

No. 871,529.

PATENTED NOV. 19, 1907.

A. SMITH.
SWITCH.

APPLICATION FILED JULY 29, 1907.

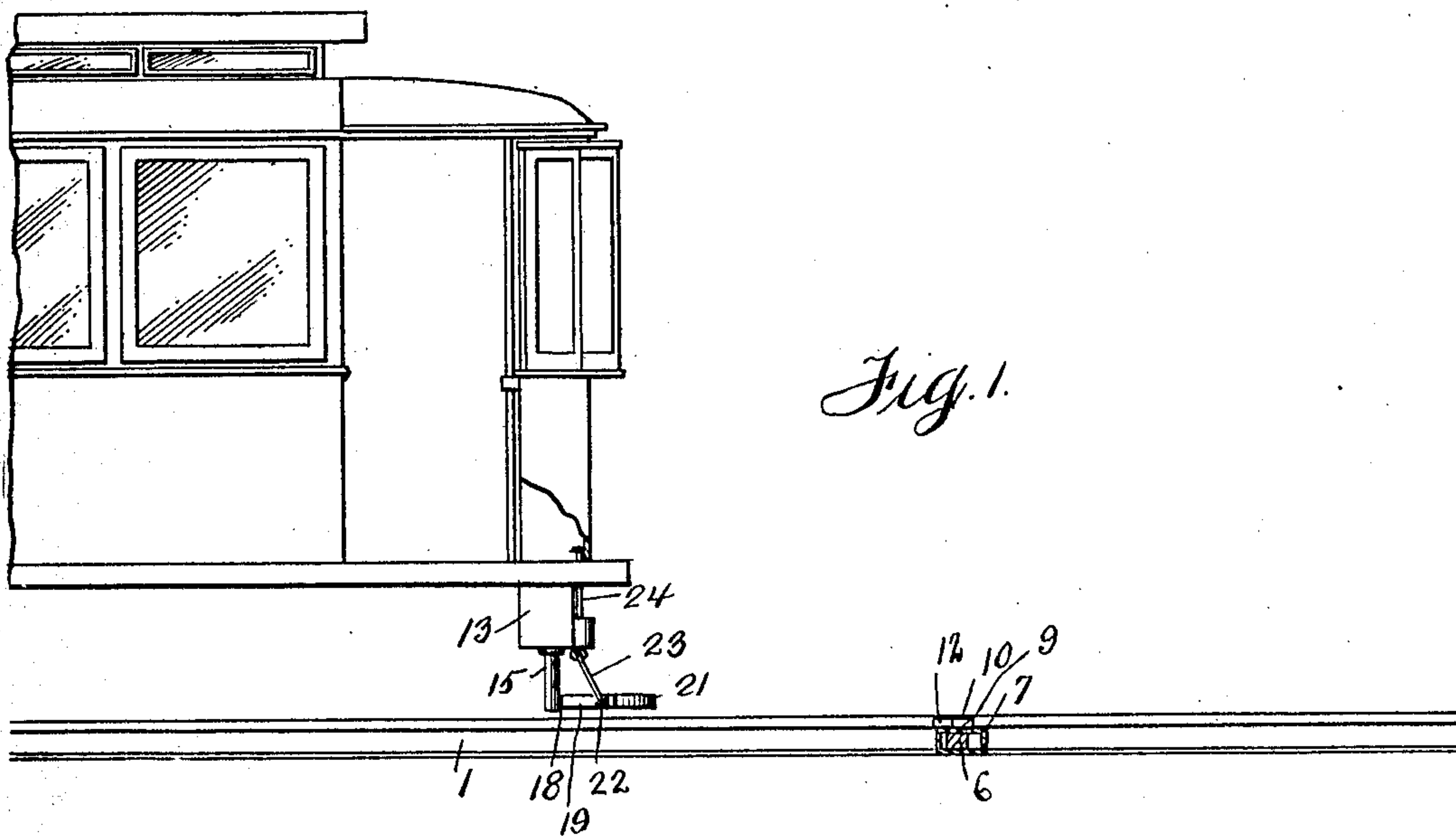


Fig. 1.

