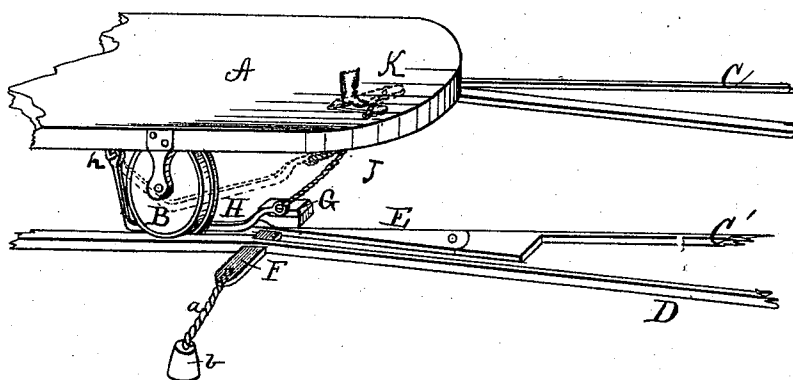


T. NEWMAN.
STREET-RAILWAY SWITCH.

No. 171,737.

Patented Jan. 4, 1876.



Witnesses:

H. W. Jenkins
T. J. Roach

Inventor:

Thos. Newman

UNITED STATES PATENT OFFICE

THOMAS NEWMAN, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN STREET-RAILWAY SWITCHES.

Specification forming part of Letters Patent No. **171,737**, dated January 4, 1876; application filed June 3, 1874.

To all whom it may concern:

Be it known that I, THOMAS NEWMAN, of the city of New Orleans, parish of Orleans and State of Louisiana, have invented a certain new and useful Improvement in Railway-Switches; and I do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the accompanying drawing forming a part of this specification.

This invention relates to a certain improvement in railway-switches, for which Letters Patent No. 145,678 were granted to me on the 18th day of September, 1873.

My present invention has for its object the reduction of the height of the striking-block used in the construction of the said switch; hence obviating the necessity of raising the paving of the street around the same.

In lieu of the projecting lug on the shoe-brake, for the operation of the switch-rail, I provide a long lever of peculiar form, and attach one end of the same to the bottom of the car, about midway between the axles thereof, by means of a pivot. The forward end of the said lever is suspended by a metal link or chain, which passes up through the bottom of the front platform of the car. The upper end of the said link is secured to a spring, in such a manner that the said spring shall keep the lever entirely clear of the ground until such time as it will be required to operate the switch, which is readily done by the driver placing his foot upon the spring, and pressing down upon the same, thereby bringing the lever very near the ground, and causing it to be brought in contact with the striking-block, forcing it, as well as the switch-rails, (connected to the same by a slide-frame,) to one side to permit the car to proceed on the branch line.

My improvement will be readily understood by referring to the accompanying drawing whereon the same is plainly illustrated.

A is the platform of the car, and B the wheels of the same. C C' are the rails of a straight or continuous line of railway. D will represent one rail of a road branching off from the main line, while E will show the switch-rail necessary to turn the cars from the main line to that of a branch road. F is the sliding frame, to one end of which the striking-block G is attached, and to the other end of the same the cord *a* and weight *b* are secured.

The striking-bar G is provided with an inclined face, against which, when the lever H is thrown down so as to bear against the same, to operate the switch-rail E. H is a lever of the form shown, and is secured by a hinge or pivot-joint, *h*, to the under surface of the car. To the opposite end of this lever is secured a rope or link, J, and which passes up through an opening in the platform and is secured to a spring, K. The tension of this spring is constantly employed in holding the lever H free from contact with the rails, but when the switch is to be moved, simply by depressing the spring the lever falls through its own gravity, and, striking against the block G, will move the switch-rail so as to leave the car free to pass on the branch rails D. So soon as the car has passed, the pressure on the spring is removed and the switch-rail, through the weight *b*, will be returned.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

The switch-rail E, sliding frame F, cord and weight *a b*, sliding block G in combination with the hinged or pivoted lever H, secured on the under surface of the car, cord or link J, and spring K, the whole constructed and arranged to operate substantially as described.

THOS. NEWMAN.

Witnesses:

H. N. JENKINS,
T. J. ROACH.