

J. A. McCAIN.
SAFETY SWITCH DEVICE.
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956,139.

Patented Apr. 26, 1910.

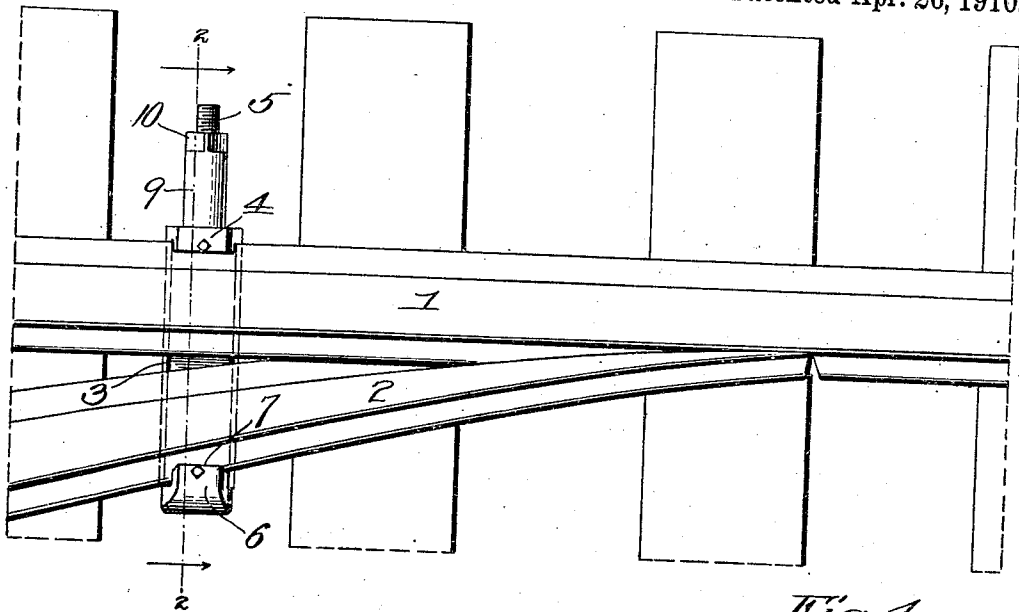


Fig. 2.

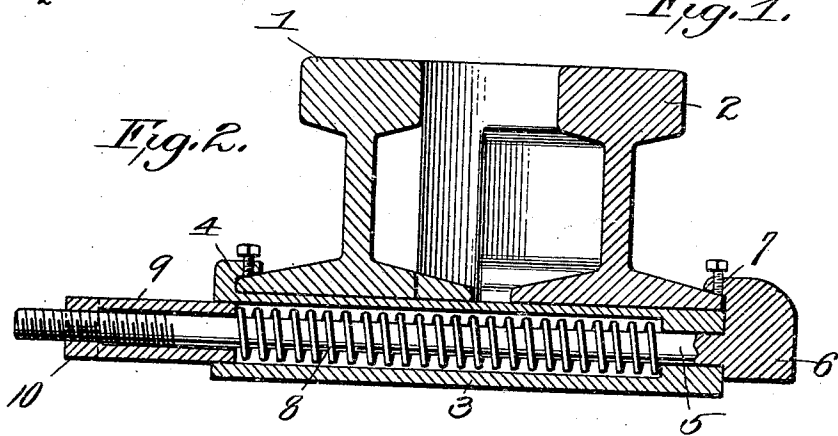
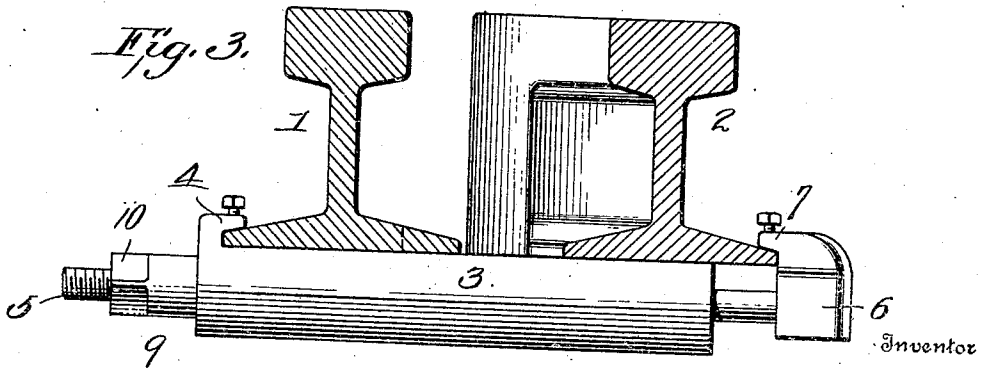


Fig. 3.



