

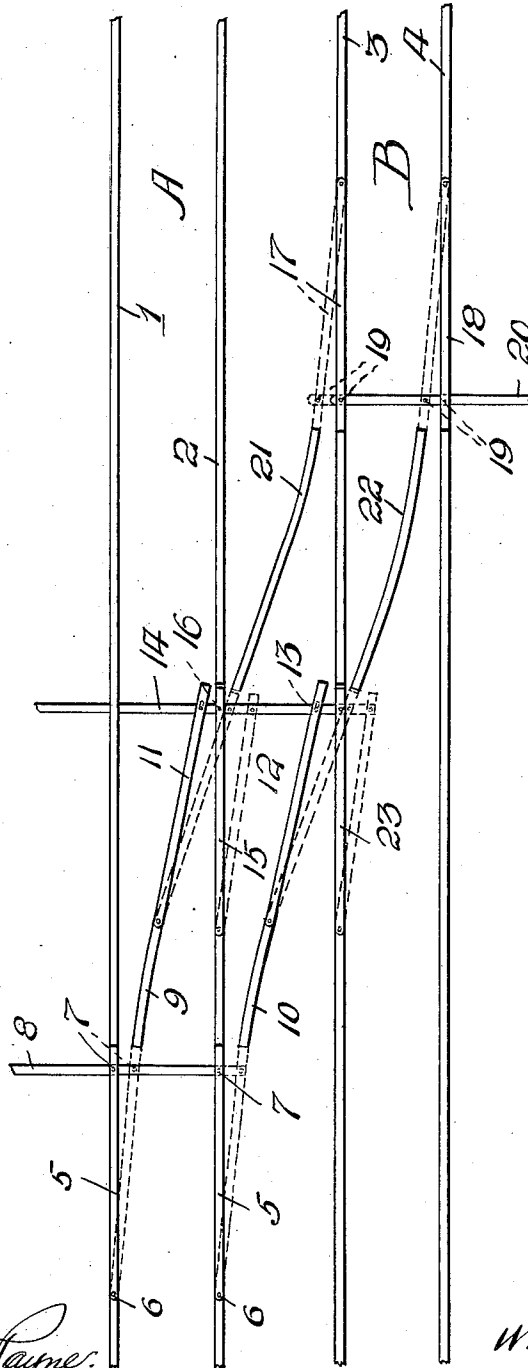
W. H. KIRKWOOD.

SWITCH.

APPLICATION FILED FEB. 3, 1912.

1,026,680.

Patented May 21, 1912.



WITNESSES

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WILLIAM HARRISON KIRKWOOD, OF VANDERGRIFF HEIGHTS, PENNSYLVANIA.

SWITCH.

1,026,680.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed February 3, 1912. Serial No. 675,220.

To all whom it may concern:

Be it known that I, WILLIAM HARRISON KIRKWOOD, a citizen of the United States of America, residing at Vandergriff Heights, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Switches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a switch, and my invention aims to obviate the necessity of using frogs in connection with a switch, thereby preventing the derailing of a train or rolling stock on account of broken frogs and imperfections in the same.

The invention further aims to use a series of switch tongues and rails for transferring rolling stock from one track to another.

The invention still further aims to accomplish the above results by a mechanical construction that will be hereinafter specifically described and then claimed and reference will now be had to the drawing, wherein there is illustrated a plan of a switch in accordance with this invention.

The reference numerals 1 and 2 denote rails of a track generally designated A and parallel with this track is another track generally designated B comprising rails 3 and 4.

Reference will first be had to track A. The rails 1 and 2 have rail sections or switch tongues 5 that are pivoted, as at 6 and these switch tongues are pivotally connected, as at 7 to a switch bar 8. Located adjacent to the inner side of the rail 1 is a switch rail 9 and located adjacent to the outer side of the rail 2 is a switch rail 10. The switch bar 8 is adapted to be moved to switch the tongues 5 out of alinement with the rails 1 and 2 and into alinement with the rails 9 and 10. The switch rails 9 and 10 have pivoted switch tongues 11 and 12 respectively that are loosely connected, as at 13 to an intermediate switch bar 14 that extends under the track A and a part of the track B. The rail 2 at a point between the

switch bars 8 and 14 is provided with a pivoted switch tongue 15 that is pivotally connected, as at 16 to the switch bar 14. The switch tongues 5 and 15 complete the rail 2 and the other switch tongue 5 completes the rail 1.

Reference will now be had to the track B. The rails 3 and 4 have pivoted switch tongues 17 and 18 similar to the switch tongues 5, the tongues 17 and 18 being pivotally connected, as at 19 to an end switch bar 20. The tongues 17 and 18 are adapted to be shifted to aline with switch rails 21 and 22 respectively, the former being arranged between the tracks and the latter between the rails 3 and 4 of the track B. The rail 3 has a pivoted switch tongue 23 that coöperates with the switch tongue 17 in completing the rail 3, while the tongue 18 completes the rail 4.

Before a train can move from the track A to the track B or vice versa it is necessary that all of the switch tongues be shifted to the position indicated by dash lines in the drawing.

I reserve the right to use a conventional form of mechanism for shifting the bars 8, 14 and 20 and locking the same in adjusted position.

What I claim is:—

In a switch, the combination with tracks A and B, pivoted switch tongues forming part of the rails of said tracks, switch bars pivotally connected to said tongues for shifting said tongues, switch rails associated with the main rails of said tracks and in proximity to said switch tongues, pivoted switch tongues forming part of said switch rails, an intermediate switch bar loosely connected to said tongues, and pivoted switch tongues forming part of the inner rails of said tracks and pivotally connected to said intermediate switch bar.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM HARRISON KIRKWOOD.

Witnesses:

J. F. BAIR,

FRED C. HARTMAN.