

D. DOCKSTADER.
RAILWAY SWITCH OPERATING MECHANISM.
APPLICATION FILED MAY 7, 1912.

1,062,822.

Patented May 27, 1913.

2 SHEETS-SHEET 1.

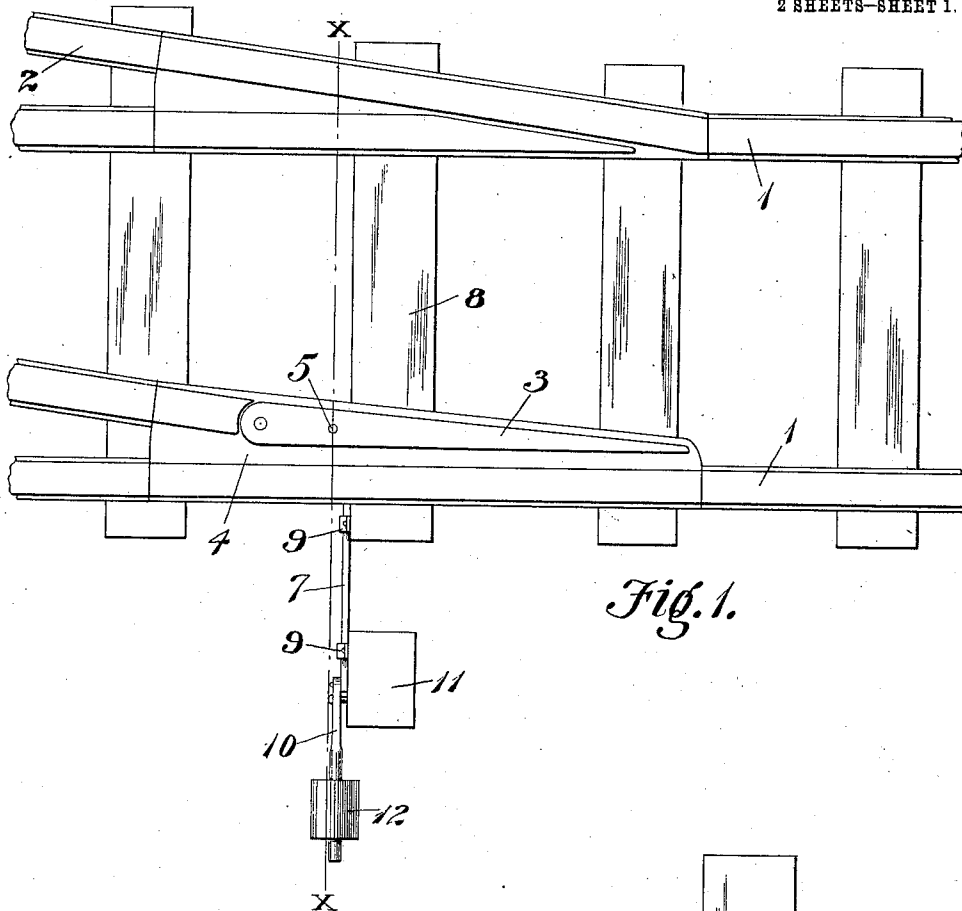


Fig. 1.

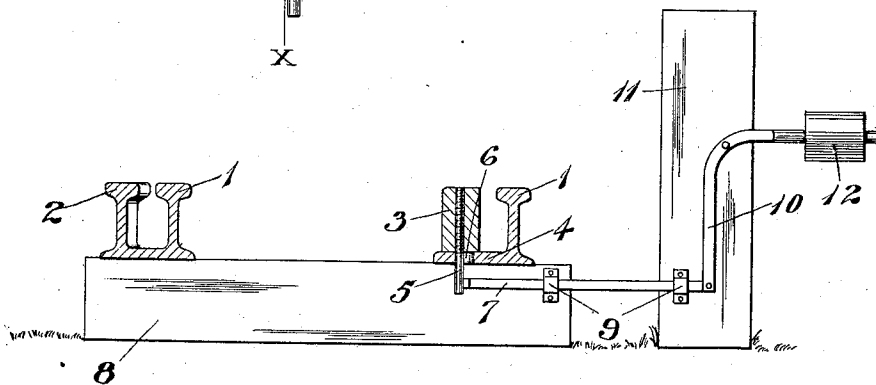


Fig. 2.

