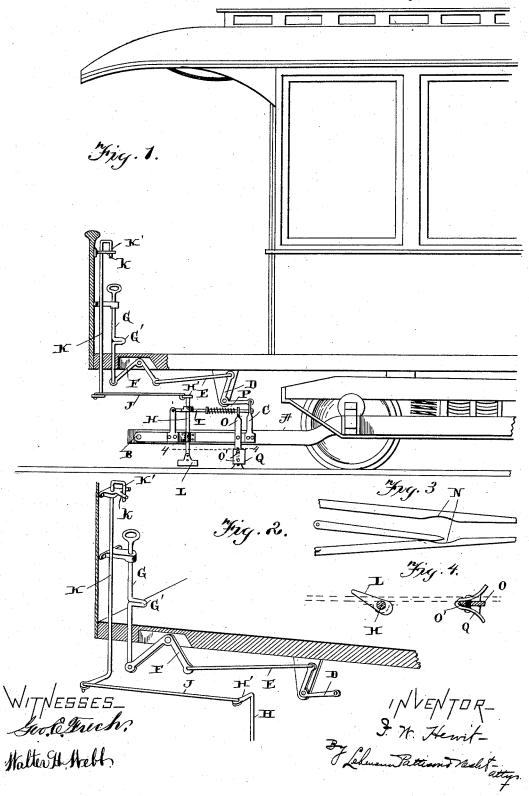
I. W. HEWIT.

.TRACK CLEANER AND SWITCH THROWER.

No. 522,898.

Patented July 10, 1894.



## UNITED STATES PATENT OFFICE.

ISAAC WILLIAM HEWIT, OF AKRON, OHIO.

## TRACK-CLEANER AND SWITCH-THROWER.

SPECIFICATION forming part of Letters Patent No. 522,898, dated July 10, 1894.

Application filed March 3, 1894. Serial No. 502,163. (No model.)

To all whom it may concern:

Be it known that I, ISAAC WILLIAM HEWIT, of Akron, in the county of Summit and State of Ohio, have invented certain new and use-5 ful Improvements in Track-Cleaners and Switch-Throwers; and I do hereby 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 pertains to 10 make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved track cleaner and switch thrower; and the object of 15 the same is to provide an efficient means of throwing tramway switches without leaving the car, and also for keeping the track and its groove clear of obstructions.

The invention consists in the novel fea-

20 tures of construction hereinafter fully described and claimed, and illustrated in the ac-

companying drawings, in which-

Figure 1 is a side elevation of my improved mechanism in position on a car. Fig. 2 is a 25 perspective view of the operating parts detached from the car. Fig. 3 is a plan view of the switch. Fig. 4 is a sectional plan on line -4 of Fig. 1.

A is the truck frame and extending longi-30 tudinally therewith is bar B pivotally secured at its outer end thereto. Extending upward from the inner end of said bar is arm C to which is connected bell crank lever D, and from the latter leads the rod E to bell crank 35 lever F to which latter is secured the operating rod G standing vertically on the car platform and provided near its lower end with the foot spur G'. This bar or rod serves to adjust vertically the switch throwing and 40 track cleaning mechanisms, while a pressure from the operator's foot on spur G' will force the track cleaner to the rail and thus aid materially in removing the accumulations thereon.

The switch thrower consists of the revolu-45 ble arm H journaled to the bar I supported by and extending parallel with bar B, and provided at its upper end with crank H'. Extending from this crank is rod J to the operating crank shaft K on the car platform. The 50 crank of this last mentioned shaft is provided with the depending stop K' which engages a

catch k projecting from the car dash as shown, and by this means the switch throwing device is held rigid after having been adjusted to perform its function.

At the lower end of arm H is shoe L which travels in the groove of the rail when bar B is let down by the mechanism before described, and by means of the operating shaft K the shoe Listurned and the switch point M shifted 60 in the desired direction. The track sides are provided with the opposite depressions N at the point of the switch so as to afford the shoe access to the latter.

Arranged in the rear of the switch throwing 65 mechanism and pivotally secured to bar B is the track cleaning arm O, slotted at its upper end to move on bar I, and coiled about the latter is spring P which bears on the upper end of said arm to hold it in a vertical posi- 70 tion but which yields to a backward movement of the same whenever an obstruction on the track of a fixed nature is encountered, such as uneven rail joints, &c.

Extending transversely through the lower 75 end of arm O are the bolts O' upon which is adjustable the vertically slotted cleaning shoe Q, which is V-shaped as shown and which forms a plow for removing the loosened material from the rail. As the same is slotted 80 vertically it may be adjusted either up or down as desired.

The whole device may be raised above the rail when not desired for use, but when needed it is most conveniently lowered by the mech- 85 anism on the car platform. The track cleaner serves to remove all slush and fine snow from the track which accumulates in cold weather and which causes the car wheels to slip when being stopped.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is-

1. In a device of the class described the combination of pivotal bar B, a means for 95 elevating its free end, bar I supported by and above the first named bar, arm O pivoted between its ends to bar B and recessed at its upper end to move on bar I, and a spring on bar I against which the said arm bears, sub- 100 stantially as shown and described.

2. The combination of a truck frame, piv-

oted bar B and a means for raising and lowering it, bar I supported by and above said bar, a switch throwing crank arm supported by said frame and depending over the track, and a means for turning said arm, substantially as shown and described.

3. The combination of a truck frame, bar B pivotally secured thereto and a means for raising and lowering it, bar I supported by 10 and above said first named bar, a switch throwing arm supported by said frame and having a crank at its upper end and a shoe at its lower end, an operating shaft on the car platform, and a connection between the same and the

switch throwing arm, substantially as shown 15

and described.

4. The combination of a switch throwing mechanism, a crank shaft for operating it, a stop depending from the shaft, and a catch for engaging said stop, for the purpose, sub- 20 stantially as shown and described.

In testimony whereof I affix my signature in

presence of two witnesses.

## ISAAC WILLIAM HEWIT.

Witnesses:

ELBIE K. FOLTZ, PETER FINDLAY.