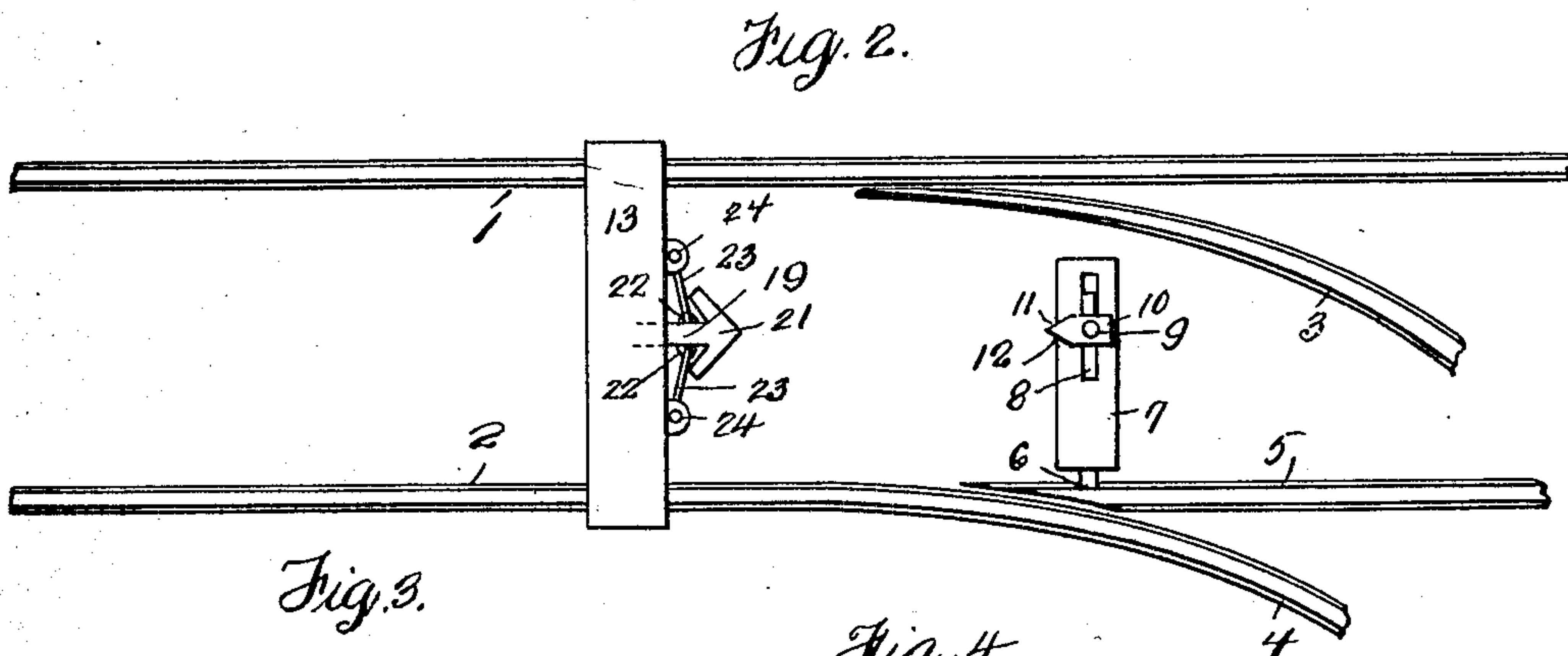


Fig. 2.

