

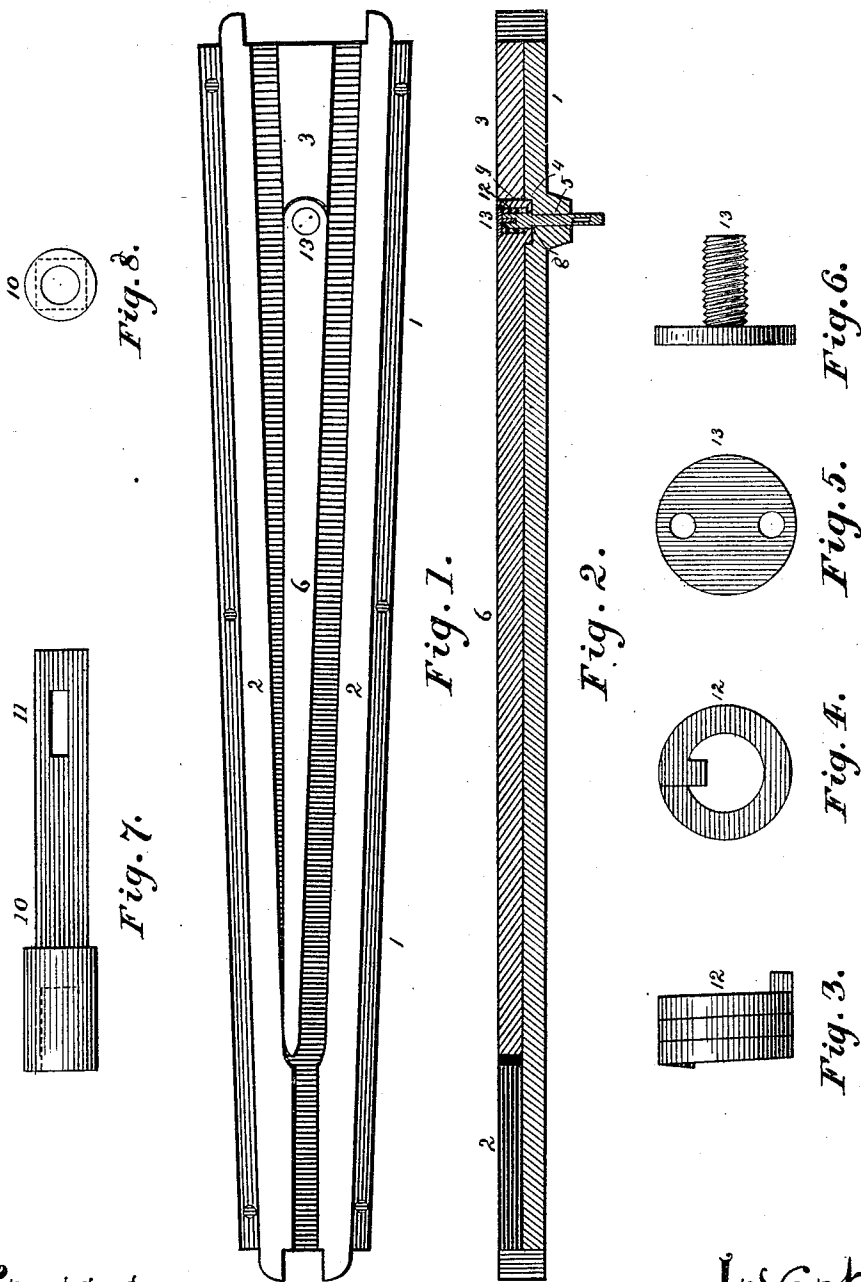
(No Model.)

2 Sheets—Sheet 1.

W. H. SNYDER.  
STREET RAILWAY SWITCH.

No. 461,786.

Patented Oct. 20, 1891.



Witnesses  
J. M. Peterson  
C. E. Humphrey

Attorney

Inventor  
WILLIAM H. SNYDER,  
C. E. Humphrey.

(No Model.)

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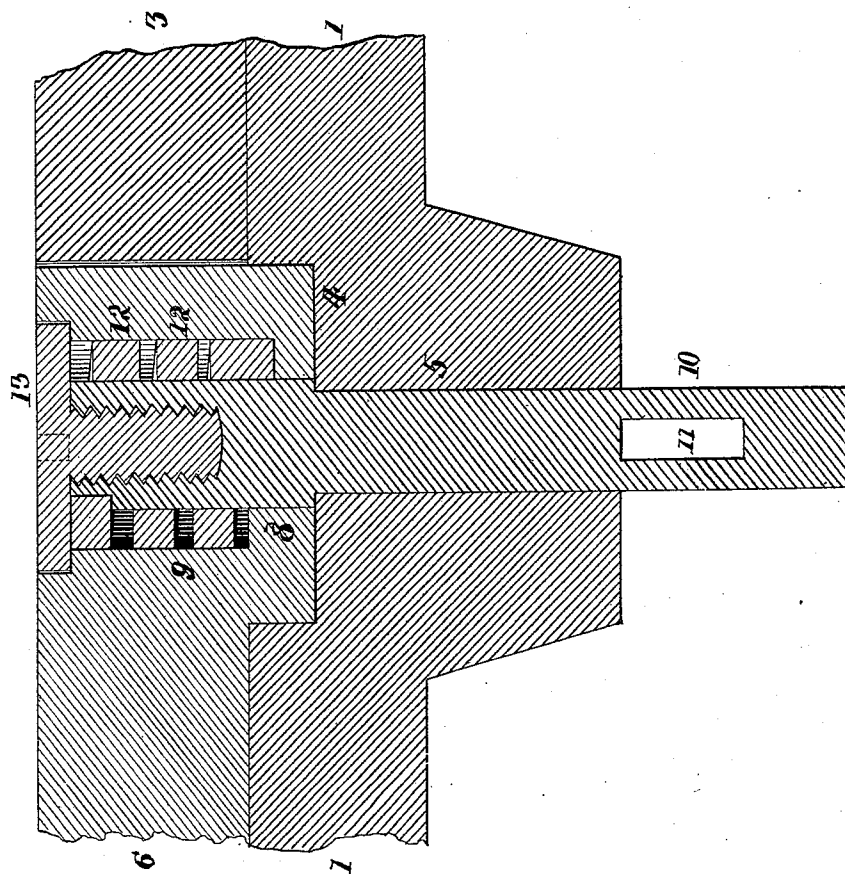


