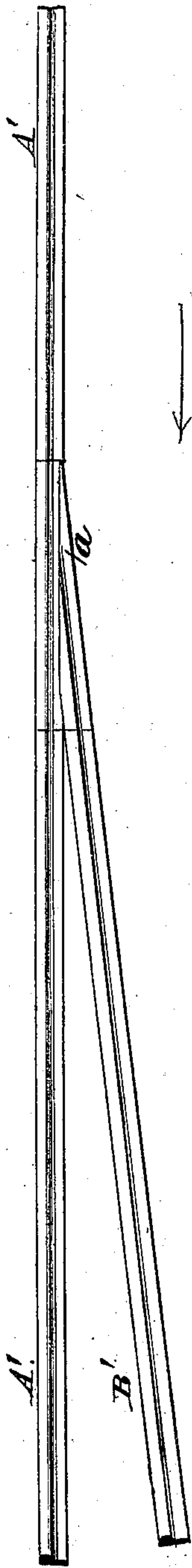


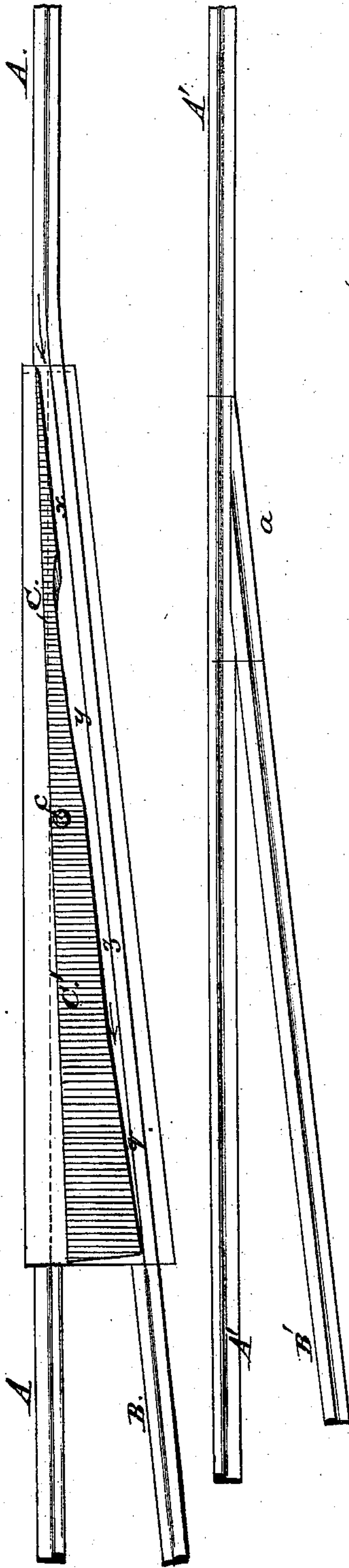
C. M. PARKS.  
RAILROAD SWITCH.

No. 272,313.

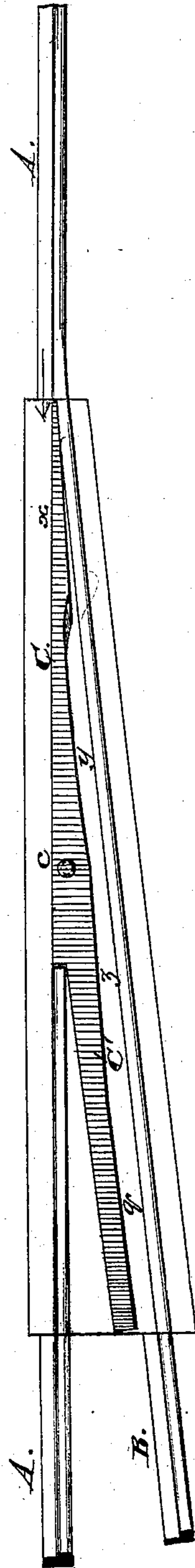
Patented Feb. 13, 1883.



*Fig. 1.*



*Fig. 2.*



Attest:  
H. L. Perrine  
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C. M. Parks  
Inventor.

# UNITED STATES PATENT OFFICE.

CALVIN M. PARKS, OF WASHINGTON, DISTRICT OF COLUMBIA.

## RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 272,313, dated February 13, 1883.

Application filed April 5, 1877.

*To all whom it may concern:*

Be it known that I, CALVIN M. PARKS, of Washington, in the District of Columbia, have invented an Improvement in Railroad-Switches; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figures 1 and 2 are top views of my automatic railroad-switch, showing the switch open in Fig. 1 and closed in Fig. 2.

