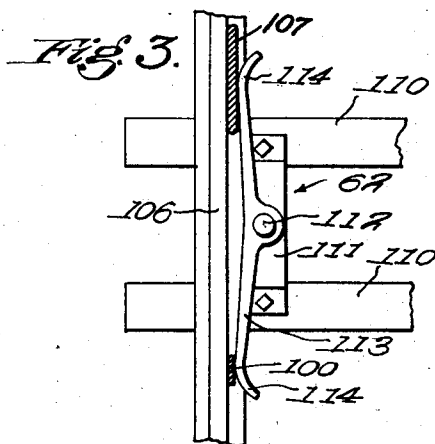
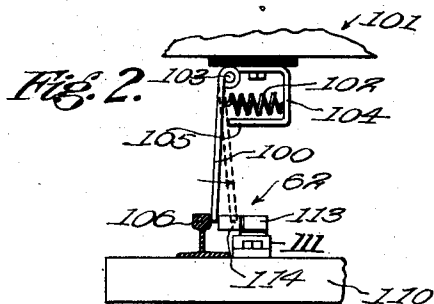
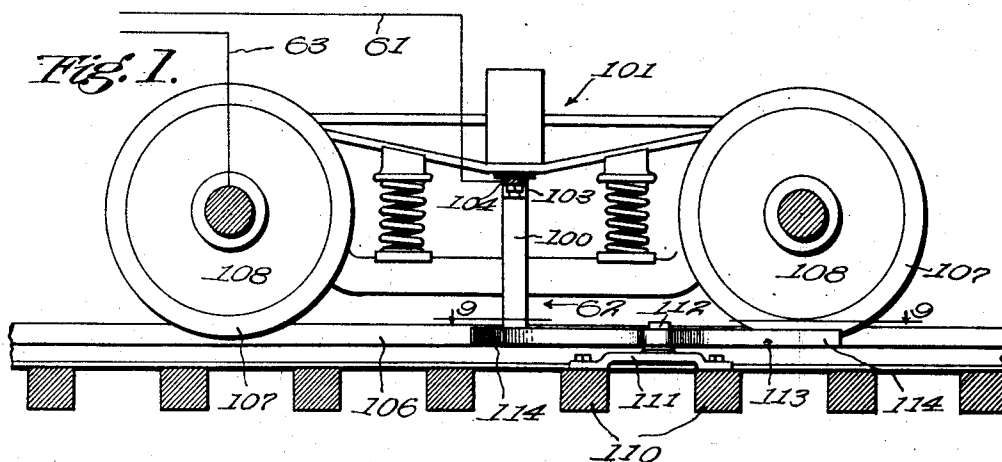


T. P. WILSON.
 INDICATOR ACTUATING MECHANISM.
 APPLICATION FILED MAR. 14, 1910.

997,590.

Patented July 11, 1911.



Witnesses
Edward H. Barkeler
Forrest W. Norford.

Inventor
Thatcher P. Wilson
by James T. Barkeler
His Attorney.

UNITED STATES PATENT OFFICE.

THATCHER P. WILSON, OF LOS ANGELES, CALIFORNIA.

INDICATOR-ACTUATING MECHANISM.

997,590.

Specification of Letters Patent.

Patented July 11, 1911.

Application filed March 14, 1910. Serial No. 549,251.

To all whom it may concern:

Be it known that I, THATCHER P. WILSON, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Indicator-Actuating Mechanisms, of which the following is a specification.

This invention relates to a track switch for electrically actuated station indicators for cars, or the like; and consists particularly in a mechanism which may be protected by placement behind the car wheel, being thus protected from injury and from accidental actuation.

In the indicator as shown, the rail forms one side of the electrical circuit, the movable contact engaging with the rail at appropriate times. However, it will be seen that the rail may represent any stationary conductor; it is mainly for convenience and simplicity that the rail is used.

Figure 1 is a section showing the switch mechanism and the track appurtenances thereof. Fig. 2 is a cross section showing the same in elevation. Fig. 3 is a sectional plan view of the same taken on line 9—9 of Fig. 1.

A contact arm 100 is suspended from truck 101 of the car, this contact arm being normally pulled in the direction indicated by the arrow by a spring 102 or other sufficient means. Arm 100 is pivoted at 103 to a member 104 secured to the truck, this member being shown in such a configuration as to provide a stop 105 for the movement of arm 100 in the direction indicated. The normal position of arm 100 is such that its lower end follows along the inside of rail 106 directly behind flange 107 of wheel 108, but does not normally touch the rail. In order to touch the rail with arm 100 it is necessary that some considerable force be applied to move the arm outwardly, any ordinary obstruction which would force the arm outwardly being removed by the flange of the wheel immediately preceding; or, if any article should happen to be so placed that the wheel flange should not remove it, or should throw it against the arm, the arm is held in place with such force by spring

102 that it will ordinarily shove the article aside.

Mounted on sleepers 110 is a frame 111 carrying a pivot 112. This pivot carries a curved arm 113 of such configuration as is shown in Fig. 4. This arm is of such size and shape and placement relative to the placement of arm 100 on the truck that when flange 107 passes between one of its ends 114 and rail 106, that end is forced away from the rail and the other end is forced toward the rail. Arm 100 is at this instant between the other end of the arm 113 and the rail so that it is forced into contact with the rail.

The electrical connections are made by wires 63 and 61, one wire connecting in some manner to the track rail 106 and the other connecting to arm 100. The connection of wire 63 to the track may be either through a brush or through the medium of the truck and wheels, arm 100 being insulated from the truck. These wires may lead to any form of indicator actuable by an electrical impulse, some source of energy being interposed in the circuit.

Having described my invention, I claim:—

1. In combination with a rail and flanged wheel running thereon, a depending arm having a motion of translation with the wheel, and means operated by the wheel flange to force the arm into contact with the rail.

2. In combination with a rail and a flanged wheel running thereon, a contact arm depending approximately in the plane of the wheel flange, means to normally hold the arm out of engagement with the rail, a stationary pivoted arm situated adjacent the rail and between which and the rail both the flange of the wheel and the contact arm pass, the pivoted arm being so situated that the passage of the wheel flange between it and the rail will force the pivoted arm into engagement with the contact arm and force it in turn into contact with the rail.

3. In combination with a rail, a wheel rolling thereon, and a frame carried by the wheel, a member mounted on the frame behind the wheel, and means actuated by the wheel to force the member into engagement with the rail.

4. In combination with a track rail, a
wheel rolling thereon and a truck frame car-
ried by the wheel, a depending arm mounted
on the frame directly behind the wheel, and
5 means mounted on the track and operable
by the wheel to force the arm into engage-
ment with the rail.

In witness that I claim the foregoing I
have hereunto subscribed my name this 7th
day of March, 1910.

THATCHER P. WILSON.

Witnesses:

CORA E. MONTGOMERY,
JAMES T. BARKELEW.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
