

**A. L. JOHNSON.**  
**Street-Railway Switches.**

No. 166,530.

Patented Aug. 10, 1875.

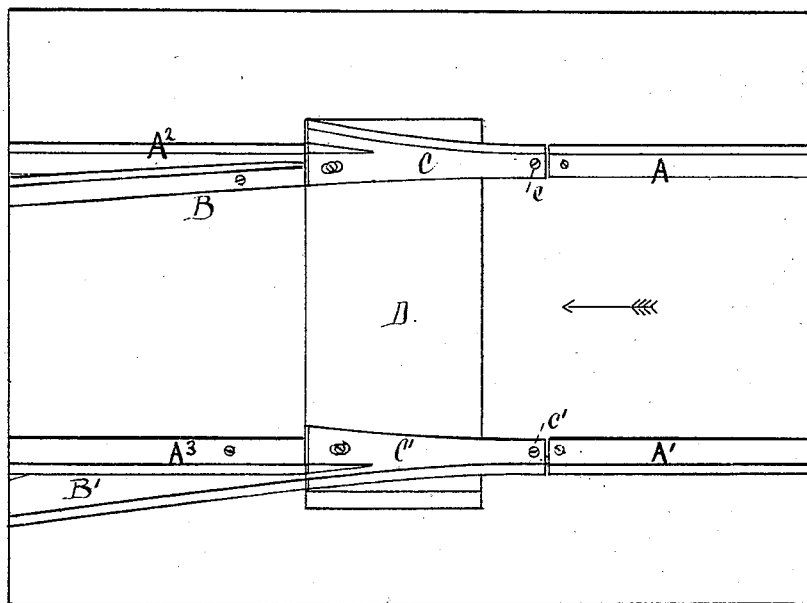


Fig. 1

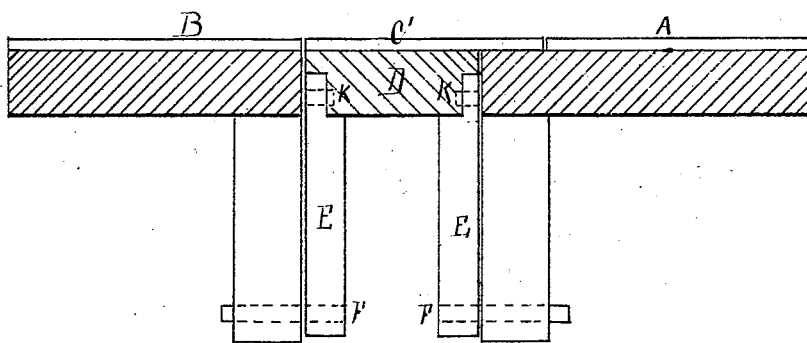


Fig. 2

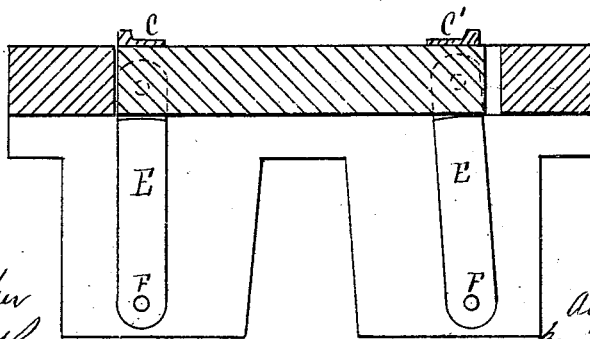


Fig. 3

Witnesses  
*Francis G. Parker*  
*H. Lloyd Van Hook*

Inventor  
*Albert L. Johnson*  
*per William Edson*

# UNITED STATES PATENT OFFICE.

ALBERT L. JOHNSON, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN STREET-RAILWAY SWITCHES.

Specification forming part of Letters Patent No. **166,530**, dated August 10, 1875; application filed May 27, 1874.

*To all whom it may concern:*

Be it known that I, ALBERT L. JOHNSON, of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Switches for Horse-Railroads, of which the following is a specification:

My invention consists in arranging, in connection with the tracks of a railroad, a pair of swinging switch rails or points, said rails or points being held by vertical toggles, so that they are free to swing, and thus allow the car to pass onto the desired track.

By sustaining the switch rails or points on vertical toggles their motion is made so free that after a car has passed onto them, they, together with the car, may be swung either to the right or left by simply turning the horses slightly from the track.

The object of this invention is to produce a switch which may be operated by the side draft of the horses.

Figure 1 is a plan of my invention. Fig. 2 is a longitudinal vertical section of the same; Fig. 3, a cross vertical section of the same.

Let A A<sup>1</sup> and A<sup>2</sup> A<sup>3</sup> represent the main track, and B B' the side or branch track. C and C' are switch rails or points, pivoted at c

c', Fig. 1. The swinging ends of these switch-rails are supported by vertical toggles E E. (See Figs. 2 and 3.) The lower ends of the toggles are pivoted at F F, Figs. 2 and 3, and their upper ends at K K, so that the switch-rails are free to swing.

The form of the switch-rails may be varied to suit the use to which they are to be applied. If the tracks are only used for cars to run in one direction, as indicated by the arrow, then the switch-rails may have but a single groove, or may be like the ordinary rail; but in case the cars are to run both ways, then the ends of the switch-rails must be formed substantially like the well-known safety-switch in use on steam-railroads, to provide against accident to returning cars.

If desirable, the platform D may be omitted and a strap or rod connection be made.

I claim as my invention.

The combination of the swinging switch-rails C and C' with the supporting-toggles E E, arranged substantially as described, and for the purpose set forth.

ALBERT L. JOHNSON.

Witnesses:

FRANK G. PARKER,  
GEO. D. BANCROFT.