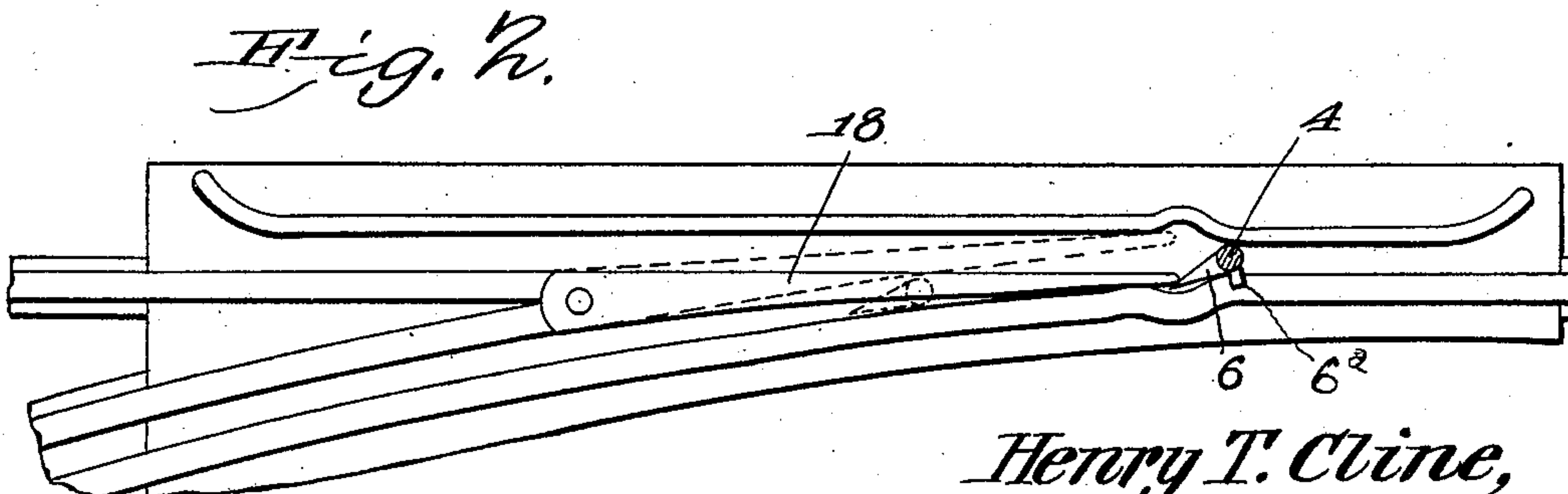
