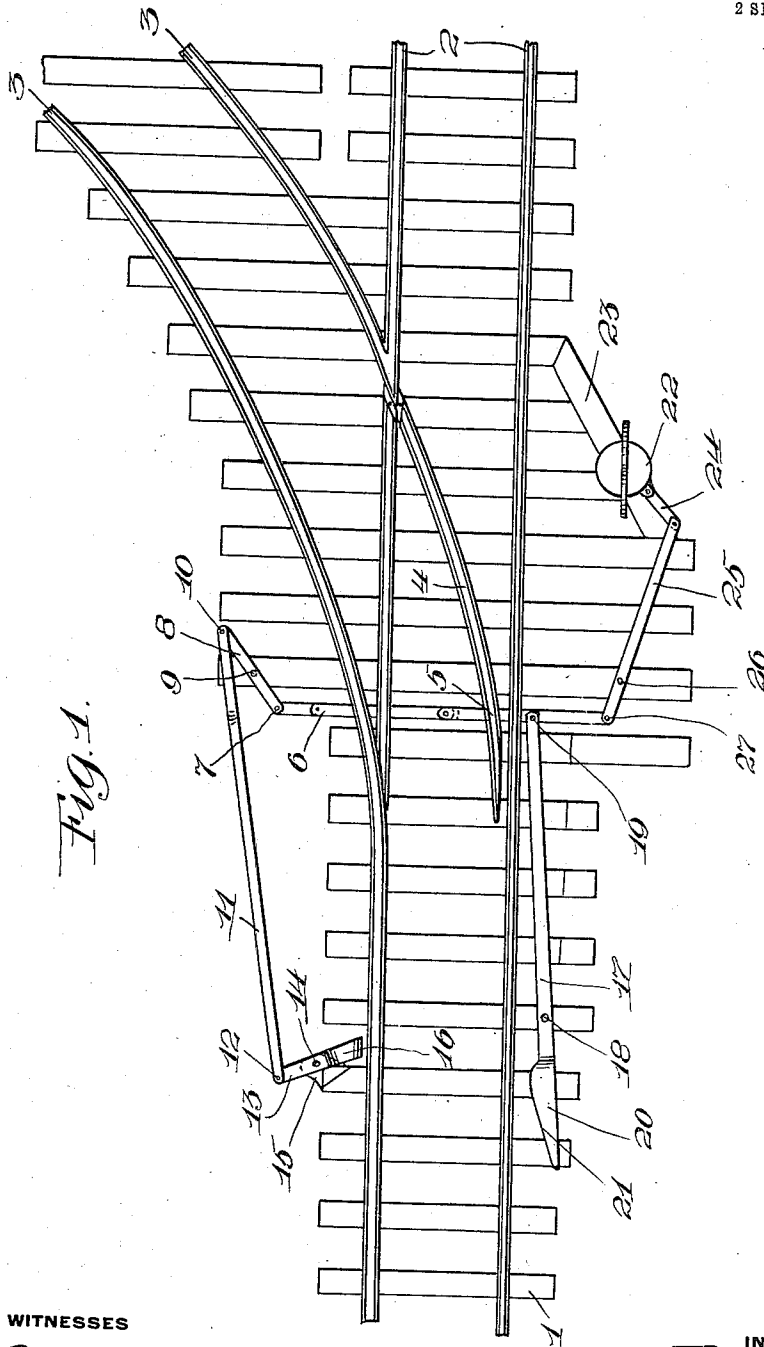


P. BARE.
 SWITCH FOR RAILWAYS.
 APPLICATION FILED SEPT. 10, 1910.

1,009,012.

Patented Nov. 14, 1911.

2 SHEETS-SHEET 1.



WITNESSES

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Fig. 2.

