

UNITED STATES PATENT OFFICE.

WILLIAM W. RILEY, OF BROOKLYN, N. Y., ASSIGNOR OF ONE-HALF OF HIS
RIGHT TO FRANCIS A. BARTHOLOMEW, OF BLOOMFIELD, N. J.

SWITCH FOR ELEVATED RAILROADS.

SPECIFICATION forming part of Letters Patent No. 227,996, dated May 25, 1880.

Application filed April 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, WM. WILLSHIRE RILEY, a citizen of the United States, residing in the city of Brooklyn, Kings county, and State of New York, have invented certain new and useful Improvements in Switches for Elevated Railroads, of which the following is a specification.

The object of this invention is to provide a simple, safe, and convenient means for switching upon elevated railroads, and specially adapted to that class of elevated railroads where a central rail and two guard or guide rails are used, such as shown in patents granted to me in 1876, numbered 173,240 and 181,596.

My invention consists in having a section of the elevated railroad constructed and arranged so that it may be swung to and from the main track by having one extremity thereof supported upon a substantial butt by a heavy pintle rigidly attached to its extremity, and in having the opposite or traveling end provided with friction-rollers which bear upon the upper surface of a suitable bed-plate supported on brackets or braces from the posts or columns, and in having the guard or guide rails supported at their respective ends by fixed brackets or braces under the same, so as to prevent all possibility of swaying or of the side rails deflecting at the joint with the weight of the passing train.

Figure 1 represents a side elevation of my improved switch. Fig. 2 is a plan of the same, showing the switch set to the main track. Fig. 3 is an end view, showing the bed-plate for supporting the traveling end of the switch-section. Fig. 4 is an end view of the traveling end of the switch, showing position of rollers.

Similar letters of reference indicate corresponding parts.

In the case here presented, A represents a girder, and B B two guards or safety guide-rails, which are rigidly attached to and supported from the same by a series of A frames or braces, C C C, the whole forming a com-

plete section or span between the columns D D.

E is a heavy pintle, rigidly attached to the girder A. This pintle is made or provided with two collars, F F, and extends vertically through bearings G G on the butt or bracket H. This pintle is made of sufficient length to insure perfect steadiness to the switch structure; but in order to prevent the possibility of deflection of either of the extremities of the safety guide-rails I have provided a bearing, I, for the support of the joints.

The opposite or traveling end of the switch is provided with two or more friction-wheels, J J, which are housed, and have their bearings in the A-frame at its extremity, and which bear upon the plane of the arc or bed-plate L, connecting the columns between the main and side track.

It will be observed that the extremity of the girder which abuts against the main central rail is made convex, so as to match the concavity at the extremity of the fixed girder, and in order that the extremities of the guard or safety guide-rails of the switch-section shall always remain in close contact with those of the main line, they are cut and set radial to the pintle E, and provided with wings K K at their extremities, so as to make the safety-guide continuous whether set for the main or side track.

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

In an elevated railroad, the combination of the independent swinging section A B C, having pintle E and friction-wheels J J, with the fixed butt H, side wings or brackets, I I, and the supporting-arc L, rigidly attached to the columns, the whole being constructed, arranged, and operating together in the manner and for the use and purpose specified.

W. WILLSHIRE RILEY.

Witnesses:

FRANK A. BARTHOLOMEW,
CHARLES H. NASH.