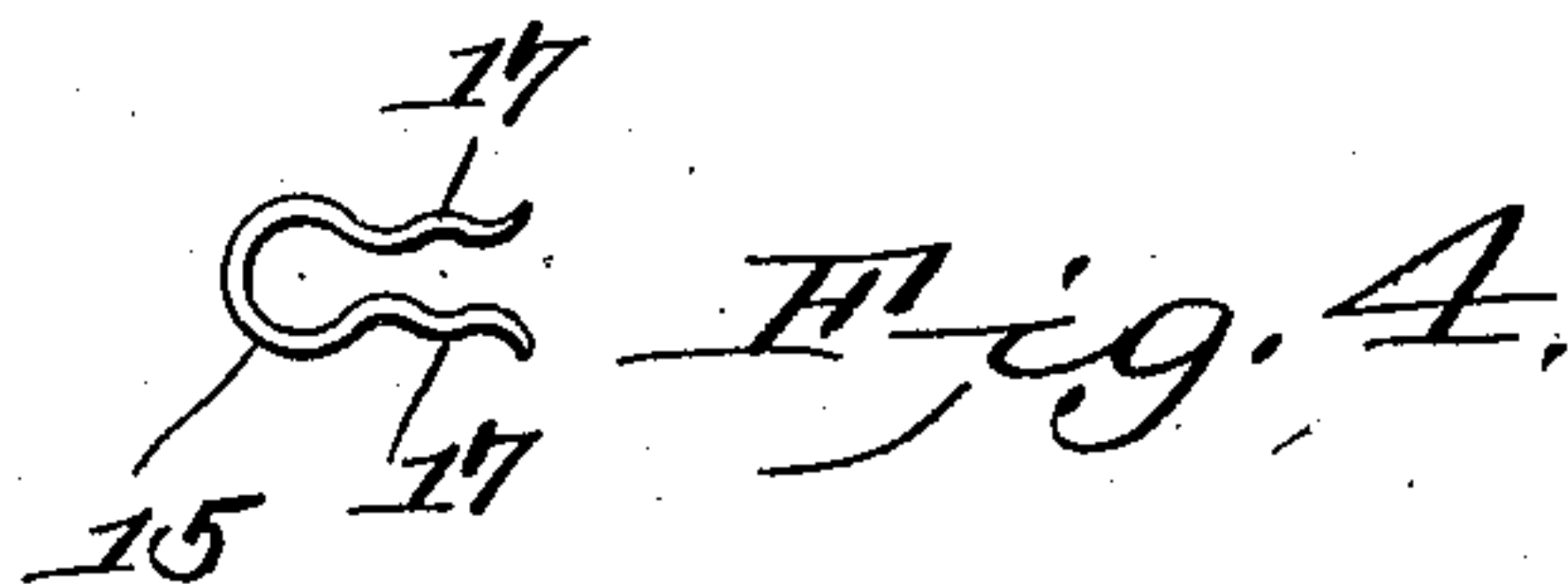
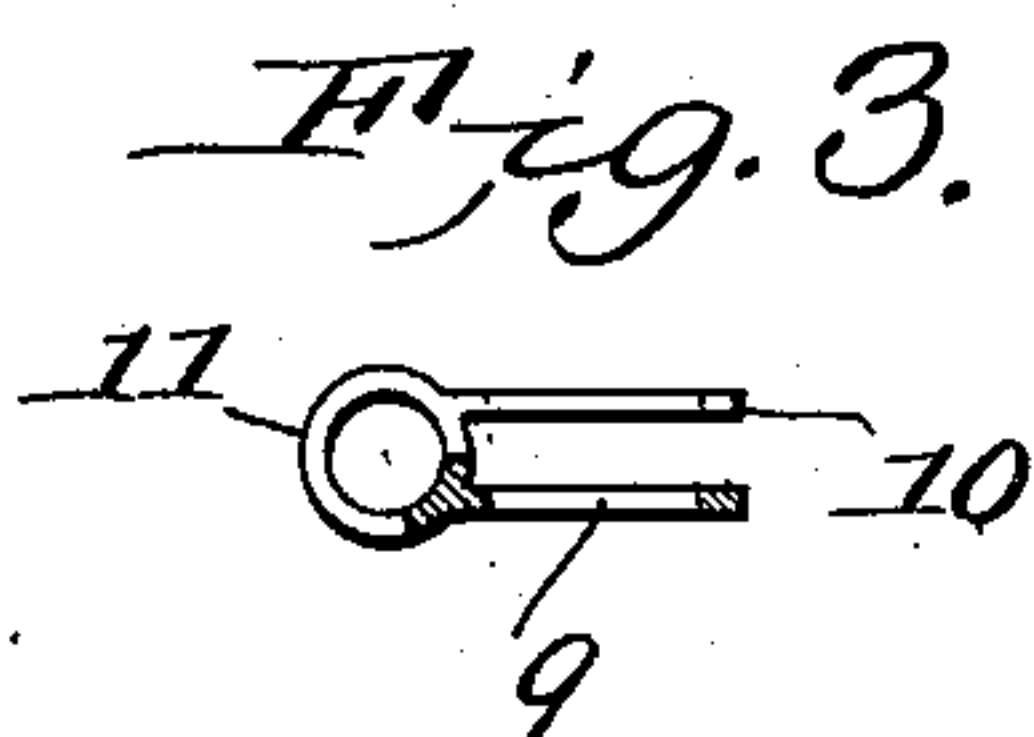
