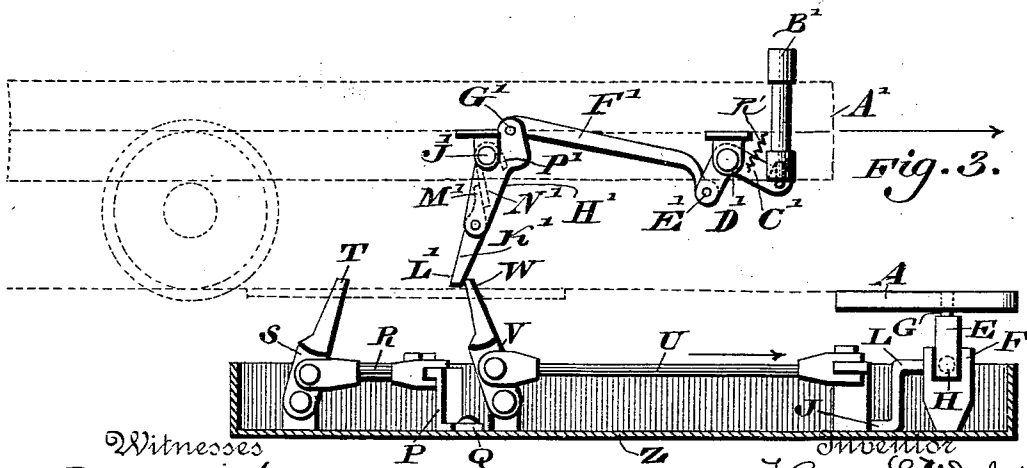
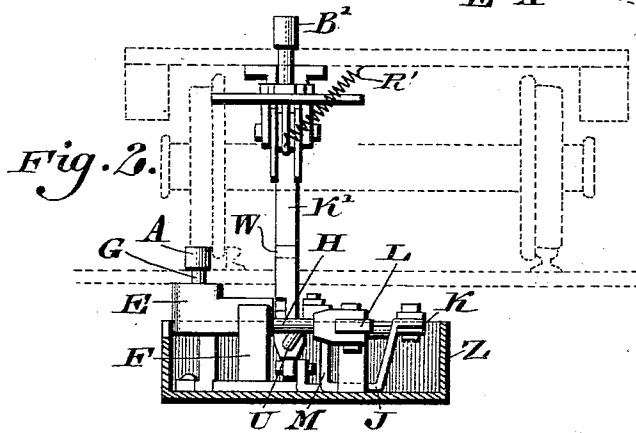
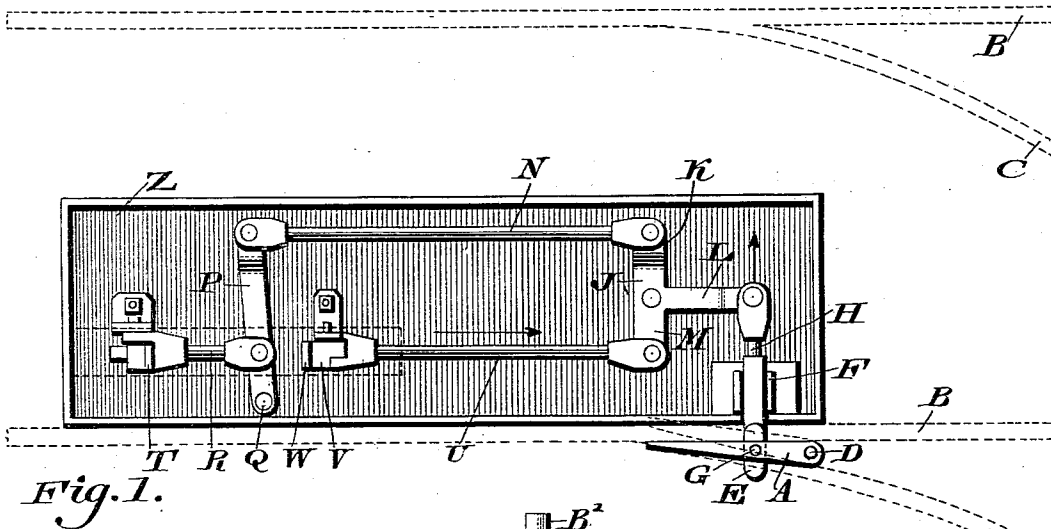


(No Model.)

H. S. WEBSTER.
SWITCH.

No. 555,352.

Patented Feb. 25, 1896.



Witnesses

P. H. Taylor.
E. H. Sanborn,

Inventor
Harry S. Webster
By *Wm. D. Wheeler*
Attorney

UNITED STATES PATENT OFFICE.

HARRY S. WEBSTER, OF PHILADELPHIA, PENNSYLVANIA.

SWITCH.

SPECIFICATION forming part of Letters Patent No. 555,352, dated February 25, 1896.

Application filed May 8, 1895. Serial No. 548,513. (No model.)

To all whom it may concern:

Be it known that I, HARRY S. WEBSTER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Switches, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to switches; and it consists of a novel construction of actuating mechanism therefor which is adapted to be tripped from a car, the movement of suitable devices on the latter tending to open or close the switch without necessitating the stopping of the car.

