

J. B. STAMOUR.  
Railway-Switches.

No. 147,189.

Patented Feb. 3, 1874.

Fig. 1.

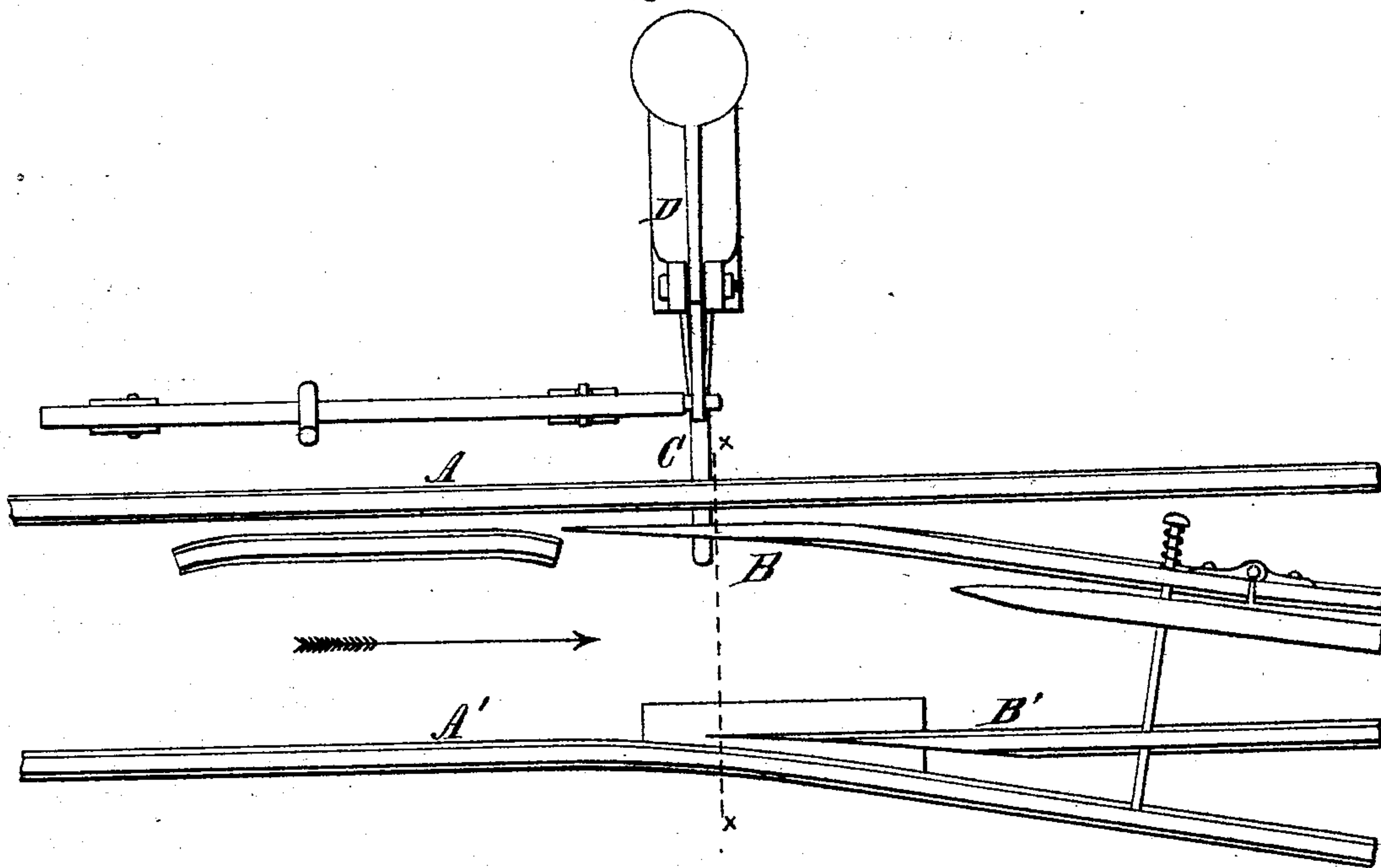


Fig. 2.