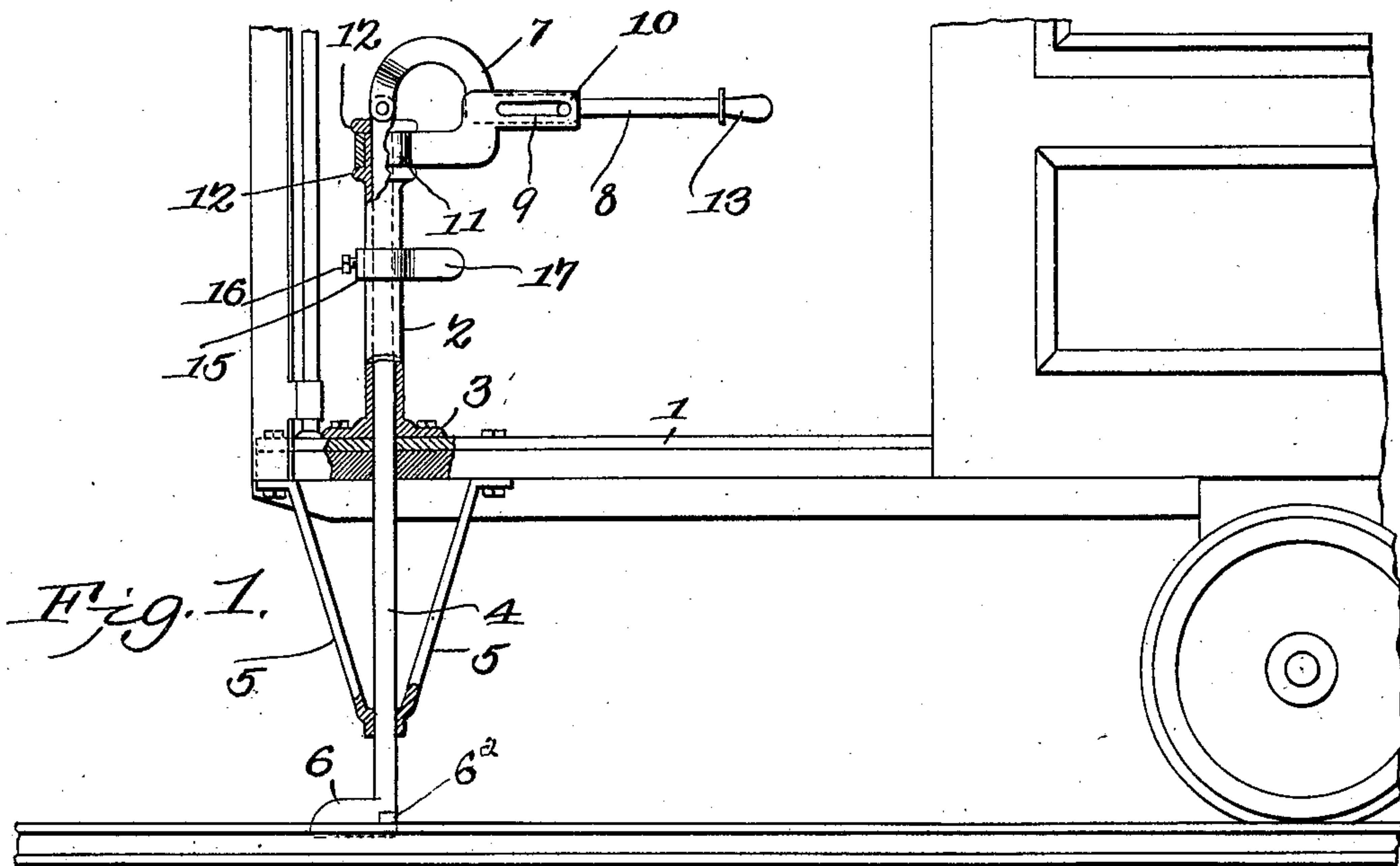