Fig. 9.

Witnesses  
John Peterson  
C. E. Humphrey

Inventor  
William H. Snyder  
Attorney  
C. P. Humphrey

# UNITED STATES PATENT OFFICE.

WILLIAM H. SNYDER, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF TO ISAAC W. HEWITT.

## STREET-RAILWAY SWITCH.

SPECIFICATION forming part of Letters Patent No. 461,786, dated October 20, 1891.

Application filed April 6, 1891. Serial No. 387,725. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. SNYDER, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Railway-Switches, of which the following is a specification.

My invention has relation to that class of railway-switches used on street-railways, and particularly those on which electric-motor cars are run and in which a swinging tongue located at the divergence of the rails is constantly held against one rail by a spring or equivalent device to divert the car-wheels to the opposite rail and to be moved aside to permit the wheels to pass on its adjacent rail.

The object of my invention is to provide a new and improved device for actuating the tongue, to inclose and protect the devices from injury or derangement and simplify the construction, and to produce an effective switch of the class specified.

To the aforesaid objects my invention consists of the peculiar and novel construction, arrangement, and combination of parts hereinafter described, and then specifically pointed out in the claims, reference being had to the accompanying drawings, which form a part of this specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the different figures, Figure 1 is a plan of my improved switch; Fig. 2, a longitudinal, vertical, central section of the same; Figs. 3 and 4, side elevation and plan, respectively, of the actuating-spring; Figs. 5 and 6, similar views of the cap-screw; Figs. 7 and 8, side elevation and inverted plan of the tongue-pivot; and Fig. 9, an enlarged sectional view of the joint of the tongue, shown at the right-hand end of Fig. 2.

Referring to the drawings, 1 is a base, having the diverging rails 2 2 and a partial central guide-rail 3, whose sides are parallel with the diverging rails 2 2, and are preferably integral with the base 1. The narrower end of the guard-rail 3 is curved inward on the arc of a circle, and coincident with it is a circular recess 4 in the bed, from the center of the bottom of which extends a rectangular orifice 5 through the bed, which is re-enforced on its underside at this point to afford sufficient strength and depth for the parts hereinafter described.

The tongue 6 consists of a long tapering bar of such depth that when it rests on the bed between the rails its top will be flush with the tops of said rails, and of such lateral configuration that when its point is turned to one rail its opposite side will be parallel with the other rail. The broader edge of the tongue is rounded to fit the guard-rail 3, and on its under face is a projection which fits the recess 4 of the bed, through the center of which is an orifice 8 to fit the pivot herein-after described, which orifice a short distance above the bottom of said projection is enlarged to constitute a cylindrical recess 9 for the actuating-spring. Placed inside this recess and extending through the orifices 8 and 5, is a rod 10, the upper part of which is cylindrical to form a core for the spring and fit the orifice 8, its lower part being square to fit the orifice 5, and provided at its lower end with a keyway 11 to receive a key to retain it in place. Surrounding the cylindrical part of the rod 10 is a heavy coiled spring 12, the lower end of which is turned downward to enter a notch in the bottom of the recess 9, and its upper end turned inward to engage a notch in the upper end of the rod 10, and this spring when in place is set in tension to constantly press the point toward one rail, as shown in Fig. 1. The upper end of the rod 10 has a central screw-threaded orifice and rests a short distance below the face of the rails, and a cap-screw 13 fits said orifice and covers said rod and spring.

I claim as my invention—

1. The combination, in a railway-switch, of a supporting-bed having diverging rails, a tongue pivotally mounted on said bed between the divergent ends of said rails, with its free end arranged to swing toward either, and a coiled spring surrounding the tongue-pivot, its opposite ends arranged to engage the bed and tongue, respectively, substantially as shown and described.

2. The combination, with the bed 1, tongue 6, pivot 10, and spring 12, of the cap-screw 17, constructed and arranged substantially as shown and described.

In testimony that I claim the above I hereunto set my hand.

WILLIAM H. SNYDER.

Witnesses:

C. P. HUMPHREY,  
C. E. HUMPHREY.