

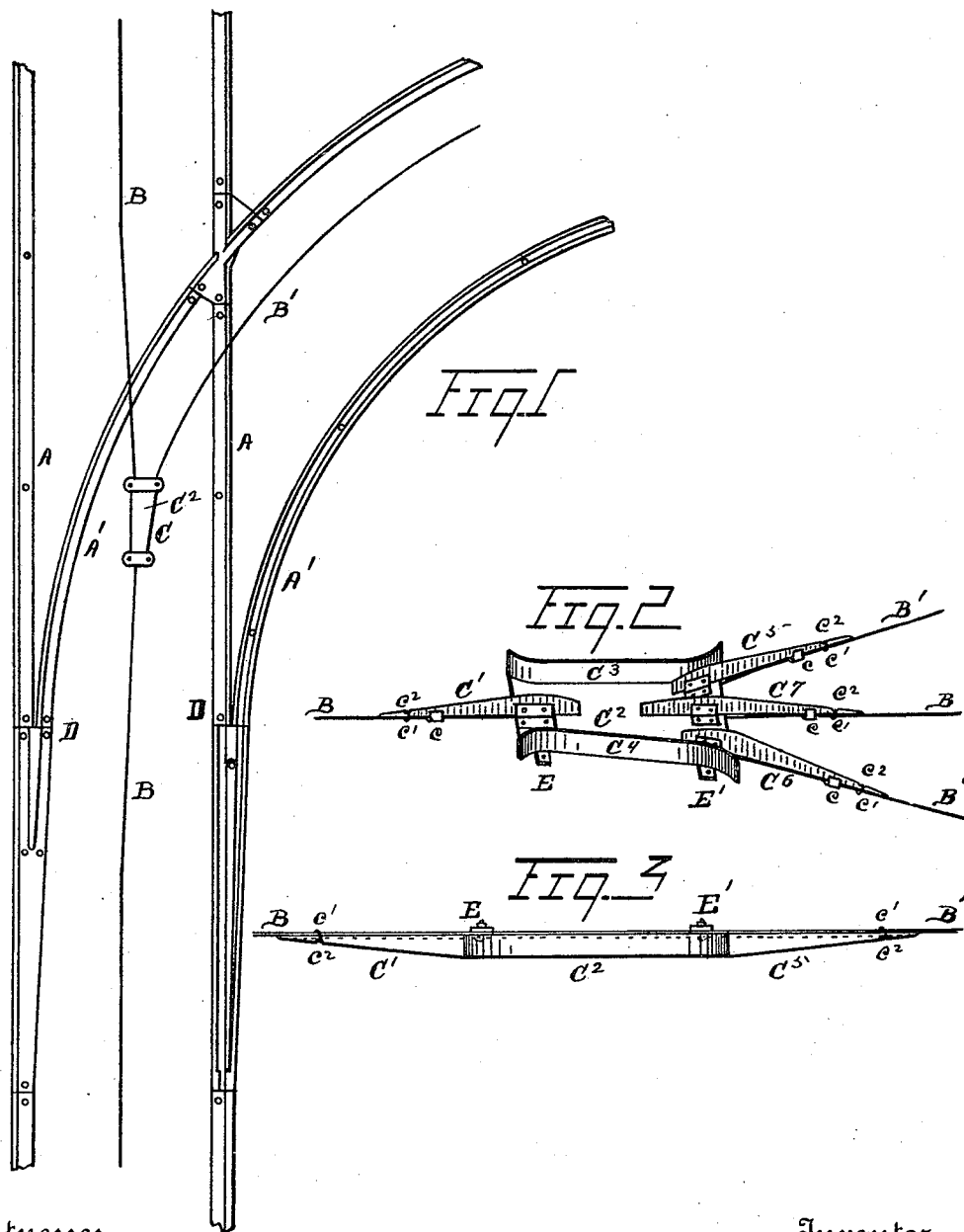
(No Model.)

D. W. EDWARDS.

TURN-OUT OR SWITCH FOR TROLLEY WIRES.

No. 460,571.

Patented Oct. 6, 1891.