Witnesses
G. R. Pierce
V. B. Hillyard.

Inventor
D. Dockstader
By Victor J. Evans
Attorney

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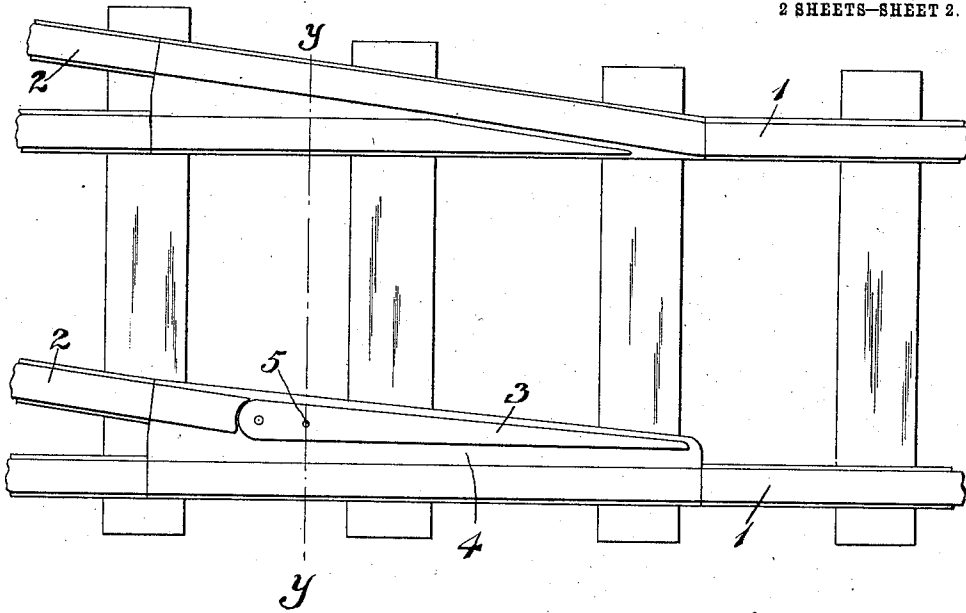


Fig. 3.

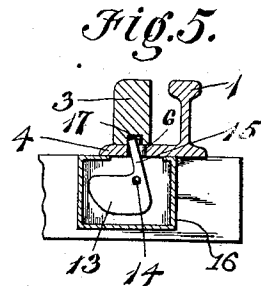
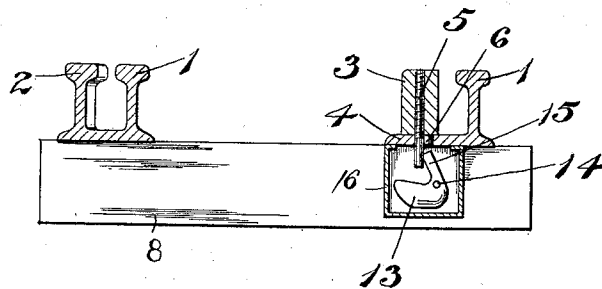


Fig. 5.

Fig. 4.



Witnesses
G. R. Pierce
V. B. Hillyard.

Inventor
D. Dockstader
Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

DANIEL DOCKSTADER, OF PALATINE BRIDGE, NEW YORK.

RAILWAY-SWITCH-OPERATING MECHANISM.

1,062,822.

Specification of Letters Patent.

Patented May 27, 1913.

Application filed May 7, 1912. Serial No. 695,696.

To all whom it may concern:

Be it known that I, DANIEL DOCKSTADER, a citizen of the United States, residing at Palatine Bridge, in the county of Montgomery and State of New York, have invented new and useful Improvements in Railway-Switch-Operating Mechanism, of which the following is a specification.