My improved switch relates to a railway having a double track, or to a track on which the cars always run the same way.

The object of my invention is to provide a switch for a street-railroad track, which will be automatic in closing and cannot be left open.

My invention consists of a pivoted switch-tongue having at one end the ordinary or other suitable point and at the opposite end an arm projecting laterally toward the side rail or turn-out track, so that when the switch has been set open the flange of the wheel will enter at the point of the switch without moving the pivoted tongue, and then said flange, in passing through the switch, will strike said laterally-projecting arm of the pivoted tongue, and by thus pushing this arm away from the rail will close the point of the switch and thereby open the main line.

My invention further consists in the shape or configuration of the switch-point rail in combination with the track.

In the drawings, A and A' represent the two rails of the main stem of a street-railroad, and B and B' a turn-out or siding. The rails A' and siding B' have the usual turn-out plates, *a*. In the rail A the tongue or switch-point C is pivoted at *c*, so as to be shifted for the siding, as seen in Fig. 1, or closed therefor, as seen in Fig. 2. The point of this tongue may be notched into the rail, as seen in Fig. 2, or bear against the side of the rail, as shown in Fig. 1, so as to be in line with the straight track or main-line rail A. The arm C of the pivoted tongue bears against the rail B when the switch is open for the siding, as seen in Fig. 1, and is pushed away from rail B when the switch is closed to the siding, as seen in Fig. 2. The side of the switch-tongue toward the rail A' is straight, and, when the

switch is set to the main line, forms part of the continuous straight line of the main track or main rail A; but the other side of the pivoted switch-tongue is irregular, as follows: When the switch is set for the turn-out, as in Fig. 1, the first quarter, *x*, of its length, commencing at its point, is parallel with the side-track rail and at a distance from it the thickness of the flange of the wheels of the cars. The second quarter, *y*, is cut out, so that its distance from the side track is about one-sixth more than the quarter *x*. The third quarter, *z*, is again parallel and at the same distance therefrom as the quarter *x*, and the last quarter, *q*, inclines toward the track until at the end it touches it. This configuration must be adhered to when the switch is constructed, as it should be, upon the basis of twice the length of the distance between the axles of the cars. The rear broad end of my pivoted switch point or bar may be made solid, as shown in Fig. 1, or cut out, so as to admit the track-rail A, as in Fig. 2, and may be pivoted to and operate upon a base-plate in the ordinary manner.

The operation of my device is as follows: The switch-point C C' having been previously prepared with reference to the curve with which it is to be used, and properly pivoted in its bed, is ready for use. My switch is intended for use on rail-tracks where the cars always run in the same direction, or from right to left, as indicated by the arrows on the drawings, the object being to keep the switch closed to the siding, except when purposely set open. It will be observed that the normal condition of the switch is shut for the siding, thus making the main track continuous, and as a car entering the siding cannot leave the switch open, since the very act of going through closes it, it is clear that the main track will always be continuous and ready for use. It will be necessary to open the switch by hand when a car must leave the main track; but my improved switch never need be closed to the siding by hand, as this is effected automatically. In the drawings the switch is represented as intended for cars running from right to left, and the length of the pivoted switch bar or point C C' is adapted to a single horse-car, and not for long trains of cars. When a car enters



the open switch the wheels will find a parallel passage for their flange until the forward wheel arrives at the commencement of the fourth quarter, *q*, which is inclined toward the track, at which time the rear wheel is about to enter the second quarter, *y*. The forward wheel then moves the extension *C'* by pressing between the inclined side and the side-track rail, and the tongue *C*, by reason of its cut-away quarter *y*, is allowed to close upon the track as the wheels advance. When the forward wheel has passed the quarter *q*, the rear wheel finds an uninterrupted passage out of the switch, leaving it closed, and the main track continuous and ready for use.

I have described my switch as being automatic in closing, but it is obvious that if it should be placed in the siding and reversed it would automatically open.

The advantages of my improved automatic switch will be obvious.

The relative terms "forward" and "backward," used in this specification and claims, are based upon the direction which the car is intended to take upon the track.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A railroad-switch point or bar pivoted centrally, and having at one end a suitable point and at the other a laterally-extended arm, which lies close to the turn out rail when the switch is open to the siding and is pushed away from said rail, thus automatically setting the switch to the main line as the flange of the forward car-wheel passes said arm, substantially as described.

2. A railroad-switch point having a pivot and laterally-extending arm, in combination with a side track, substantially as described.

The above specification of my said invention signed and witnessed at Washington this 5th day of April, A. D. 1877.

C. M. PARKS.

Witnesses:

THOMAS C. CONNOLLY,  
A. E. BEECHER.