Witnesses

John Schuman.
John F. Miller

Inventor

Daniel W. Edwards

By his Attorney

Newell S. Wright.

UNITED STATES PATENT OFFICE.

DANIEL W. EDWARDS, OF SAGINAW, MICHIGAN, ASSIGNOR TO THE MURRAY OVERHEAD TROLLEY SWITCH COMPANY, OF SAME PLACE.

TURN-OUT OR SWITCH FOR TROLLEY-WIRES.

SPECIFICATION forming part of Letters Patent No. 460,571, dated October 6, 1891.

Application filed October 2, 1890. Serial No. 366,843. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. EDWARDS, a citizen of the United States, residing at Saginaw, county of Saginaw, State of Michigan, have invented a certain new and useful Improvement in Turn-Outs or Switches for Trolley-Wheels; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in turn-outs or switches for trolley-wheels of electric street cars or railways; and it consists of the devices and appliances, their combinations and arrangements, as hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a main and branch track with electric lines and turn-out or switch indicated. Fig. 2 is a view in perspective showing the under side of the turn-out or switch, and Fig. 3 is a side elevation thereof.

I carry out my invention as follows:

A A represent the main tracks, and A' A' branch tracks upon which the cars are to be switched or turned off.

B represents the overhead wire of the main track, and B' the overhead wire of the branch line intersecting the wire B at a desired point and at which point my improved switch or turn-out is located. C denotes said turn-out or switch constructed with a central trolley-wheel track at one end, as shown at C', engaged upon a metallic web C², provided with lateral flanges or tracks. C³ and C⁴, diverging at their extremities, as shown, for the free operation of the trolley-wheel thereupon and in connection therewith.

At the end of the web C² opposite the single central track C' two diverging tracks C⁵ and C⁶ are located and extended to lead the trolley-wheel to the right or to the left, as may be required.

C' is a central track.

In locating the switch or turn-out it should be placed on the overhead wire a little ahead of the frog. (Shown at D in the track.) If the turn-out is to the right, the overhead wire of the main track is led a little to the right between the tracks—that is, a little to the right of the center of the main line—and the switch or turn-out placed just far enough ahead of the frog in the track to cause the trolley-wheel to hug to the side of the turn-out in the direction the wheel is to be turned off upon the branch wire. In this way, the trolley-wheel hugging to the side of turn-out, the wheel goes readily in the direction desired. If the turn-out is desired to the left of the main line, the position of the overhead wire on the main line is led a little to the left of the center of the tracks, causing the trolley-wheel to hug the left side of the turn-out or switch. In this manner the trolley-wheel turns off automatically without the need of being watched. In returning to the main line from a switch or turn-out the trolley-wheel returns to the main overhead wire with equal facility. The trolley-wheel will thus go in the desired direction without any trouble. When the trolley-wheel is thus led—for example, to the right side of the switch or turn-out—it will ride on the track C³ at the side of the web and thence onto the track C⁵. When led to the left, the trolley-wheel rides from the main wire upon the track C⁴ at the side of the web and thence onto the track C⁶ and to the branch wire.

The turn-out may be supported in any desired manner, as upon the trolley-wires, the same being held to the wires by clips, (indicated at c.) A tie-wire may also be wound about the end of the track and the wires B B', respectively, as shown at c', the track being notched for this purpose, as shown at c².

The trolley-wires pass above the turn-out, as shown in Fig. 3 more particularly, Fig. 1 being simply a diagram view.

E and E' represent cross-bars engaged upon the ends of the web, to which guy-wires may be attached. The trolley-wire preferably passes under said cross-bars.

What I claim as my invention is—

The combination, with the main and branch overhead wires of a trolley system for electric cars, of a turn-out or switch forming the intersection of said branch wire with the main
5 wire, said main wire led to each end of the switch or turn-out at an acute angle to the main track of the car, and the branch wire led from the overhead switch or turn-out par-

allel with the switch-track of the car, substantially as set forth. 10

In testimony whereof I sign this specification in the presence of two witnesses.

DANIEL W. EDWARDS.

Witnesses:

ROBERT N. WILSON,
JOHN MITCHELL.