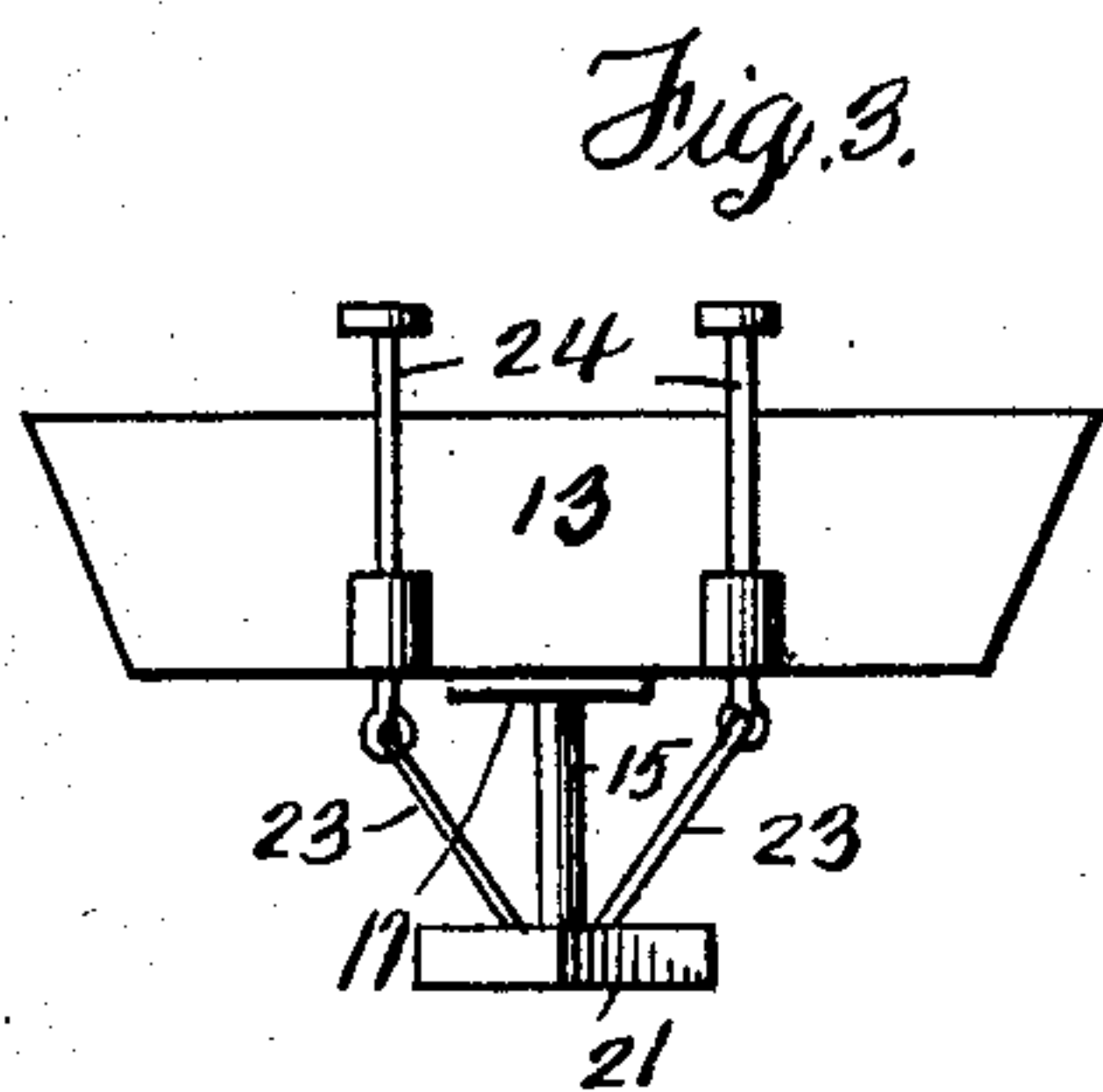


Fig. 3.

