

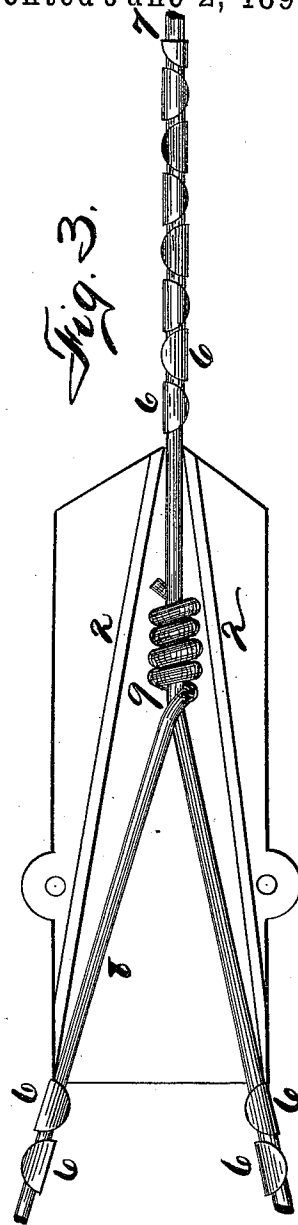
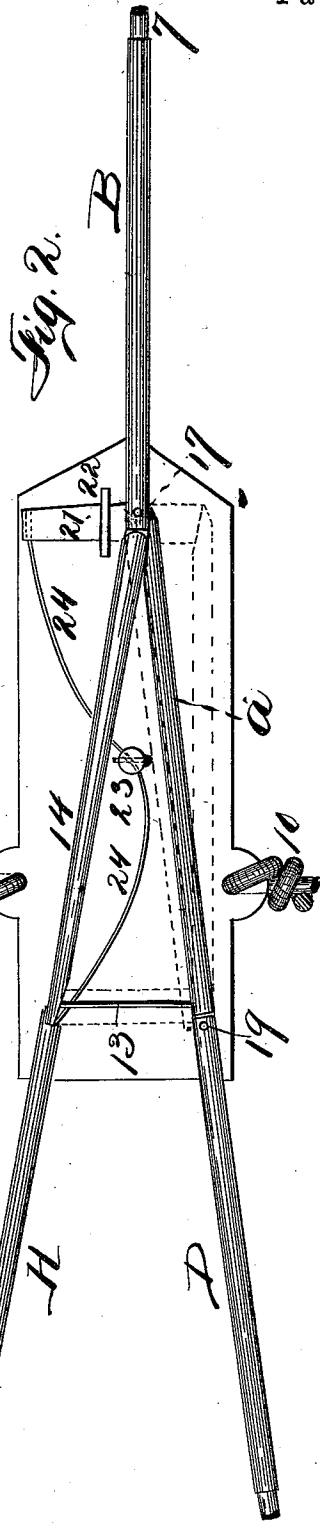
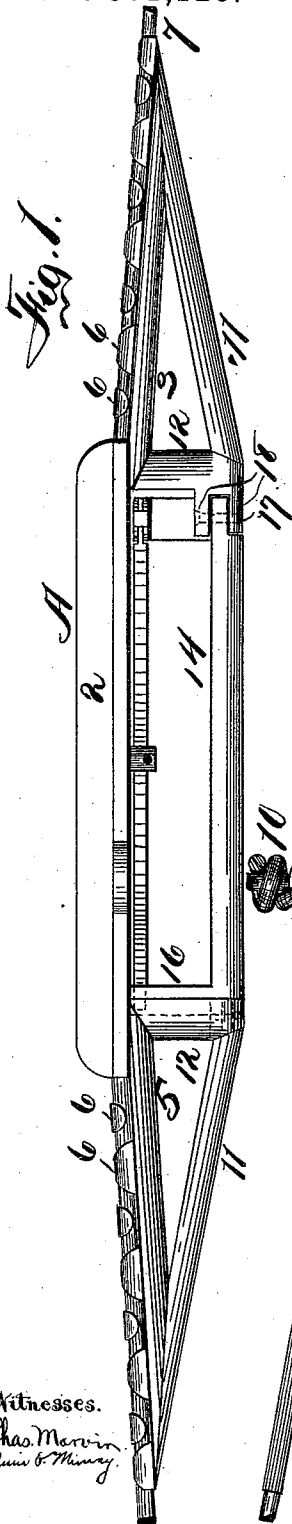
(No Model.)

2 Sheets—Sheet 1.

M. RANGEY & P. PLANTE.
TROLLEY SWITCH.

No. 561,128.

Patented June 2, 1896.



Witnesses.
Chas. Marvin
J. W. Murray

INVENTORS
Moses Rangey.
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ATTORNEYS.