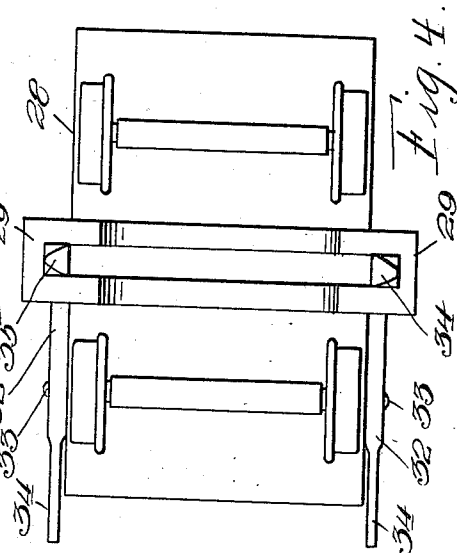
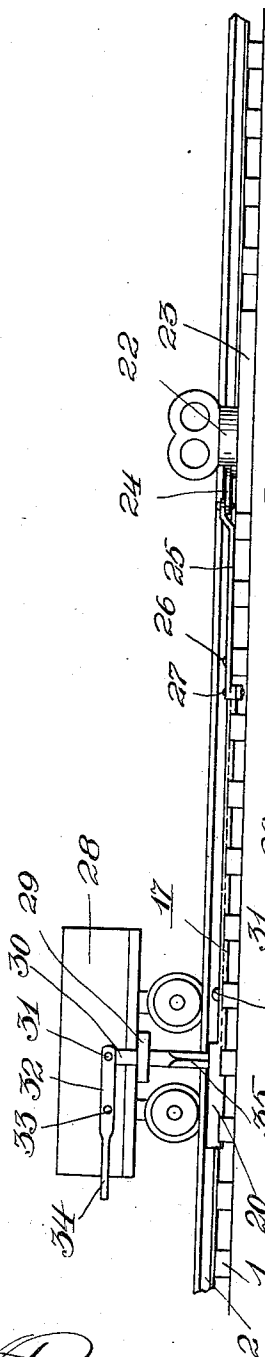


Fig. 4.

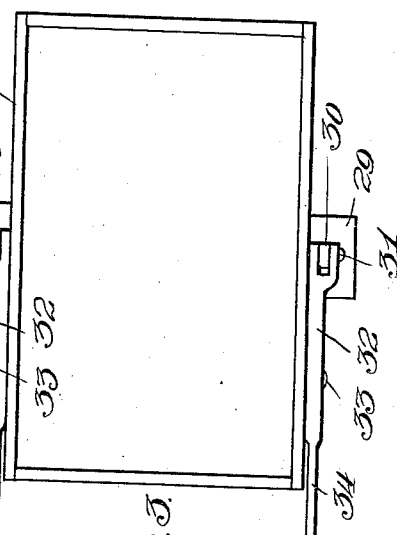


Fig. 3.

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UNITED STATES PATENT OFFICE.

PAUL BARE, OF PRICEDALE, PENNSYLVANIA.

SWITCH FOR RAILWAYS.

1,009,012.

Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed September 10, 1910. Serial No. 581,404.

To all whom it may concern:

Be it known that I, PAUL BARE, a citizen of the United States of America, residing at Pricedale, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Switches for Railways, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to switches for railways, and more particularly to industrial railways, such for instance as used in connection with mines and quarries.

The primary object of the invention is to provide a car with means as will be hereinafter set forth for automatically operating the switch without necessitating the brakemen or attendant of the car leaving the same while the car is in motion.

Another object of the invention is to provide a switch throwing mechanism that is positive in its action, free from injury by ordinary use and efficient for the purposes for which it is intended.

These and such other objects as may hereinafter appear are attained by the novel construction, combination and arrangement of parts to be hereinafter more specifically described and then claimed.

Reference will now be had to the drawings, wherein:—

Figure 1 is a plan of a switch in accordance with this invention, Fig. 2 is a side elevation of the same, showing a car and signal in connection with the switch, Fig. 3 is an enlarged top plan of the car, and Fig. 4 is a bottom plan of the same.

Like numerals of reference designate corresponding parts throughout the several views.