Witnesses

Oliver W. Holmes
E. B. McBeth.

J. H. McCain

By O'Meara & Brock
Attorneys

UNITED STATES PATENT OFFICE.

JOHN ALEXANDER McCAIN, OF POWDER SPRINGS, GEORGIA, ASSIGNOR OF ONE-HALF
TO W. L. FLORENCE, OF POWDER SPRINGS, GEORGIA.

SAFETY SWITCH DEVICE.

956,139.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN A. McCAIN, a citizen of the United States, residing at Powder Springs, in the county of Cobb and State of Georgia, have invented a new and useful Improvement in Safety Switch Devices, of which the following is a specification.

This invention relates to a device for holding a switch point in close engagement with a main track rail, permitting the point to be forced from the rail by the flange of a car wheel and positively returning the point to its proper position after the wheels have passed over it.

The object of the invention is to positively connect the switch point and the main track rail together directly at the point and without placing the connecting means upon the top of a tie or in any other position where it would be in danger of being struck by a loose brake rod or by any other part of the train.

The invention consists of a sleeve arranged beneath the rail and the switch point, one end of said sleeve gripping the base of the rail, a rod working through said sleeve, a head carried by said rod and gripping the base of the switch point, and a spring arranged within the sleeve for the purpose of holding the head of the rod against the end of the sleeve and the switch point in engagement with the rail.

The invention also includes means for adjusting the tension of said spring.

In the accompanying drawings, Figure 1 is a plan view of the device applied to a switch point. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a similar section, the switch point being shown in the position it occupies when forced from the main track rail by the flange of a car wheel.

In these drawings, 1 represents a main track rail and 2 a switch point. A sleeve 3 extends transversely beneath the rail and point and it is provided with an inwardly extending undercut shoulder 4 at its outer end which grips the base upon the outside of the rail 1. Working loosely through this sleeve is a rod 5 provided at its inner end with a head 6 which head carries an inwardly extending tongue 7 which grips the

inside edge of the base of the switch point. In order to hold the tongue 7 in positive engagement with the point a coil spring 8 is placed in the sleeve and around the rod 5 and bears against the inner end portion of the sleeve 3 and at the outer end against a collar 9 which is threaded upon the outer end portion of the rod 5, said collar having a squared portion 10 for engagement with a wrench, and said collar also works in the sleeve. By adjusting the collar upon the rod the tension of the spring can be adjusted.

It will be obvious that the switch point will be normally held against the rail 1 as shown in Fig. 2, but it can be forced away from said rail by the flange of a car wheel and into the position shown in Fig. 3, such movement compressing the spring 8, which spring will return the switch point to its normal position when the wheels of the car have passed over the switch.

What I claim is:—

1. The combination with a track rail and a switch point, a sleeve arranged transversely beneath the rail and point, an inwardly extending undercut shoulder at one end of the sleeve, a rod working loosely through said sleeve and projecting therefrom at each end, a head provided with a tongue carried by the rod and at the end of the rod opposite the said shoulder, and a spring adapted to hold the head of the rod in engagement with the sleeve.

2. The combination with a rail and a switch point, of a sleeve arranged transversely beneath the rail and point, an inwardly extending shoulder carried by the sleeve adapted to engage the base of the rail, a rod working through the sleeve and projecting from its ends, a head carried by the rod, a tongue carried by the head adapted to engage the base of the point, a collar threaded upon the rod, and a coil spring arranged within the sleeve and bearing respectively upon an end portion of the sleeve and upon the inner end of said collar.

JOHN ALEXANDER McCAIN.

Witnesses:

W. L. FLORENCE,
C. A. CAMP.