No. 828,461.

PATENTED AUG. 14, 1906.

H. T. CLINE.  
SWITCH POINT THROWER.  
APPLICATION FILED APR. 26, 1906.



WITNESSES:

*E. H. Stewart*  
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ATTORNEYS



# UNITED STATES PATENT OFFICE.

HENRY THEODORE CLINE, OF COLORADO SPRINGS, COLORADO, ASSIGNOR  
OF ONE-HALF TO WARREN W. ROLLINS, OF COLORADO SPRINGS,  
COLORADO.

## SWITCH-POINT THROWER.

No. 828,461.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed April 26, 1906. Serial No. 313,884.

*To all whom it may concern:*

Be it known that I, HENRY THEODORE CLINE, a citizen of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Switch-Point Thrower, of which the following is a specification.

This invention relates to switch-throwing attachments for street-railway cars; and its object is to provide a simple device of this character which can be connected to the front end of a car and whereby the motorman can throw the switch either to open or close the same without the necessity of leaving the car to do so or of stopping the same.

The invention consists of a tubular standard adapted to be secured upon the car-platform and in which is slidably mounted a rotatable rod having a point at its lower end adapted to contact with the inner surface of the rail. A lever is connected to the upper end of this rod and is fulcrumed on a bracket rotatably mounted on the standard. By manipulating this lever the point can be swung to the right or to the left for the purpose of opening or closing the switch, and also by means of this lever the point can be raised above the rails, so as to pass over a switch without operating it.

The invention also consists of certain other novel features of construction and combinations of parts, which will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a view, partly in section and partly in side elevation, showing the device on a car-platform, Fig. 2 is a horizontal section through the rod and showing the foot and switch in plan, the switch-tongue being shown by dotted lines in shifted position. Fig. 3 is a detail view of the rotatable bracket, and Fig. 4 is a similar view of the clip.

Referring to the figures by numerals of reference, 1 is a car-platform, having a tubular standard 2 thereon provided with a base 3, which is bolted or otherwise secured to the platform. A rod 4 is slidably mounted within the standard and extends downward therebelow and through hangers 5, which are fastened to the platform and constitute braces

for the lower portion of the rod. This rod has a wedge-shaped foot 6 at its lower end, while its upper end extends into and is pivoted to a fork 7 at one end of a lever 8. This lever is fulcrumed within slots 9, formed longitudinally in angular ears 10, extending from a sleeve 11, which is rotatably mounted on the upper portion of the standard 2 between collars 12. By pressing downward on the handle 13 of the lever the same will pull upward on the rod 4 and raise the foot above the rails 14. The foot can be held in this position by forcing the lever 8 into a spring-clip 15, which is secured to the standard by means of set-screw 16 or in any other preferred manner, and consists of oppositely-disposed waved arms 17, formed of resilient metal and adapted to bind upon the lever and hold it when lowered.

When the car approaches a switch and it is desired to shift the tongue thereof, the motorman grasps the handle 13 and pulls the lever 8 out of engagement with clip 15. This results in the rod 4 sliding downward, so as to bring the foot 6 beside the rod 14. Lever 8 is then swung laterally, so as to bring the foot into proper position for shifting the tongue 18.

By providing a device such as herein described a switch-tongue can be shifted by a motorman without the necessity of stopping the car. The foot is readily manipulated by one lever, and said lever is normally held out of the way by the clip 15. The device can be readily connected to cars such as ordinarily in use and will not interfere with any of the parts usually connected to the platform.

If desired, a projecting arm 6<sup>a</sup> may be arranged on the foot, so as to overlap and contact with the rail to limit the downward movement of said foot.

What is claimed is—

1. A switch-tongue device comprising a standard, a rotatable rod slidably mounted therein, a foot at one end of the rod, an operating-lever pivoted to the other end of the rod, and a bracket rotatably mounted on the standard, and constituting a fulcrum for the lever.

2. A switch-tongue-operating attachment for cars comprising a tubular standard, a rotatable rod slidably mounted therein, a foot at one end of the rod, a bracket rotatably mounted on the standard, and a lever having



a sliding fulcrum upon the bracket and pivotally connected to the rod.

3. A switch-tongue-operating attachment for cars comprising a tubular standard, a rotatable rod slidably mounted therein, a foot  
5 at one end of the rod, a bracket rotatably mounted on the standard, a lever having a sliding fulcrum upon the bracket and pivotally connected to the rod, and means upon  
10 the standard for engaging the lever to hold the rod in raised position.

4. A switch-tongue-operating attachment for cars comprising a tubular standard, a rotatable rod slidably mounted therein, a foot  
15 at one end of the rod, a bracket rotatably mounted on the standard, a lever having a sliding fulcrum upon the bracket and pivotally connected to the rod, and a clip upon the

standard for engaging the lever to hold the rod in raised position. 20

5. The combination with a support; of a tubular standard secured thereon, a rotatable rod slidably mounted within the standard, a tapered foot at one end of the rod, a lever pivoted to the other end of the rod, a bracket  
25 rotatably mounted on the standard, said lever being fulcrumed on the bracket, and a clip on the standard for engaging the lever to hold the rod in raised position.

In testimony that I claim the foregoing as  
30 my own I have hereto affixed my signature in the presence of two witnesses.

HENRY THEODORE CLINE.

Witnesses:

H. C. HENDERSON,  
W. W. ROLLINS.