

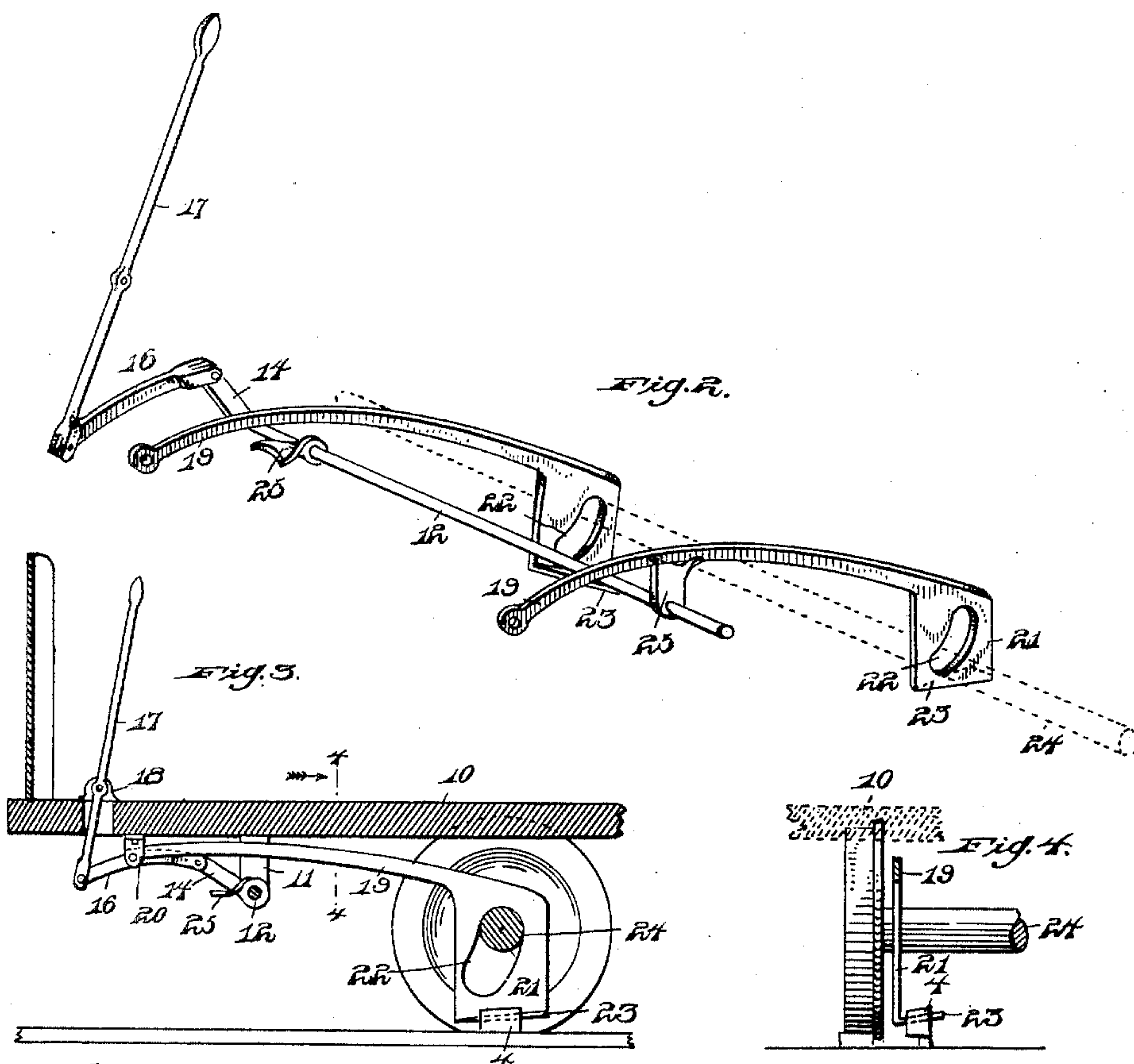
