(No Model.)

D. J. McOSKER.

RAILROAD SWITCH.

No. 422,610. Patented Mar. 4, 1890.

Fig. 1.

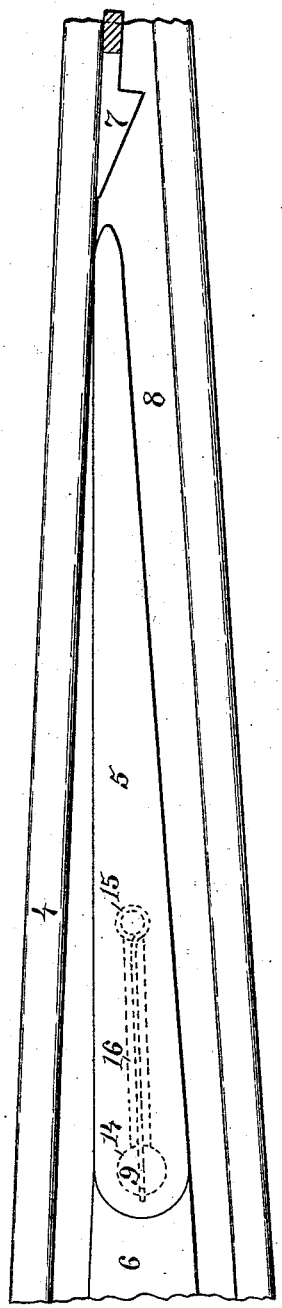


Fig. 2.

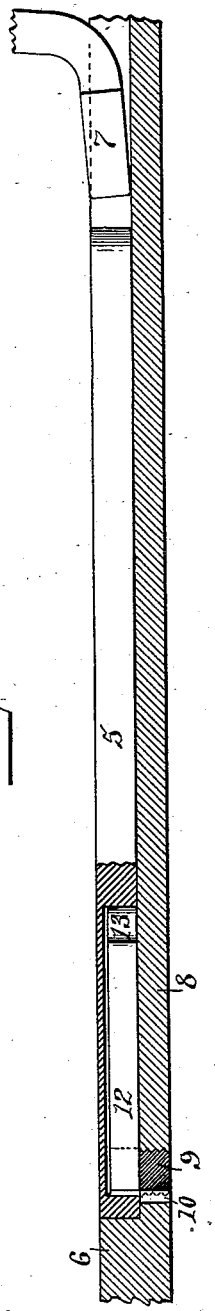
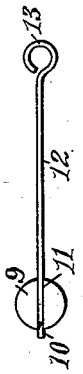


Fig. 3.



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UNITED STATES PATENT OFFICE.

DANIEL J. MCOSKER, OF PROVIDENCE, RHODE ISLAND.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 422,610, dated March 4, 1890.

Application filed October 31, 1889. Serial No. 328,851. (No model.)

To all whom it may concern:

Be it known that I, DANIEL J. MCOSKER, of the city of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Railroad-Switches; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in the tongue of a street-railway switch; and it consists in the peculiar and novel construction of the tongue and a spring by which the same is held in place, as will be more fully set forth hereinafter.

The object of this invention is to so construct the tongue of a turn-out or switch of a street-railway that the same will close automatically after it has been opened to admit a car to the turn-out or branch track of the road.

Figure 1 is a top view of the hinged tongue used on street-railroads at the connection of a turn-out or branch with the main track, the position of the spring being shown in broken lines. Fig. 2 is a sectional view of the switch, showing the location of the spring in the tongue. Fig. 3 is a view of the spring and the hinge or stud pin.

Similar letters of reference indicate corresponding parts in all the figures.

In street-railways, when it is desired that a car on the main track is to enter a turn-out at any street or place, a hinged tongue, by which the turn-out is closed, is moved so as to open the turn-out and guide the wheels into the curved track forming the turn-out. To prevent the next following car from also entering the turn-out, the tongue has to be moved to its original position, closing the inlet to the branch track or turn-out.

When my improved switch-operating device, shown and described in Patent No. 413,455, granted to me October 22, 1889, for improvements in switch-operating devices for street-cars, is used, the tongue is moved as the car passes over the switch, if the car is to enter the turn-out or branch, by the plow-share-pointed arm 7, (indicated in Figs. 1 and 2,) to open the switch and allow the flanges of the wheels to pass between the tongue and the rail.

In the drawings, the number 4 indicates the rail of the turn-out or branch; 5, the tongue; 6, an abutment having a concaved end, into which the convex end of the tongue enters.

7 indicates the switch-operating lever already referred to.

The bed-plate 8 has the stud-pin 9 secured in the same, so as to form the pivot or hinge on which the tongue swings. The stud-pin 9 may be screwed into the bed-plate, as is shown in Fig. 2, and held against rotation by the spline 10, which enters a groove formed in the bed-plate and in the pin 9, as is shown in Fig. 3. The stud-pin 9 has the slit 11 cut into its upper half to receive the plate of the spring 12, the opposite end of the spring being bent into the form of the cylinder 13. In the under side of the tongue the round holes 14 and 15 are formed, connected by the slot 16. The stud-pin 9 enters the hole 14. The bent end 13 of the spring enters the hole 15, and the plate of the spring extends through the slot 16. By this construction the spring is held firmly in the stud-pin, and the tongue, while free to move resisted by the spring, is held in place, the spring and stud-pin being protected against water and sand by the tongue.

Having thus described my invention, I claim as new and desire to secure by Letters Patent--

The combination, in a switch for street-railways, with the rail 4, abutment 6, and bed 8, of the stud-pin 9, secured in the bed-plate, the spring 12, provided with the bent end 13 and the tongue 5, the holes 14 and 15, and groove 16, extending into the under portion of the tongue only, constructed to protect the spring against injury, as described.

DANIEL J. MCOSKER.

Witnesses:

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