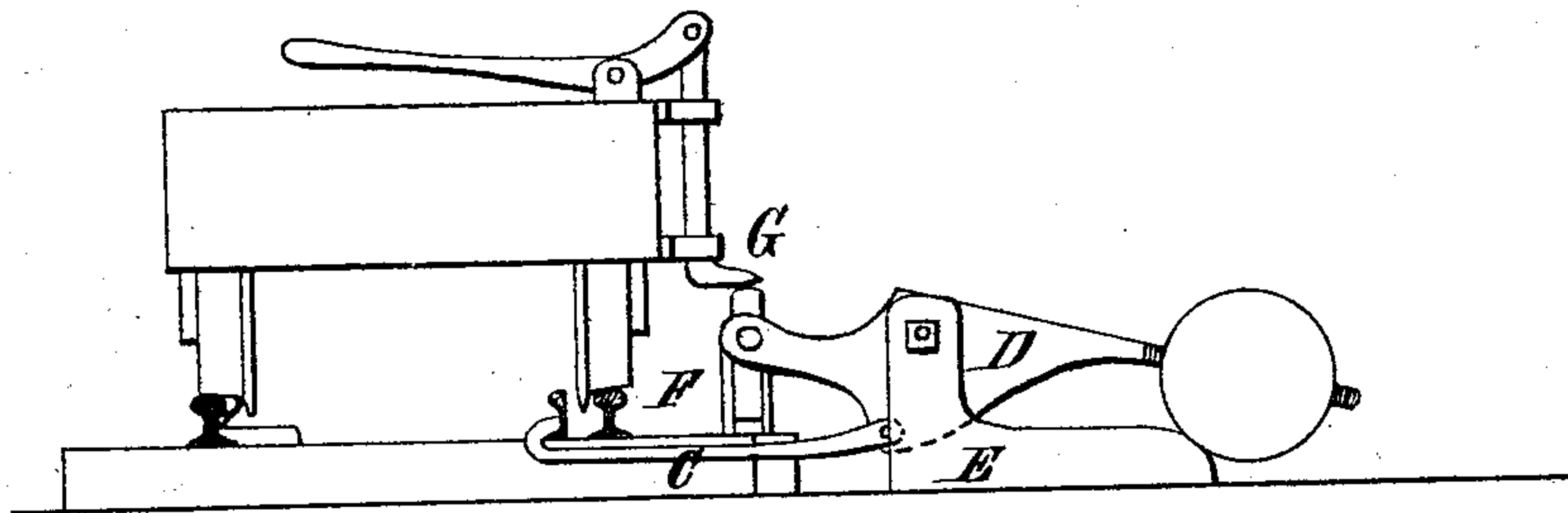
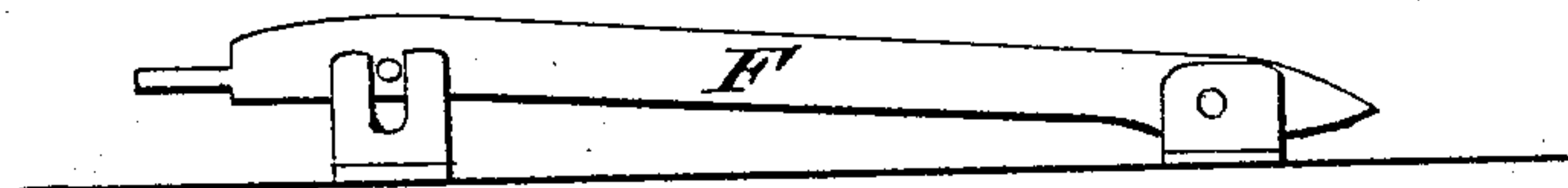


Fig. 3.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN B. STAMOUR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF HIS RIGHT TO WILLIAM NEWELL, OF SAME PLACE.

## IMPROVEMENT IN RAILWAY-SWITCHES.

Specification forming part of Letters Patent No. **147,189**, dated February 3, 1874; application filed  
December 9, 1873.

*To all whom it may concern:*

Be it known that I, JOHN B. STAMOUR, of the city and county of Philadelphia and the State of Pennsylvania, have invented a new and useful Improvement in Railroad-Switches; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a top view of the device embodying my invention. Fig. 2 is a transverse section in line *x x*, Fig. 1. Fig. 3 is a side view of a portion thereof.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in means for automatically keeping the main track open. It also consists in means, operated from the engine, for shifting the switch for passing cars over the side track.

Referring to the drawings, A A' represent the rails of the main and B B' of the side track, of which B is the movable rail, and constitutes means for switching to said side track. To this movable rail B is attached a transversely-arranged arm, C, whose outer end is jointed to a weighted lever, D, having its bearing E properly located at the side of the main track. F represents a rising-and-falling lever or bar, which is arranged longitudinally in the direction of the main track and has one end secured to the inner end of the weighted lever, so that, when said end is elevated, one end of the lever or bar F is also elevated. The tendency of the weighted lever is to force the arm C in a direction toward the opposite side of the track, and, as the movable rail B is attached to the arm C, said rail is held away from the rail A of the main track, and thus the main track is automatically kept open or clear.

G represents a foot, which is arranged on the engine at the forward end thereof, and adapted to be raised and lowered by means within control of the engineer or fireman. This foot is so disposed that when the forward

end of the engine reaches the rising-and-falling lever or arm F, the foot being elevated, it passes over said lever or arm, the direction of the car being indicated by the arrow, Fig. 1.

Now, when the train is to move over the main track, the foot remains in a state of rest, so that there is no action on the lever or arm F, whereby the switch is not changed; but when it is required to run on the side track, the foot, when it reaches the lever or arm, is depressed, in order to bear against the lever or arm, and thus lower the latter. This lowers the inner end of the weighted lever D, which, through the medium of the arm C, draws the movable rail B toward the weighted lever, and thus closes the switch for the side track.

As soon as the cars have passed over the movable rail B, the action of the weighted lever causes the said rail to return automatically to its first position, whereby the main track is again closed or cleared.

When the cars are coming on the side track in the direction opposite to that indicated by the arrow, Fig. 1, the resistance of the weighted lever is overcome by the pressure of the car against the movable rail, and thus the latter moves properly to close the switch for the passage of the cars from the side to the main track.

The weighted lever D is made adjustable by means of a ball or other appliance fitted on a threaded portion of the outer end of the lever.

In order that the rail B may not be moved, when switching to the side track occurs, until the entire train has passed from the main track, the rail B is jointed near the end, where it joins the next length, and between the joint and free end is passed a guiding-rod, on which is placed a spring, so that the free end of the rail will be pressed against the adjacent rail of the main track as long as one pair of car-wheels is on the movable rail, so that, before said set leaves the rail and the wheels of the next car reach the movable rail, the latter, during the interval, cannot be operated, and thus the entire train passes in safety to the side track without danger of a portion thereof striking the main track at the point



of switching, the dangerous nature of which is well known.

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

The combination of the transverse rod C, transverse crank-lever D, longitudinal lever F,

and movable rail B, all constructed, arranged, and operating as and for the purposes specified.

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Witnesses:

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