

R. J. HUGHES.
Railroad Crossings.

No. 139,716.

Patented June 10, 1873.

Fig. 1.

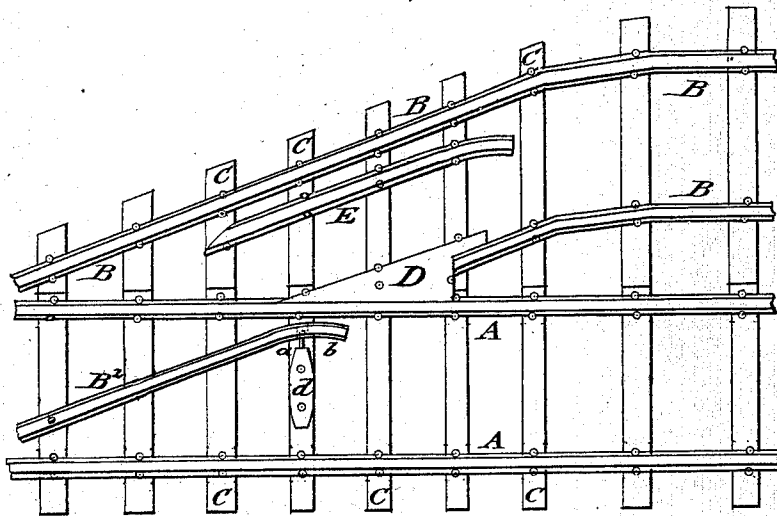


Fig. 2.

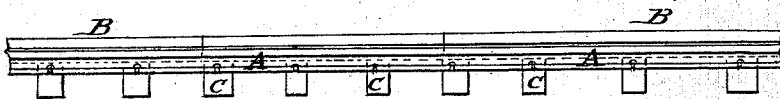
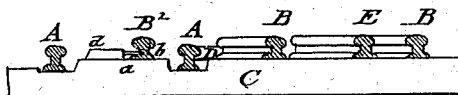


Fig. 3.



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ROBERT J. HUGHES, OF RYNEAR, INDIANA.

IMPROVEMENT IN RAILROAD CROSSINGS.

Specification forming part of Letters Patent No. 139,716, dated June 10, 1873; application filed April 5, 1873.

To all whom it may concern:

Be it known that I, ROBERT J. HUGHES, of Rynear, in the county of Fountain and State of Indiana, have invented a new and Improved Switch, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a plan view of my raised crossing; Fig. 2, a side elevation of the same; and Fig. 3, an end view of the same.

Similar letters of reference indicate corresponding parts.

My invention is an improvement in the class of switches or railroad crossings in which the rails of the side track are elevated to allow the wheels of the cars to pass above the rails of the main track. The improvement consists in the construction and arrangement of a spring-rail, flanged plate, and notched cross-ties, with the rails proper of the respective tracks, as hereinafter described.

In the drawing, A represents the rails of the main track; B, those of the side track. C are the cross-ties, which are placed higher than usual to reach the level of the crossing-rails, and are placed nearer together at the switch. They are suitably notched for the reception of the main rails A, to keep them on the level of the main track. The crossing-rails B are placed on the elevation of the ties, and are thereby raised above the level of the main rails. Between the rails of the main track is laid the pivoted or spring-rail B², the end *b* of which is curved from the main rail, and, by a guide-pin, *a*, projecting from support *d*,

entering a perforation of spring-rail B², is prevented from being lifted off the track. The flanges of the wheels pass between the main rail A and spring-rail B² by pressing the latter sidewise. The flange-plate D, of triangular shape and made of wrought-iron, is placed on a level with the top of the main rail A adjacent to end *b* of the spring-rail and serves the purpose of conveying the flanges of the car-wheels from the spring-rail B² to the raised side rails B. The guide-rail E, placed opposite the flange-plate D, on a level with the crossing-rails B, assists the wheels to pass over the flange-plate D and to the side track. The traffic on the main track is, by the herein-described arrangement, not hindered in the least, and the switching is accomplished in a simple and substantial manner.

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

1. The raised crossing-rails B, allowing the car-wheels to pass above main rails, in connection with the spring-rails B², flange-plate D, and guide-rail E, substantially as described.

2. The spring-rail B², having perforations, in connection with the pin *a*, and support *d*, as set forth.

3. The cross-ties C, formed with notches for keeping the main rails on the level of the track, as set forth.

ROBERT J. HUGHES.

Witnesses:

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