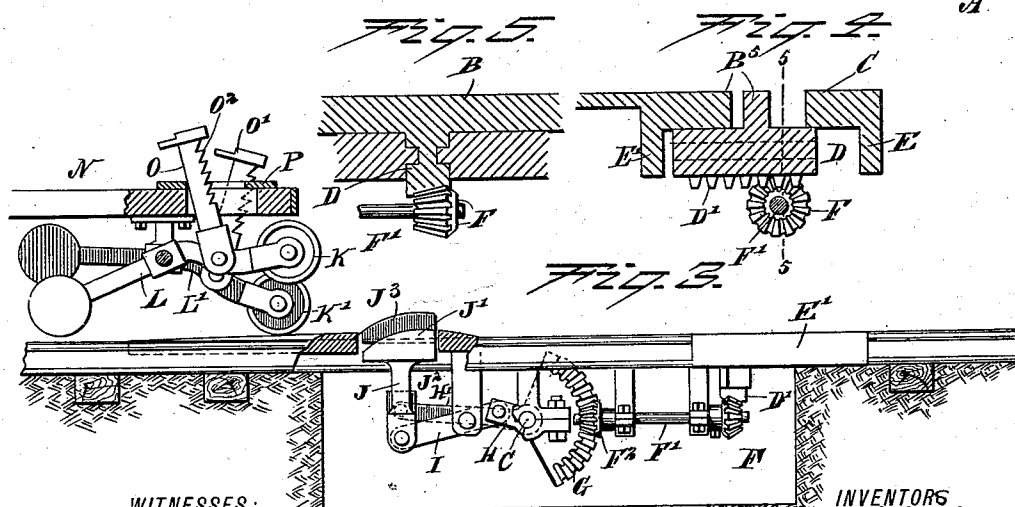
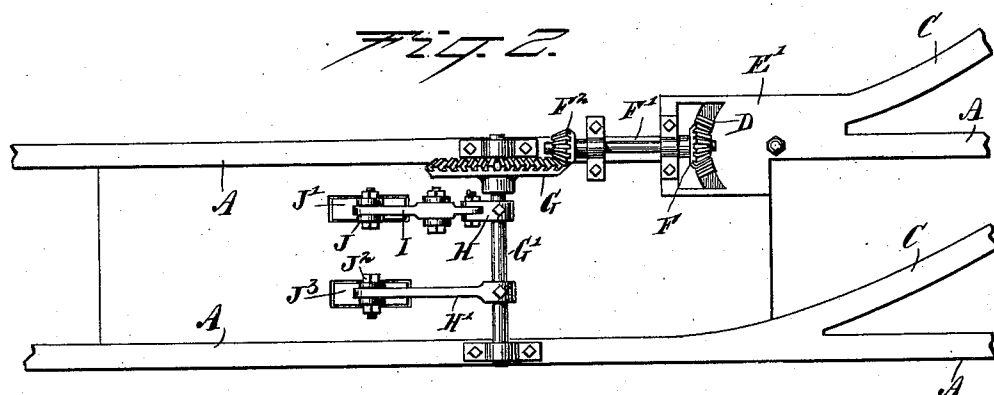
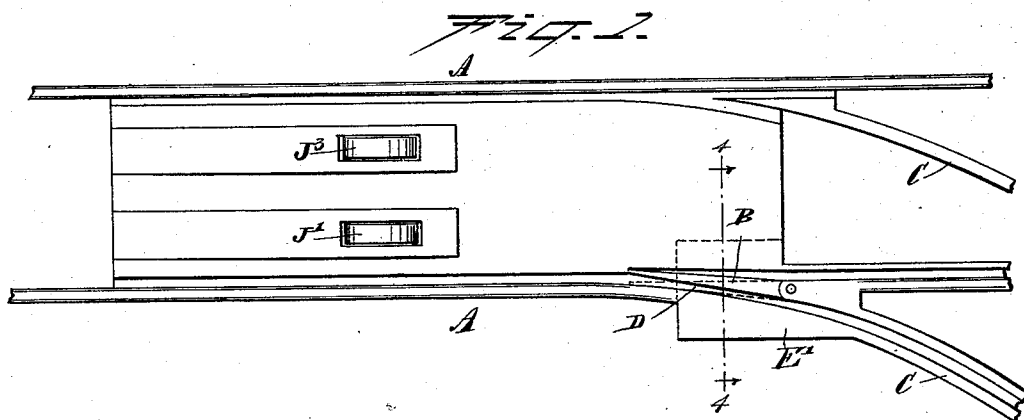


H. L. DALLIG & W. KRYSZEWSKI.
STREET RAILWAY SWITCH.

Patented Sept. 8, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HUGO L. DALLIG AND WLADYSLAW KRYSZEWSKI, OF JERSEY CITY, NEW JERSEY.

STREET-RAILWAY SWITCH.