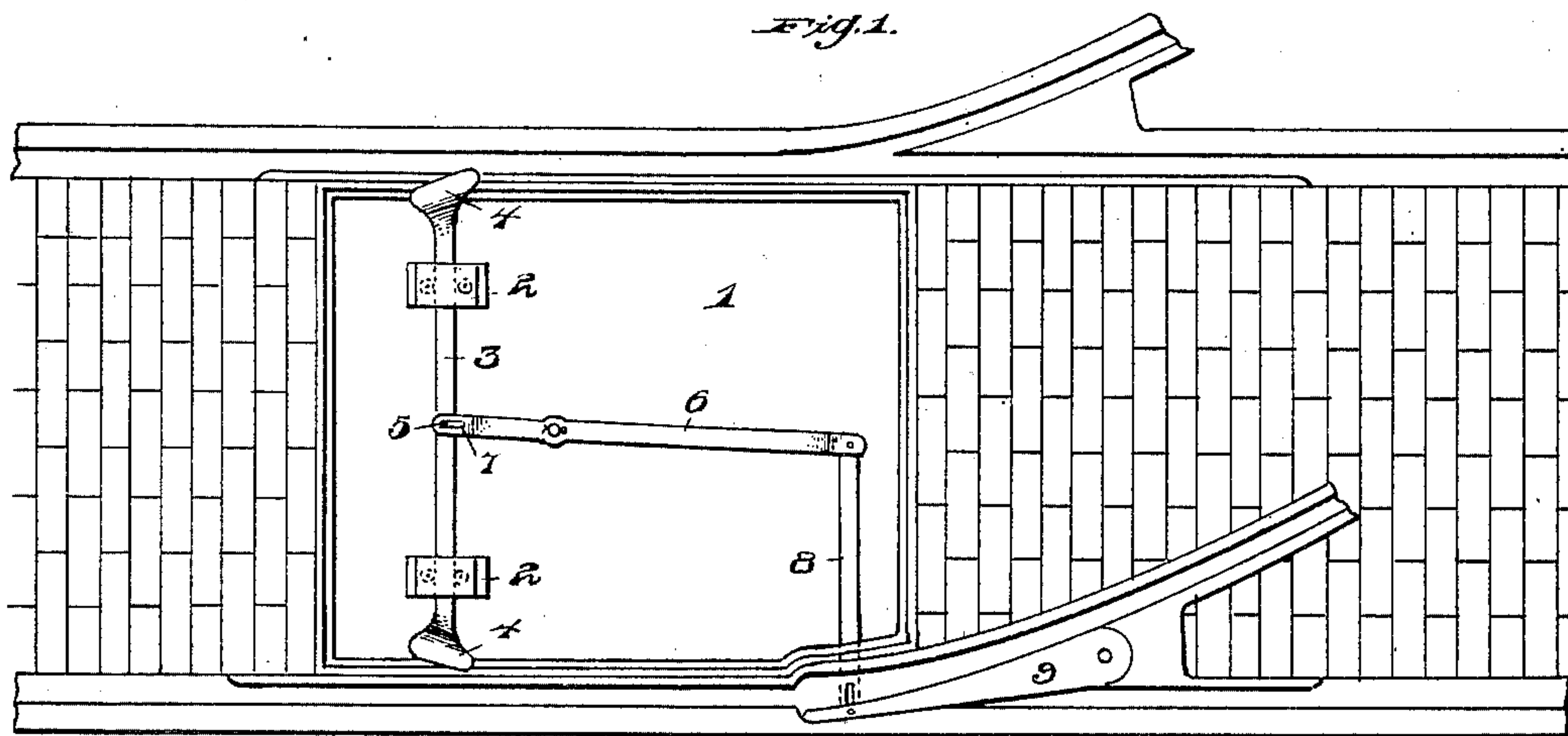
No. 675,683.