The present invention provides a simple, effective and durable mechanism for yieldingly holding the switch of a railway open so that a car may pass from the siding onto the main track without stopping or requiring the services of a switchman or other operator to manipulate the switch so as to close and open the same.

The invention is designed most especially for the switches of street and interurban railways to admit of the motorman of an electric car or the operator of a motor driven car passing from a siding or branch onto the main line without requiring the stopping of the car to admit of the conductor operating the switch so that the transfer may be effected.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawings, and pointed out in the appended claims.

Referring to the drawings, forming a part of the specification, Figure 1 is a top plan view of a railway switch provided with automatic operating mechanism embodying the invention. Fig. 2 is a transverse section on the line $x-x$ of Fig. 1. Fig. 3 is a view similar to Fig. 1 of a modification. Fig. 4 is a cross section of the modification on the line $y-y$ of Fig. 2. Fig. 5 is a sectional view of a modification.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawings, by the same reference characters.

The rails of the main track are indicated at 1 and 2 designates the rails of the siding or branch. The switch point 3 is pivoted at one end in the usual manner and is free at its opposite end to move horizontally. A plate 4 is provided at the switch and supports the switch point 3 which is arranged to normally stand away from the rail 1 at its free end. The present invention contemplates a weight disposed in such a manner as to hold the free end of the switch point 3

spaced from the main rail 1. A pin 5 projects from the switch point and passes through a transverse slot 6 formed in the bed plate 4. The slot 6 is closed by the switch point which prevents dust or other foreign matter from passing through the said transverse slot. In the form shown in Figs. 1 and 2 a bar 7 is located against the side of a tie 8 and is mounted in suitable guides 9 with its inner end extending under the main rail 1 and switch point 3 so as to engage the pin 5. A lever 10 is pivoted to a post 11 at one side of the track and is jointed to the outer end of the bar 7. The lever 10 is of elbow form and has a weight 12 adjustable upon its horizontal arm. This form of the invention is designed most especially for interurban railways.

In the form shown in Figs. 3 and 4 a weight 13 is arranged below the bed plate 4 and is pivoted at 14 and has an extension 15 adapted to engage a pin 5 pendent from the switch point 3. The weight 13 is arranged horizontally and occupies a position close to the under side of the bed plate so as to be out of the way. A box 16 forms a housing for the weight 13 and excludes foreign matter therefrom. The weight 13 like the weight 12 serves normally to hold the switch point at its free end away from the main track. When the car is passing from the siding upon the main track the flanges of the wheels engage the side of the switch point and move the same toward the main rail and after the flanges of the car wheels clear the switch point the latter is moved away from the main track at its free end by the action of the weight in the manner herein stated. The pin 5 is detachably fitted to the switch point and is preferably connected thereto by means of a screwthread.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

In the modification shown in Fig. 5 the

pin 5 is dispensed with, a recess 17 being formed in the lower side of the switch point to receive the projecting portion 15 of the weight 13.

5 Having thus described the invention what is claimed as new, is:—

10 1. In a railway switch the combination of the switch point, a pin pendent from the under side of the switch point and extending below the plane of the under side of the main rail, and a weight actuated part arranged beneath the main rail and adapted to engage the said pin and serving normally to hold the free end of the switch point away
15 from the rail of the main track.

20 2. In a railway switch, the combination of a bed plate having a transverse slot, a main rail and a switch point supported upon the bed plate, a pin pendent from the switch point and extending through the transverse slot of the bed plate, and a weight arranged horizontally below the bed plate and having

an extension to engage the pin of the switch point to normally hold the free end of said switch point away from the main rail. 25

3. In a railway switch, the combination of a bed plate having a transverse slot, a main rail and a switch point supported upon the bed plate, a pin pendent from the switch point and extending through the transverse slot of the bed plate, a weight arranged horizontally below the bed plate and having an extension to engage the pin of the switch point to normally hold the free end of said switch point away from the main rail, and
35 a box forming a housing for said weight and completely inclosing the same.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL DOCKSTADER.

Witnesses:

E. H. IRELAND,
P. W. COLEMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."