

(No Model.)

T. W. ROUNDS.

AUTOMATIC SWITCH FOR STREET RAILWAYS.

No. 394,939.

Patented Dec. 18, 1888.

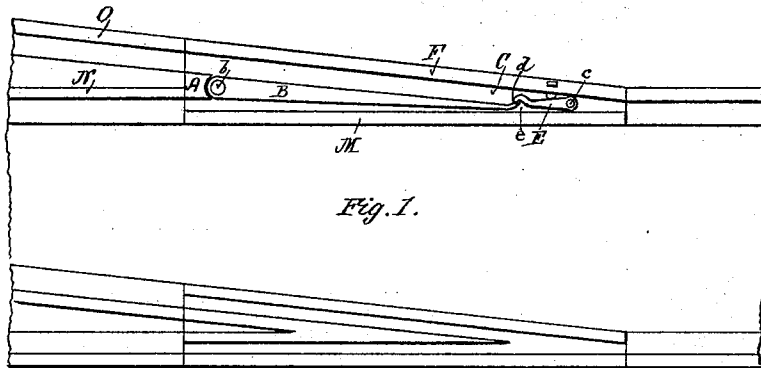


Fig. 1.

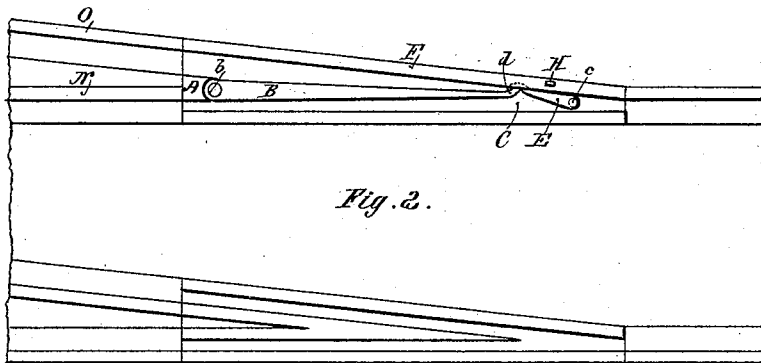


Fig. 2.

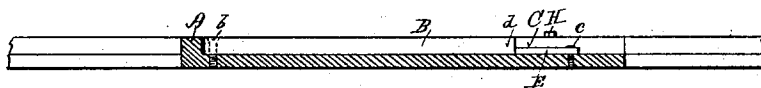


Fig. 3.

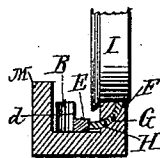


Fig. 4.

Witnesses,

Joseph F. Scholfield.
Edwin Reynolds

Inventor.

Thomas W. Rounds
per J. Scholfield
Attorney

UNITED STATES PATENT OFFICE.

THOMAS W. ROUNDS, OF PROVIDENCE, RHODE ISLAND.

AUTOMATIC SWITCH FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 394,939, dated December 18, 1888.

Application filed September 8, 1888. Serial No. 284,908. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. ROUNDS, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in Automatic Switches for Street-Railways, of which the following is a specification.

My invention relates to that class of switches which are operated automatically by the wheel of the car; and it consists in certain improvements upon the invention described in Letters Patent No. 362,158, whereby the necessity of employing a spring to operate the switch-tongue in one direction is avoided.

Figure 1 represents a plan view of my improved switch with the switch-tongue moved back to open the switch. Fig. 2 represents a plan view showing the switch closed. Fig. 3 represents a longitudinal section taken through the frog and showing the switch tongue and lever. Fig. 4 is a transverse section taken through the frog, lever, and curved plunger, the plunger being depressed by the car-wheel and the switch open.

In the accompanying drawings, A is the ordinary street-railway frog, and B the switch-tongue, which is pivoted to the frog at the point *b*. At the forward end of the switch-tongue *d*, and resting against the same, is placed the lever E, which is pivoted to the frog at the point *c*, the tongue B and lever E being held in the recess C, which is made wide enough to allow full play for the tongue B and lever E. In the outer track, F, of the frog is formed a circularly-curved cavity, G, extending from the top of the rail to the inner surface of the same and opposite the side of the lever E. In this cavity rests a correspondingly-curved piece of metal, H, so that its lower end will abut against the side of the lever E. The upper opening of the cavity G should be far enough distant from the inside of the rail to allow the rim of the car-wheel

I to escape the projecting upper end of the plunger H when the wheel is passing over the main track of the switch.

The end *d* of the tongue B is turned outward, and when the switch-tongue is in the closed position shown in Fig. 2, with the upper end of the plunger H projecting a little above the track F, and it is desired to turn the car to the side track, O, then by pulling the horses a little to the right the right forward wheel of the car will pass over the upper end of the plunger H and force it down, and thus move the lever E and consequently the switch-tongue B to the opposite side of the recess C, thus opening the switch, as shown in Fig. 1. The flange of the wheel will then enter the space at the right-hand side of the tongue, and the car will pass from the main track N onto the side track, O.

If it is desired to move the car along the main track N, the switch at the same time being open, as shown in Fig. 1, the horses are to be pulled slightly to the left, so that the right forward wheel will just avoid the plunger H by passing to the left of the same, and the flange of the wheel will enter the wedge-formed space *e*, between the outwardly-turned end *d* of the tongue B and the right side of the flange M, and thus press the tongue B toward the right, so that the car will pass forward along the main track N.

I claim as my invention—

An automatic switch consisting of the pivoted switch-tongue outwardly inclined at its end for adjusting movement in one direction, with the lever and the curved plunger for adjusting movement in the opposite direction, substantially as described.

THOMAS W. ROUNDS.

Witnesses:

SOCRATES SCHOLFIELD,
JOHN B. HUMPHREYS.