SPECIFICATION forming part of Letters Patent No. 567,454, dated September 8, 1896.

Application filed May 27, 1896. Serial No. 593,284. (No model.)

To all whom it may concern:

Be it known that we, HUGO LEOPOLD DALLIG and WLADYSLAW KRYSZEWSKI, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Street-Railway Switch, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved street-railway switch which is simple and durable in construction and arranged to enable the driver or a motorman of a car to conveniently set the switch according to the direction in which the car is to travel.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is also to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement as applied. Fig. 2 is an inverted plan view of the same. Fig. 3 is a side elevation of the same with parts in section. Fig. 4 is an enlarged transverse section of part of the improvement on the line 4 4 of Fig. 1, and Fig. 5 is a longitudinal section of the same on the line 5 5 of Fig. 4.

From the main-track rails A extend the side-track rails C, adapted to be connected with the main-track rails A by the usual pivoted switch-point B, as illustrated in Fig. 1. This switch-point B is provided on the under side with a segmental block D, fitted to slide transversely in suitable bearings E, formed in a box or housing E', arranged in the main track, as plainly illustrated in the drawings. On the under side of this segmental block D is formed or secured a segmental rack D' in mesh with a pinion F, secured on a longitudinally-extending shaft F', journaled in suitable bearings arranged in the main track. On the forward end of the shaft F' is secured a pinion F² in mesh with a segmental gear-wheel G, fastened on a transversely-extending shaft G', likewise journaled in suitable bearings forming part of the track. On this

shaft G' are fastened two arms H and H', of which the arm H is pivotally connected at its free end with a lever I, fulcrumed at or near its middle in the main track, the free end of the said lever carrying an upwardly-extending arm J, formed at its top with a head J', extending into the path of a roller K, journaled on a weighted lever L, fulcrumed on a car N, adapted to travel on the main-track rails A and onto the side-track rails C whenever the switch-point D is in the corresponding position.

The other arm, H', is provided at its free end with an upwardly-extending arm J², similar to the arm J and likewise formed at its upper end with a head J³, extending into the path of a roller K', journaled in a weighted lever L', likewise fulcrumed on a car N and arranged alongside the weighted lever L.

The weights of the levers L and L' normally hold the rollers K and K' in an uppermost position, that is, out of contact with the heads J' and J³, respectively; but the said rollers will be moved downward to engage and press the said heads by means of arms O and O', pivotally connected with the said levers L and L', respectively, and extending upwardly through openings in the bottom of the car N to be under the control of the driver or motorman on the platform of the car.

Each of the arms O is provided with teeth O², adapted to engage a plate P, secured on a platform to lock the arms O and O' either in an uppermost or lowermost position.

The operation is as follows: When the several parts are in the position as illustrated in the drawings in Fig. 1, then the switch-point B is open to the side-track rails C, and when a car approaches the switch-point then the operator in charge of the car will throw the lever L' to bring the roller K' in engagement with the raised head J³ to depress the latter and thereby cause a swinging of the arm H' and a turning of the shaft G' to move the shaft F' and cause a lateral shifting of the block D, so that the switch-point B is shifted into a closed position, that is, closing the side-track rails and opening the main-track rails for the car to proceed on the main-track rails to its destination. Now it will be seen that during this operation the turning of

the shaft G' has caused a swinging of the lever I, so that the arm J and the head J' are raised to extend above the track and be in condition to be pressed by the roller K of the next following car destined to travel over from the main-track rails A onto the side-track rails C. Thus it will be seen that the operator in charge of the car can conveniently throw the switch-point into the proper position for the car to travel in the desired direction, that is, either along the main-track rails or onto the side-track rails, as above described.

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

1. A street-railway switch, comprising a pivoted switch-point, a segmental rack on the under side of the said switch-point, a rock-shaft provided with a pinion in mesh with the said segmental rack, and mechanism operated from the approaching car, whereby the said rock-shaft can be turned in either direction, substantially as shown and described.

2. A street-railway switch, comprising a pivoted switch-point, a segmental rack on the under side of the switch-point, a shaft provided with a pinion in mesh with the said

rack, a second shaft geared with the first-mentioned shaft, arms provided with heads and adapted to be moved from the approaching car, the said arms being connected with the said second shaft and adapted when moved to respectively turn the said shaft in opposite directions, substantially as shown and described.

3. A street-railway switch, comprising a pivoted switch-point, a segmental rack secured to the under side of the switch-point, a pinion in mesh with the said rack, a rock-shaft carrying the said pinion, a second rock-shaft geared with the first-named rock-shaft and provided with two arms, and an arm pivoted on one of the said rock-shaft arms and provided with a head adapted to be engaged by a roller carried by the car, the other arm being connected with a lever carrying a headed arm likewise adapted to be engaged by a roller carried by the car, substantially as shown and described.

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Witnesses:

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