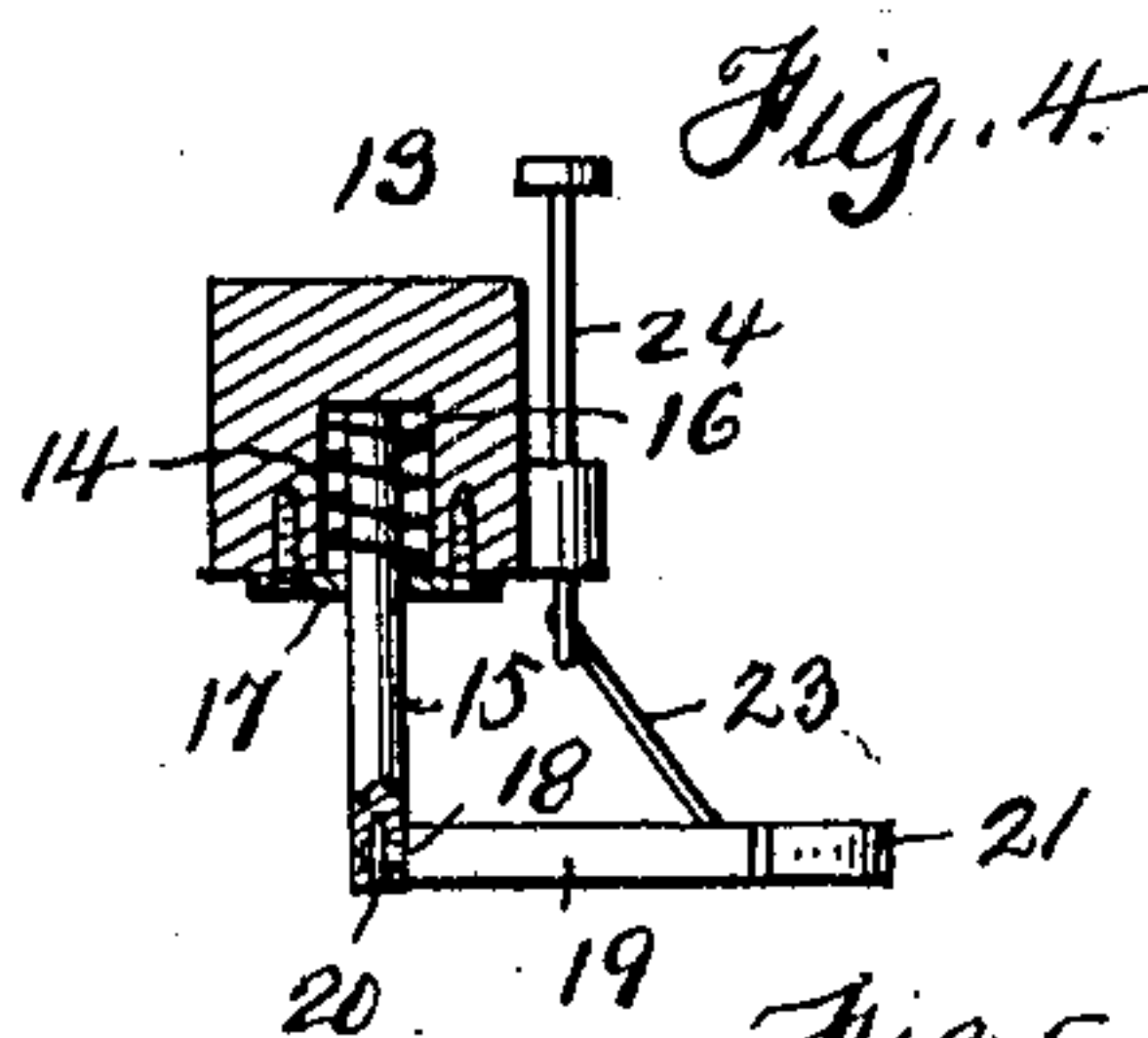


Fig. 4.

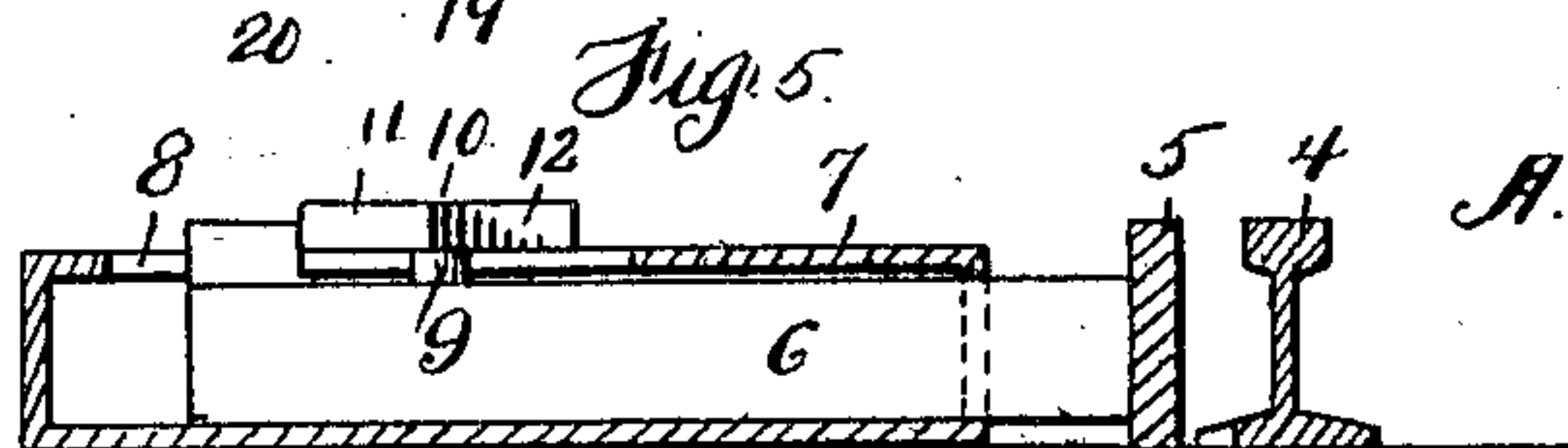


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

ARCHIE SMITH, OF CHESTER, WEST VIRGINIA.