It further consists of novel details of construction, all as will be hereinafter set forth.

Figure 1 represents a plan view of a switch and its adjuncts embodying my invention. Fig. 2 represents an end elevation of the same, showing also a portion of a car and devices thereon for actuating said switch. Fig. 3 represents a side elevation of Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a switch, which is pivoted at a suitable point D between the junction of the main tracks B and the siding C.

E designates a block, which slides in suitable ways F, which are supported in any suitable manner, said block having a pin G common to it and to said switch A.

H designates a rod having one end attached to said block E, while the other end is attached to the arm L of the plate J, the latter being pivotally mounted and having also attached thereto other arms, K and M, which extend at an angle thereto.

N designates a rod leading from said arm K to the end of the lever P, the latter being pivotally mounted at the point Q and having attached thereto the rod R, which has its other end pivotally connected to the bar S, whose extremity T extends above the tracks in the present instance, as will be understood from Fig. 3.

U designates a rod, which has one end connected to the arm M, while its other end is connected to the bar V, whose other end, W, also extends above the tracks, said bars S and

V being pivotally mounted on any suitable supports.

A' designates the body of a car, the same having passing therethrough the upright rod or stem B', which has a cavity in its lower end which engages a pin on the arm C' of the elbow-lever D', which is suitably supported, the other arm, E', of said elbow-lever having pivoted thereto an end of the link F', the other end of said link being pivotally attached at G' to the lever H', said lever being pivoted at the point J' to a suitable support and having pivotally attached to its other end an arm K', whose end L' is adapted to contact with either the ends T or W of the bars S or V, as will be understood from Fig. 3, said arm K' having its end M' in contact with the spring N', which is coiled around the pin J' and has its other end, P', engaging a suitable point of said lever H'.

R' designates a suitable spring, which has one end attached to the under side of the car-body A', while its other end is connected with one of the arms of the bell-crank D', as will be understood from Fig. 2.

The operation is as follows: Assuming the parts to be in the position shown in Figs. 1 and 3, if the car is moving in the direction indicated by the arrow in Fig. 3, the arm or tripping device K' will contact with the head T, and will ride over the same, and if it is desired to run the car upon the siding C, the end L' is caused to contact with the end W of the bar V, as seen in Fig. 3, thereby moving the rods U and H in the direction of their respective arrows, thus imparting motion to the switch A, so that the same will assume the position seen dotted in Fig. 1, which will cause the car to be positively switched upon the siding C. The next car coming along in the same direction, if it desires to proceed straight along the main track B will allow the end L' of the tripping device to contact with the end T of the bar S, which it will be understood is moved to the left of the position seen in Fig. 3, when the switch is in the position seen dotted in Fig. 1, thereby moving the switch A into the position seen in full lines in Fig. 1, after which the car can proceed upon said main track B, as is evident, and if said second car should desire to run on the siding C

it will only be necessary to move the switch A into the position seen in dotted lines, Fig. 1, as has already been described with reference to the first car—viz., by causing the end W of the bar V to be moved to the right from the position seen in Fig. 3.

In the preferred embodiment of my invention the operative parts of the same are supported within a suitable box Z, which is embedded between the tracks, a little to one side of the center of the same, it being especially noted that the ends T and W of the bars S and V, respectively, are located at one side of the center of the track, making my invention readily applicable to cable or other underground systems, which have a slot in the center of the track, as is evident.

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

1. The pivoted switch A, the block E connected with said switch and guided in ways, the pivoted plate J connected with said block, the rod N pivotally connected with an arm on said plate, the lever P pivoted at one end and connected at its other end to said rod, the bar S having its upper end adapted to extend above a track, and the rod R pivotally connected with said lever, P, and bar S, said parts being combined substantially as described.

2. A pivoted switch, a block pivotally connected with said switch, a plate having an arm pivotally connected to a rod on said block, a rod pivotally connected with a sec-

ond arm on said plate and connected with a lever pivoted at one of its ends, the pivoted bar S connected to said lever, the pivoted bar V and the rod U connecting said bar V with an arm on said plate opposite said second arm, said bars S and V being adapted to be in the path of an operating device on a car, said parts being combined substantially as described.

3. The plate J having the arms K, L, and M, a connection from said arm L to the head E, ways in which said head E is guided, a switch A pivoted to said head and to a suitable fixed point, the rod N leading from said arm K to the free end of the lever P, the latter being pivoted to a fixed point, a connection R leading from said lever to a bar S suitably supported, and a connection U leading from said arm M to the bar V, the latter having one end W extended above the track, substantially as described.

4. The pivoted elbow-lever D', the rod B', connected with one limb of said lever, the link F' connected with the other limb thereof, the pivoted lever H' pivotally connected with one end of said link, the arm K' pivoted to said lever H' and the spring N' secured to the pivotal pin J' of said lever H' and having an end bearing against one end of said arm K', said parts being combined substantially as described.

HARRY S. WEBSTER.

Witnesses:

JOHN A. WIEDERSHEIM,
E. H. FAIRBANKS.