Patented June 4, 1901.

A. STINNER.
SWITCH THROWING DEVICE.

(Application filed Mar. 21, 1901.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

AUGUST STINNER, OF DUQUESNE, PENNSYLVANIA.

SWITCH-THROWING DEVICE.

SPECIFICATION forming part of Letters Patent No. 675,683, dated June 4, 1901.

Application filed March 21, 1901. Serial No. 52,214. (No model.)

To all whom it may concern:

Be it known that I, AUGUST STINNER, a citizen of the United States of America, residing at Duquesne, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Switch-Throwing Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in switch-throwing devices, and has for its object to provide novel and effectual means for throwing the switch-tongue from the car.

15 Briefly described, the invention comprises a throwing-bar which is located in the bed of the track and is connected by levers to the switch-tongue. This bar is movable laterally of the track and carries shoes on its ends which are adapted to be engaged by curved 20 levers that are suspended from the car-platform and from the axle of the truck. Means are provided for operating these levers so as to lower the one and elevate the other, according to which end of the throwing-bar it is desired to engage to move the switch-tongue in the desired direction.

Various other features enter into my invention, and these will be more specifically explained hereinafter and then particularly pointed out in the claims, and in describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals 30 of reference will be employed for designating like parts throughout the several views, in which—

Figure 1 is a top plan view of the track mechanism. Fig. 2 is a detail perspective 40 view of the car mechanism detached from the car. Fig. 3 is a longitudinal sectional view of a part of the car, showing the car mechanism in position for throwing the switch-tongue. Fig. 4 is a vertical cross-sectional view taken on the line 4 4 of Fig. 3.

50 To put my invention into practice, I arrange in the bed of the track between the rails a suitable box or casing 1, which may be provided with a removable lid or cover, so that access may be easily had thereto. In the bottom of this box or casing 1 is arranged a pair of keepers 2, and mounted to be moved

transversely of the track in these keepers 2 is a throwing-bar 3, which has shoes or angular ends 4, these ends being first turned up 55 at right angles to the bar and then outwardly at right angles toward the rails. This bar 3 carries centrally of its length a pin 5, and pivotally supported from the bottom of the box 1 is a lever 6, which has a slotted end 7 to engage with the pin 5. The other end of this lever 6 is pivotally connected by a link 8 to the switch-tongue 9. The angular or shoe ends of the bar 3 protrude through the cover or lid of the box or casing 1, the lid in the accompanying illustrations not being shown in order to better show the construction of the switch mechanism. These angular or shoe ends are at an incline or angle with respect to the rails of the track, so that as they are engaged by the mechanism suspended from 70 the car the bar will be moved laterally, as will be further explained.

Suspended from the body or platform of the car 10 is a pair of brackets 11. Journaled in these brackets is a shaft 12. This shaft 12 75 has connected thereto near one end an arm 14, the upper end of which is pivotally connected to one end of a link 16, having its other end pivotally connected to the lower end of a lever 17, that is pivotally mounted in a stand 18, carried by the car-platform, said lever 17 operating through the car-platform. A pair of curved arms 19 are pivotally supported at their forward ends in brackets 20, attached 85 to the underneath face of the car-platform, these arms or levers at their rear ends being enlarged into shoes 21, which have curved slots 22 to receive the axle 24 of the car-truck. The shoes 21 carry side flanges 23, the outer edge of which is at an angle. The arms 19 90 are elevated by means of brackets 25, mounted on the shaft 12, one under each arm, these brackets being so set upon this shaft that when the one bracket is in engagement with the arm above the same the other bracket will be out of engagement and the shoe will be permitted to assume the lowered position.

Assuming the lever 17 to be placed at the right-hand side of the platform 10, it will be 100 observed that when this lever is moved rearwardly the link 16, arm 14, and bracket 25, that is under the right-hand curved arm 19, will be moved, so as to permit the heavy end

of said arm to descend where the inclined flange 23 will be in position to engage with the inclined end of the throwing-bar and as the car passes forward operate the bar, so as to throw the switch. When the lever 17 is moved forward, this arm will be elevated and the support for the other arm will be removed, and this arm will fall, so as to be in position to have its shoe engage the opposite end of the throwing-bar to move the switch-tongue in the opposite direction. The throwing of the switch, it will be observed, is dependent upon whether the lever is moved forward or backward, and this lever will be moved according to the direction in which it is desired to throw the switch-tongue.

It will be observed that in the practice of the invention various changes may be made in the details of construction without departing from the general spirit of the invention.

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

1. In combination with a pivoted switch-tongue, a throwing-bar arranged between the rails of the track and movable laterally thereof, said bar having upturned ends which are at an angle to the bar, and connections be-

tween the bar and the switch-tongue, of mechanism suspended from the car for engagement with the upturned ends of the bar to operate the same, said mechanism comprising two curved arms having enlarged ends provided with curved slots to receive the axle of the car-truck, said enlarged ends having flanges the outer face of which is at an angle to engage the upturned ends of the bar, substantially as described.

2. In combination with a pivoted switch-tongue, a throwing-bar and connections between the bar and the switch-tongue; of mechanism suspended from the car and comprising two curved arms, shoes carried by said arms for engagement with the ends of the throwing-bar, a shaft carrying brackets for engagement with the arms to elevate the same alternately, and a lever pivoted to the car-platform and connected to said shaft for operating the arms, substantially as described.

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

AUGUST STINNER.

Witnesses:

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