1 denotes ties supporting a main track and a side track, the main track comprising rails 2 and the side track rails 3. At the intersection of the rails 3 with the rails 2 there is a pivoted movable switch tongue 4 and connected to the under side of this switch tongue, adjacent to the point thereof, as at 5 is a sectional bar, comprising pivotally connected sections 6, said bar extending longitudinally between the ties 1 that support the rails adjacent to said switch tongue. One end of the bar 6 is pivotally connected, as at 7 to a fulcrum arm 8, said arm being fulcrumed upon an elongated tie, as at 9, and pivotally connected to the op-

posite end of the fulcrumed arm 8, as at 10 is a connecting rod 11. This rod may be of any desired length and extends rearwardly from the switch, said rod being pivotally connected, as at 12 to an operating lever 13 fulcrumed, as at 14 upon an end extension 15 of one of the ties 1. The operating lever 13 has the end thereof enlarged, as at 16 to provide a contact surface for a shoe, as will presently appear. 17 denotes another operating lever fulcrumed, as at 18 upon one of the ties 1, said lever having the forward end thereof pivotally connected, as at 19 to the sectional bar beneath the tongue 4, and the opposite end thereof enlarged, as at 20 and provided with a beveled contact surface 21 for another shoe employed for operating the switch.

22 denotes a rotatable signal, as a lantern or semaphore arm, said signal being carried by a support 23 arranged upon the ties 1. The rotatable signal 22 is connected by a pivoted link 24 to an arm 25 fulcrumed upon one of the ties 1, as at 26, said arm being pivotally connected, as at 27 to the sectional bar 6 beneath the switch tongue 4.

28 denotes, by the way of an example, a pit car and this pit car is adapted to travel upon the main track and the side track, the passage of the car from the main track to the side track and vice versa being controlled through the medium of the switch tongue 4. The pit car 28 has the bottom thereof provided with a transverse frame 29, said frame having the ends thereof protruding beyond the sides of the car 28 and serving functionally as guides for bars 30. These bars have the upper ends thereof pivotally connected, as at 31 to operating levers 32 pivotally connected to the sides of the car 28, as at 33, said operating levers having the ends thereof reduced to provide handles 34. The lower ends of the bars 30 are shaped to provide beveled shoes 35, and these shoes are thereof reduced to provide handles 34. The lower ends of the bars 30 are shaped to provide beveled shoes 35, and these shoes are adapted to engage the operating levers 13 and 17 and throw the switch tongue 4 in a desired direction, the movement of the switch tongue depending upon which of the operating levers 32 is actuated by the brakeman or attendant of the car. For instance, when the shoe 35 upon the left hand side of the car contacts with the enlarged end 16 of the operating lever 13, the connecting

rod 11, arm 8 and the sectional bar beneath the tongue 4 are shifted to move the tongue to a closed position, and when the shoe 35 upon the opposite side of the car contacts with the enlarged beveled end 20 of the operating lever 17, the tongue is thrown to an open position. The signal 22 is employed to denote the position of the tongue 4 at a distance from the switch.

10 It is thought that the utility and operation of the switch will be apparent without further description, and it is to be understood that the structural elements are susceptible to such changes as fall within the scope of the appended claim.

What I claim is:—

20 The combination with a car and movable shoes carried by the sides thereof, of a main track, a side track intersecting said main track, a switch tongue controlling the pas-

sage upon said tracks, a sectional bar connected to the under side of said tongue, a fulcrumed lever pivotally connected to said bar and having the forward end thereof enlarged to provide a contact surface for one of the shoes of said car, a fulcrumed arm pivotally connected to said sectional bar at the opposite side of said bar, a connecting rod pivotally connected to said arm, and an operating lever pivotally connected to said rod and having the end thereof enlarged to provide a contact surface adapted to be engaged by the other shoe of said car, substantially as described.

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

PAUL BARE.

Witnesses:

MAX H. SROLOVITZ,
C. T. HOOD.

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