SWITCH.

No. 871,529.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed July 29, 1907. Serial No. 386,032.

To all whom it may concern:

Be it known that I, ARCHIE SMITH, a citizen of the United States of America, residing at Chester, in the county of Hancock and State of West Virginia, have invented certain new and useful Improvements in Switches, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to switches for street railway tracks, and its object is to provide a switch-showing device of novel construction adapted to be operated by tripping mechanism carried below the car platform in position to be controlled by the motor-man.

15 The construction of the improvement will be fully described hereinafter in connection with the accompanying drawing which forms a part of this specification, and its novel features will be defined in the appended claims.

20 In the drawing:—Figure 1 is a side elevation partly in section, of a part of a track and cars equipped with my improvement, Fig. 2 is a top plan view only, a portion of the car platform being shown, Fig. 3 is a front elevation of the tripping mechanism carried by the car, Fig. 4 is a vertical section of the same, and, Fig. 5 is a longitudinal section of the casing located below the rails within which the switch bar works.

30 The numerals 1 and 2 designate the main line rails of tracks, and 3 and 4 the curved rails of a siding. The rail 5 serves as a switch-point to which is secured one end of a rod or bar 6, said bar extending into a casing 7 formed on its upper side with a longitudinal slot 8 through which extends a pin 9 projecting from the bars 6, and carrying at its upper end a horizontally-disposed plate 10, one end of which is oppositely beveled to provide striking surfaces 11 and 12 for the tripping device.

45 The under surface of the car platform 13 is formed with socket 14 within which extends the upper end of a rod 15, a coil spring 16 surrounding said upper end of the rod, and bearing upon a retaining plate 17 through which the rod extends. The lower end of the rod 15 is formed with a horizontal seat to receive a lug 18 projecting from a tripping arm 19, said lug being pivotally secured by a pin 20. The forward end 21 of the arm 19 is an arrow head shape to provide oppositely-disposed contact surfaces. From each side

of the arm 19 projects a loop or eye 22 to which are loosely secured the lower ends of two oppositely inclined links 23, the upper ends of which are loosely connected to the lower ends of two treadles 24 extending through openings in the car platform and supported in suitable bearings.

60 The operation of the improved construction as thus described will be readily understood. The arrow head of the tripping arm, when one of the treadles is depressed, strikes the plate 10 on one or the other of its contact surfaces 11 and 12, according to which of the treadles is depressed, and the switch box 6 is thus moved to throw the switch point. The spring 16 retracts the tripping device as soon as the treadle is relieved of pressure.

75 A characteristic feature of the invention is, that the tripping arm 19 has a limited pivotal movement as well as a vertical movement to adapt it to turn sufficiently to strike either side of the plate 10 when the proper treadle is depressed.

Having fully described my invention what I claim and desire to secure by Letters Patent, is,

1. The combination with a switch throwing device located between the rails of a track, of means suspended from a car for actuating said device, said means comprising an arm provided with a plurality of contacting surfaces, means connected with said arm for lowering it, a spring-controlled rod depending from the bottom of the car, and means for pivoting the rear end of the arm to the lower end of the rod.

2. The combination with a switch throwing device located between the rails of a track, of an actuating means for said device suspended from a car, said means comprising an arm having a plurality of contacting surfaces, a duplex means for lowering said arm, angularly-disposed members connected with said duplex means and with said arm, a spring-controlled rod depending from the bottom of the car, and means for pivoting the rear end of the arm to the lower end of the rod.

3. The combination with a switch throwing device located between the rails of a track, of an actuating means for said device suspended from a car, said means comprising an arm extending in a longitudinal direction

with respect to the track, vertically-extend-
ing duplex actuating members connected
with said arm for lowering it, a spring-con-
trolled rod depending from the car bottom
5 for elevating said arm, and means for pivot-
ing the rear end of the arm to the lower end
of the rod.

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

ARCHIE SMITH.

Witnesses:

H. A. MILLER,

J. M. CHORLTON.