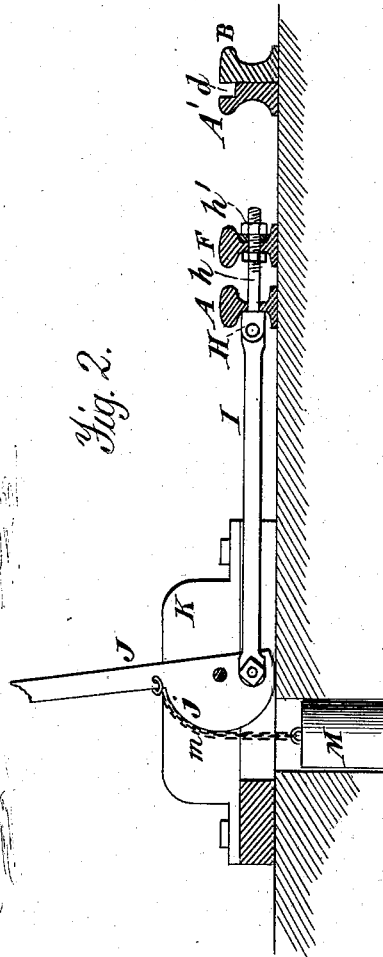
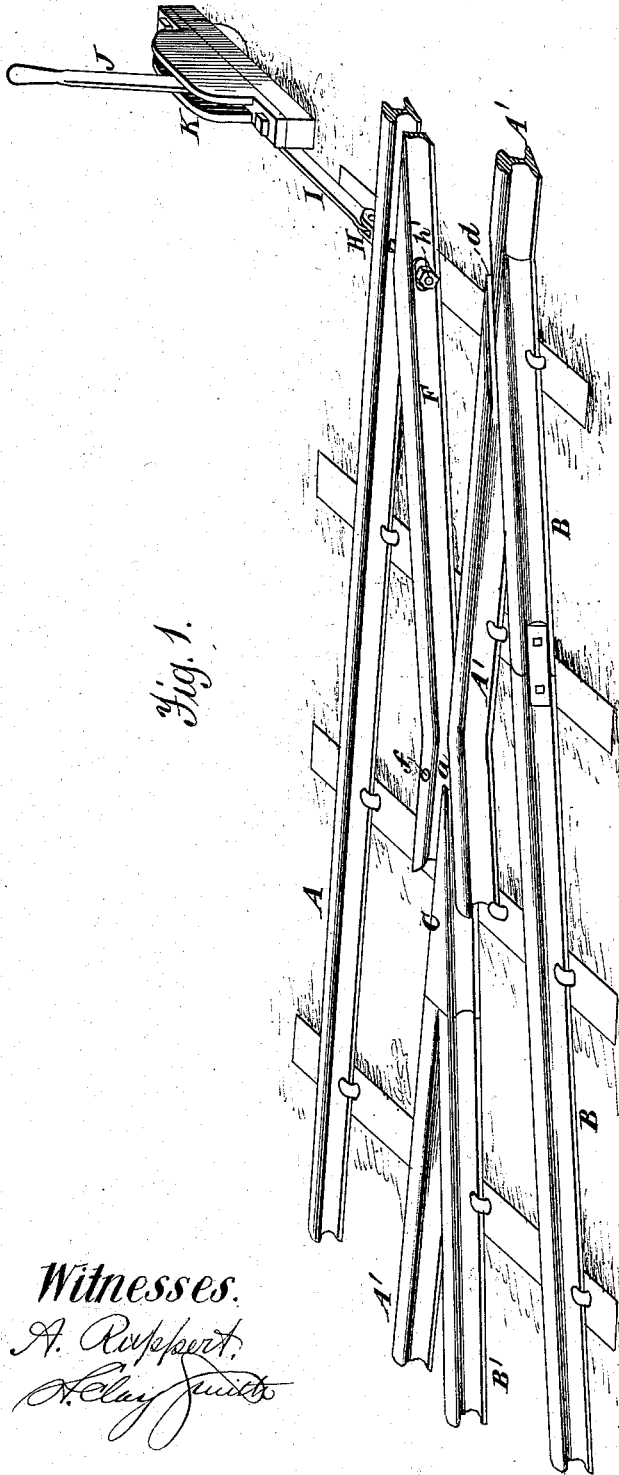


(No Model.)

