

(No Model.)

C. A. BEACH.
TRAMWAY SWITCH.

No. 456,543.

Patented July 28, 1891.

Fig. 1.

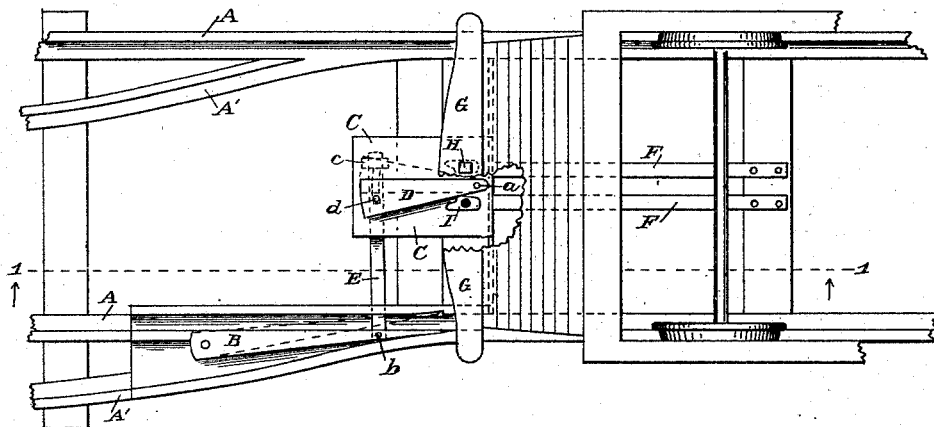
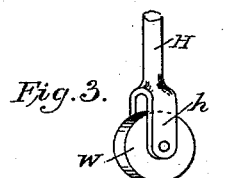
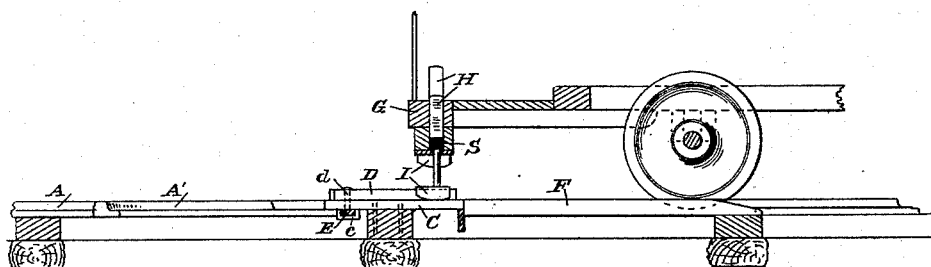


Fig. 2. Sec. 1-1.



WITNESSES:

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TRAMWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 456,543, dated July 28, 1891.

Application filed January 8, 1891. Serial No. 377,126. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BEACH, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Tramway-Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to construct a switch-operating device adapted to be used in connection with railway-tracks and to be readily controlled from the platform of a car. This I accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a car-frame and a switch embodying my invention. Fig. 2 is a vertical longitudinal section of the same taken on line 1 1 of Fig. 1. Fig. 3 is a perspective view of a modification of the lower end of a presser-bar.

As illustrated in the drawings, A designates the main track; A', a branch track, and B a switch-block pivoted at its rear end in line with the main track and movable at its forward end, so as to form either a continuation of the main-track or a guide to direct the car onto the branch track.

E represents a cross-bar secured at one end to the free end of the switch-block B and at its other end to the free end of the shifting-block D, which is pivoted at one end by means of the pin *a* to some suitable frame or support, such as the plate C, provided on its under side with a stirrup or loop *c*, which serves to support one end of the cross-bar E. The sides or edges of the shifting-block D are inclined outward from its pivoted end for the purpose hereinafter specified.

The forward end G of the car-frame is provided with vertically-movable presser-bars H, provided on their lower ends with means of any suitable construction adapted to bear against

the edges of the shifting-block D, such as the shoe I shown in Figs. 1 and 2, or the wheel W shown in Fig. 3.

Bearing or guide bars F are arranged in front of the pivoted end of the shifting-block D, on which the shoes may ride when approaching the block D, and thereby enable said shoes to be conveniently brought into engagement with the edges of the shifting-block D.

When the car approaches the guide-bars, the operator moves downward the presser-bar H which is nearest the direction the car is desired to pass in, and the lower end of said bar will then bear against the edge of the shifting-block, as shown in full lines in Figs. 1 and 2, and the car in going forward will move the free end of said shifting-block and the free end of the switch-block in the direction indicated by dotted lines in Fig. 1, and thereby guide the car onto the branch track. After the car has passed the presser-bar H is automatically lifted by the spring S, mounted on the end of the car-frame, and seated in a chamber between the lower end of the presser-bar and the upper end of the shank of the shoe, as seen best in Fig. 2, so that the lower end of said bar may be free from contact with obstacles met in passing.

What I claim is—

1. The combination, with the main track and the branch track, of the pivoted switch-block, the plate C, having loop *c* on its under side, the shifting-block pivoted to said plate, the cross bar E, connected at one end to the free end of the switch-block and at its other end to the free end of the shifting-block and supported in the loop *c* of the plate C, the longitudinal guide-bars F for the shoes, and the vertically-movable presser-bars with their shoes, all arranged and operating substantially as described.

2. The combination, with the main track and branch track, of the pivoted switch-block, the plate C, having loop *c* on its under side, the shifting-block pivoted to said plate,

the cross-bar E, connected at one end to the free end of the switch-block and at its other end to the free end of the shifting-block and supported in the loop c of the plate C, the
5 vertically-movable presser-bars with their shoes, the springs S, seated in chambers and arranged between the lower ends of the presser-bars and the upper ends of the shanks of the shoes, and the longitudinal guide-bars

F, on which the said shoes slide, substantially as and for the purpose specified.

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

CHARLES A. BEACH.

Witnesses:

ROBERT W. HARDIE,
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