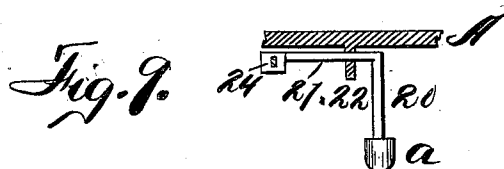
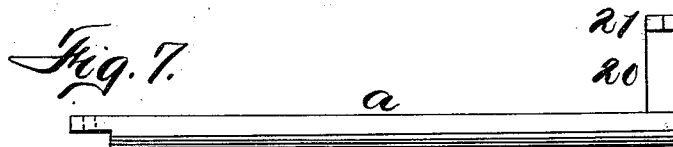
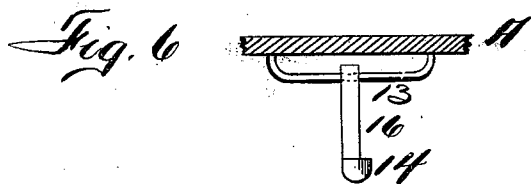
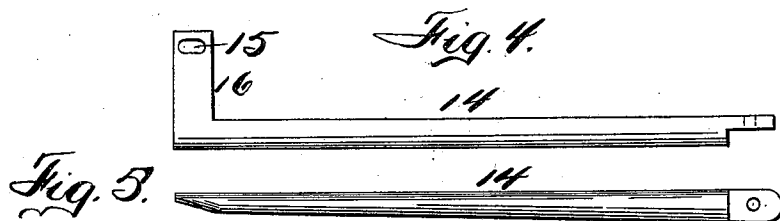
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2 Sheets—Sheet 2.

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TROLLEY SWITCH.

No. 561,128.

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WITNESSES:

Charles W. Morum.
Jessie O. Murray.

INVENTORS
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Peter Plante.

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UNITED STATES PATENT OFFICE.

MOSES RANGEY AND PETER PLANTE, OF SCHENECTADY, NEW YORK.

TROLLEY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 561,128, dated June 2, 1896.

Application filed January 17, 1896. Serial No. 575,842. (No model.)

To all whom it may concern:

Be it known that we, MOSES RANGEY and PETER PLANTE, of Schenectady, in the county of Schenectady, in the State of New York, have invented new and useful Improvements in Trolley-Switches, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

Our invention relates to trolley-wire switches, and by which a trolley-wheel is automatically shunted from a main-line wire onto a branch, or vice versa, and thereby saving all hand-shifting and enabling the trolley-wheel to run from the main line onto the branch or from the branch onto the main line.

Our object is to provide a trolley-switch body with improved means for connecting it to or mounting it upon the wire or wires, whereby soldering is not essential, by providing the body with end arms, which are provided with prongs, which are adapted to be folded over the wires from opposite sides, and by providing it with switch-rails connected at their ends to a slide mounted in ways or upon a way across the switch-body, and providing a spring or springs, which engage with the end of one of the switch-rails or the slide connected to the other rail, and operate to return said rail and slide, respectively, to their normal position after the trolley-wheel has passed, said switch-rails being adapted to be operated independently.

Our invention consists in the several novel features of construction and operation hereinafter described and which are specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the switch. Fig. 2 is a bottom plan thereof. Fig. 3 is a top plan thereof. Fig. 4 is a side elevation of one switch-rail. Fig. 5 is a top plan thereof. Fig. 6 is a sectional detail showing the end of this switch-rail and its mounting upon its guide bar or way. Fig. 7 is a side elevation of the other switch-rail. Fig. 8 is a top plan thereof. Fig. 9 is an end elevation thereof, showing its mounting upon a slide.

A is the switch-body, usually provided on top with the ribs 2 and provided at one end

with an arm 3 and at the other with arms 4 5. All of these are provided with the upwardly-projecting prongs 6, those on the arms 3 and 4 being clenched over the main-line wire 7 and those on the arm 5 being clenched over the branch wire 8, tied to the main-line wire at 9. This supports the switch, and solder may be used, if deemed desirable.

The guy-wires 10 are tied to the body in any ordinary manner. Each body-arm is provided with a track 11, secured to the uprights 12, secured to or integral with the switch-body. A way 13 is suitably secured to the under side of said body, and upon it the switch-rail 14 is mounted at one end, said way passing through a slot 15 in the arm 16, the other end being shouldered and pivoted upon a pin 17 through the laterals 18 upon the uprights 12.

Another switch-rail *a* is pivoted at 19, is provided with an arm 20, and is secured to or integral with the slide 21, which is mounted in a slot in the lug 22, secured to or integral with the switch-body.

At a suitable point or points upon the switch-body a stud 23 (or studs) is erected, and 24 is a suitable spring mounted therein in any suitable manner and having one end in suitable engagement with the end of the switch-rail 14 and the other in suitable engagement with the slide 21. When a trolley-wheel is running on the main wire from B to D and the wheel, guided and controlled by the car to which it is connected, strikes the switch-rail 14, it will force the left-hand end over alongside of the switch-rail *a*, as shown by the dotted lines, and the wheel will follow the wire to D. When a wheel is running from H to B, then it will open the right-hand end of the rail *a*, as indicated by the dotted lines, and pass onto the wire beyond toward B. In either case the spring or springs will return the rail operated to its normal position.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a trolley-switch, a switch-body provided with uprights at or near each end, two movable rails pivoted to the uprights, but at opposite ends of the frame, each rail being provided with an arm at one end which extends at a right angle to the rail, combined

with a spring which has its ends connected to said arms to return the free ends of the rails to position after having been moved by the trolley, substantially as shown.

- 5 2. A switch-body provided with uprights at each end, and guides 22 and 13 on its lower side, combined with two pivoted rails, having arms which extend at a right angle thereto and which arms engage the guides; and a
10 spring having its ends connected to said arms

to return the free ends of the rails to position, substantially as described.

In witness whereof we have hereunto set our hands on this 6th day of January, 1896.

MOSES RANGEY.

PETER PLANTE.

In presence of—

MARK E. COUCH,

C. F. RANGEY.