F. A. WHITE.
RAILROAD SWITCH.

No. 263,740.

Patented Sept. 5, 1882.



Witnesses.
A. Rappert.
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UNITED STATES PATENT OFFICE.

FRANK. A. WHITE, OF CORTLAND VILLAGE, NEW YORK, ASSIGNOR OF ONE-HALF TO WM. B. STOPPARD, OF SAME PLACE.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 263,740, dated September 5, 1882.

Application filed February 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, FRANK. A. WHITE, of Cortland village, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Railroad-Switches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to railroad-switches adapted to leave the main track open at all times, except when the switch is changed by force to connect the main track with the siding, to return automatically to its normal position as soon as the train has reached the siding, and thus again opening the main track, and to connect the siding to the main track automatically as the train leaves the siding, returning to normal position automatically, as before; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

The object of this invention is to avoid the liability to accidents; and to this end the invention consists essentially in such a construction that the main track will always be intact, even when the switch-rail is in immediate service and a train is passing to or from the siding, and the connection made from the main track to the siding by the manipulation of a single switch-rail. By my construction the only necessary manipulation of the switch-rail by the switchman is to open the connection from the main track to the siding, the said connection closing as soon as the train has passed upon the siding, automatically, without the necessity of placing any dependence upon the switchman. By my construction the switch connects from the siding to the main track automatically, and a train may leave the siding and reach the main track easily and safely without the assistance of a tender.

The invention is clearly and fully illustrated in the accompanying drawings, which form a part of this specification, and in which Figure

1 is a perspective view, and Fig. 2 a vertical section, of the switch-lever and its connections.

Referring to the drawings, in which similar letters of reference indicate like parts in all the figures, A represents the outer rail of the main track, and B the outer rail of the siding; A', the inner rail of the main track, and B' the inner rail of the siding. A tongue-point, C, abuts against the ends of the rails A' B', and a slot, d, diagonally across the main rail A' at its intersection with the rail B, is adapted to receive the flange of the car-wheels as the cars pass to and from the siding. The end of main rail A' adjacent to the tongue C is preferably formed as a guide-rail at a. The parts thus far described are stationary, being rigidly spiked to the sleepers, and it will be observed that the main track is open to trains approaching from either direction.

Pivoted at f, near the point of the tongue C, is a single switch-rail, F, the free end of which is beveled off to accommodate the plane of the inner surface of the rail A. A bolt, h, passing through the rail A, and having a threaded shank, is secured to the switch-rail F by a nut, h', and connects said switch-rail with a link, H, which in turn is connected to an arm, I, upon a pivoted switch-lever, J, operating in a frame, K, as shown. A chain, m, is secured to the switch-lever and passes over a cheek or projection thereon, (seen at j,) and has secured to its free end a weight, M, which hangs in a proper well made to receive it. The gravity of the weight M is sufficient to render the manipulation of the switch-rail certain, and the said switch-rail is provided with such anti-frictional bearings that the flange of the car-wheel will throw it against the rail A as the car leaves the siding.

It will be observed that the free end of the switch-rail in its position of rest is distant from the main rail A only sufficiently to allow the passage of trains to and fro upon the main track freely and safely, and it will be understood that the tread of the wheel will thus rest upon the main rail before the wheel leaves the switch-rail.

I am aware of Patent No. 147,189, of 1874, and the construction therein set forth is not sought to be covered in this application.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In combination with the main track and siding, the rail A' *a*, having slot *d*, the single switch-rail F, and means for automatically operating said switch-rail, as specified.
2. The combination of the single switch-rail F, adjusting-bolt *h*, link H, and lever J, having arm I and cheek *j*, with the frame K, chain *m*, and weight M, as specified.
3. The combination of the main track and

siding, the tongue, and the guide-rail A' *a*, having slot *d*, with the switch-rail, the switch-lever, the weight, and connections, as and for the purposes set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANK. A. WHITE.

Witnesses:

B. A. BENEDICT,

IRVING A. BENEDICT.