(No Model.)

J. F. BATCHELOR, 2d.

SWITCH OPERATING MECHANISM.

No. 457,178. Patented Aug. 4, 1891.

Fig. 2.

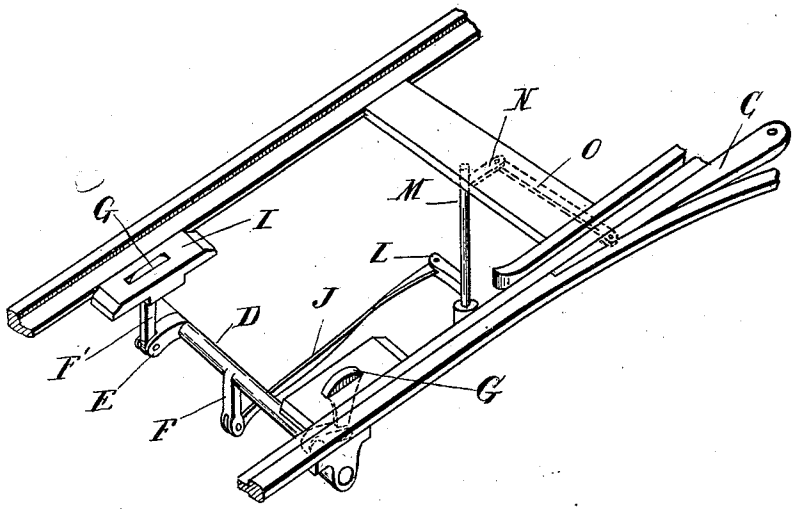


Fig. 1.

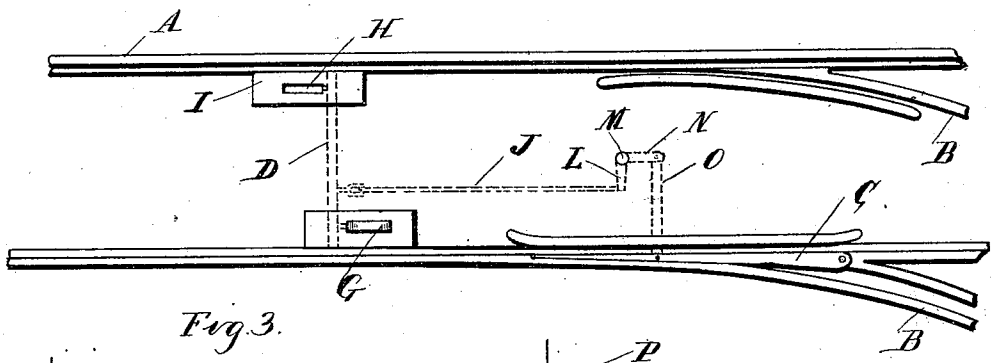
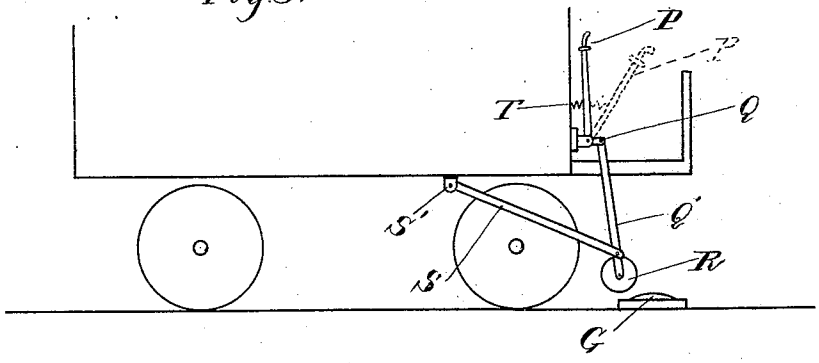


Fig. 3.



Inventor

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By Thos. A. Sprague & Son

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Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JACOB F. BATCHELOR, 2D, OF SAGINAW, MICHIGAN.

SWITCH-OPERATING MECHANISM.

SPECIFICATION forming part of Letters Patent No. 457,178, dated August 4, 1891.

Application filed March 18, 1891. Serial No. 385,540. (No model.)

To all whom it may concern:

Be it known that I, JACOB F. BATCHELOR, 2d, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Switch-Operating Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in switch-operating mechanism, and is especially intended to be used in connection with street-cars.

The invention consists in the peculiar construction of the switch and its connections and a lever upon the car by means of which the conductor or driver can throw the switch from the car, all as more fully hereinafter described.

In the drawings, Figure 1 is a plan view of a track to which my invention is applied, the switch-actuating mechanism being shown in dotted lines. Fig. 2 is a perspective view thereof; and Fig. 3 is a diagram side elevation of the car, showing the connections thereon.

A are the rails of the main track, and B are the switch-rails, C being the movable switch-section. Beneath the track, a short distance in advance of the switch, is located a transverse shaft D, journaled in any suitable bearings. This shaft is provided upon opposite sides with the rock-arms E and with the downwardly-extending rock-arm F. The rock-arms E are bifurcated, and between the bifurcations are pivotally secured the vertical switch-blocks F′, which are provided with a double-inclined head G, extending through the slots H in the blocks I, secured upon the surface of the road-bed, two between the rails. The rock-arm F is correspondingly bifurcated to receive the connecting-rod J, which is connected to the rock-arm L of the vertical shaft M, journaled in any suitable bearing, and having at its top a rock-arm N, which is connected by means of the connecting-rod O with the switch-section C. Upon the car is a lever P, having offset Q at its lower end, to which is connected the connecting-rod Q′, at the lower end of which is journaled the roller R.

S is a stay-rod pivotally secured to the rod Q′ and also to the block S′ upon the bottom of the car.

T is a spring normally holding the lever P in its vertical position.

The parts being thus constructed, as the car approaches the switch the driver depresses the lever P, which carries downward the roller R, striking the double-inclined head G, depressing it, which rocks the shaft D and throws the switch-section C to side-track the car. As soon as the driver releases his hold of the lever, the spring T returns it to its normal position. If now the car approaches which it is desired to continue on the main track, the operator throws the lever upon the opposite side of the car, which will depress the head G upon that side and rock the shaft in the opposite direction, throwing the switch-rail in proper position for the main track.

What I claim as my invention is—

In a switch-operating mechanism, the combination, with the hand-lever on the car, of the roller at the lower end of the rod actuated by said lever, and the double-inclined head G upon both sides of the track and upon opposite sides of the shaft D and adapted to rock said shaft in opposite directions, and connections to the movable switch-rails, substantially as described.

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

JACOB F. BATCHELOR, 2D.

Witnesses:

H. K. HOWRY,

JAMES T. WYLIE.