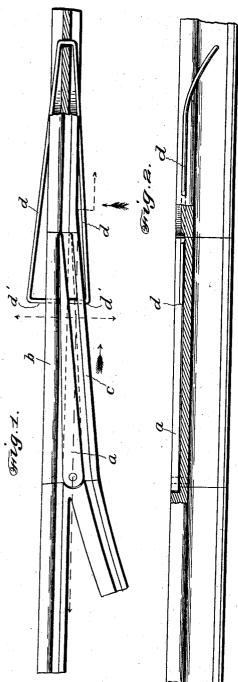
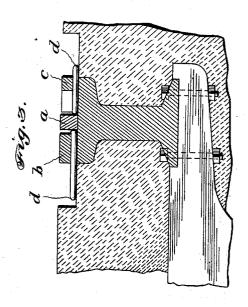
## S. FIERBAUGH. RAILWAY SWITCH.

(Application filed Oct. 4, 1902.)

(No Model.)





Witnesses ;

Ra Boswell, Edin L. Gewell

By

Samue Firkangle, Davist Davis,

attorneys

## UNITED STATES PATENT OFFICE.

SAMUEL FIERBAUGH, OF HUNTINGTON, WEST VIRGINIA.

## RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 717,375, dated December 30, 1902.

Application filed October 4, 1902. Serial No. 125,907. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL FIERBAUGH, a citizen of the United States of America, and a resident of Huntington, county of Cabell, 5 State of West Virginia, have invented certain new and useful Improvements in Railway-Switches, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of portions of a switch, showing my invention applied thereto. Fig. 2 is a side elevation thereof, and

Fig. 3 a transverse vertical section.

The object of this invention is to provide extremely simple devices for shifting the switch point or tongue, the device being adapted to operate in conjunction with a suitable device mounted on a car and adapted to be operated by the motorman or conductor, so that the switch may be thrown without alighting from a car or arresting its movement, as more fully hereinafter set forth.

In the drawings the letter a designates the switch-tongue, which is pivoted at its rear or 25 larger end in the usual way and lies between the tread portion b and the inner flange c of the junction-rail, which is of the usual construction. The forward or pointed end of the tongue a is adapted to be shifted laterally 30 from the inner face of the tread portion b to the adjacent face of the flange c, as is usual. At either side of the rail is mounted a rod d, whose forward end is bent at substantially right angles and enters a horizontal opening 35 in the tread b or the flange c and contacts with one of the side faces of the tongue. The two inward-extending parts d' bear against the tongue at opposite points, and they fit sufficiently loosely in the holes in the parts 40 b and c to enable them to readily slide back and forth therein. The rear ends of these  $\operatorname{rods} d$  are connected together and are pivotally attached to the section of rail just ahead of the junction-rail. Their extreme forward 45 ends are turned downward, so as to conveniently pass through a transverse hole in the vertical web portion of the rail. These bars d incline inwardly toward their forward ends,

as shown.

It will be observed that by simply causing 50 the part carried by the car to impinge against the outer side of either one of the rods d as it goes along toward the switch the switchpoint may be thrown in either direction. Any of the well-known devices may be em- 55 ployed for engaging the bars or rods d, and I therefore do not wish to be confined in this respect. It will be observed that when one of the rods d is operated to shift the tongue toward the other side of its recess the rod 60 will be pushed in close to the adjacent edge of the rail, and the rod on the other side of the rail will be by the same act pushed outward, where it will be in proper position for manipulation when it is desired to shift the 65 tongue into its other position. It will be observed that the inward-bent ends d' should lie at the bottom of or in grooves or recesses formed in the bottom of the recess in which the tongue works, so that they shall not be 70 struck by the wheel-flanges. It will also be observed that the rod should be located as near the top of the rails as is practicable, so that they may be shifted readily. It will be observed also that by turning down the for- 75 ward ends of the bars, so that they may pass through the web portion of the rail, the objection of cutting or boring out the upper or thick part of the rail is avoided.

Having thus fully described my invention, 80 what I claim, and desire to secure by Letters

Patent, is—

1. In a railway-switch, the combination of the switch-rails and the junction-rail, having an outer tread surface or flange and an 85 inner guard-flange, a switch-tongue pivoted between these flanges and adapted to be shifted from side to side in the space therebetween, and a pair of rods pivotally attached to the rail at a point forward of the 90 junction-rail and extending along one on either side of the same and having their forward inward-turned ends working through openings formed respectively in the flanges of the junction-rail and adapted to engage 95 the opposite faces of the switch-tongue, said rods approaching each other toward their forward or pivotal ends.

2. A device for shifting the switch-tongue of railway-switches consisting of a pair of rods lying at opposite sides of the rail and having their forward ends connected together and pivotally supported in an opening in the rail and their rearward ends turned inward and adapted to engage the switch-tongue, for the purposes set forth.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, 10 this 29th day of September, 1902.

SAMUEL FIERBAUGH.

Witnesses:
DON WEIDER,
S. C. HERMAN.