(No Model.)

G. M. HILBERT, Jr.

RAILWAY SWITCH.

No. 581,026. Patented Apr. 20, 1897.

Fig. 1

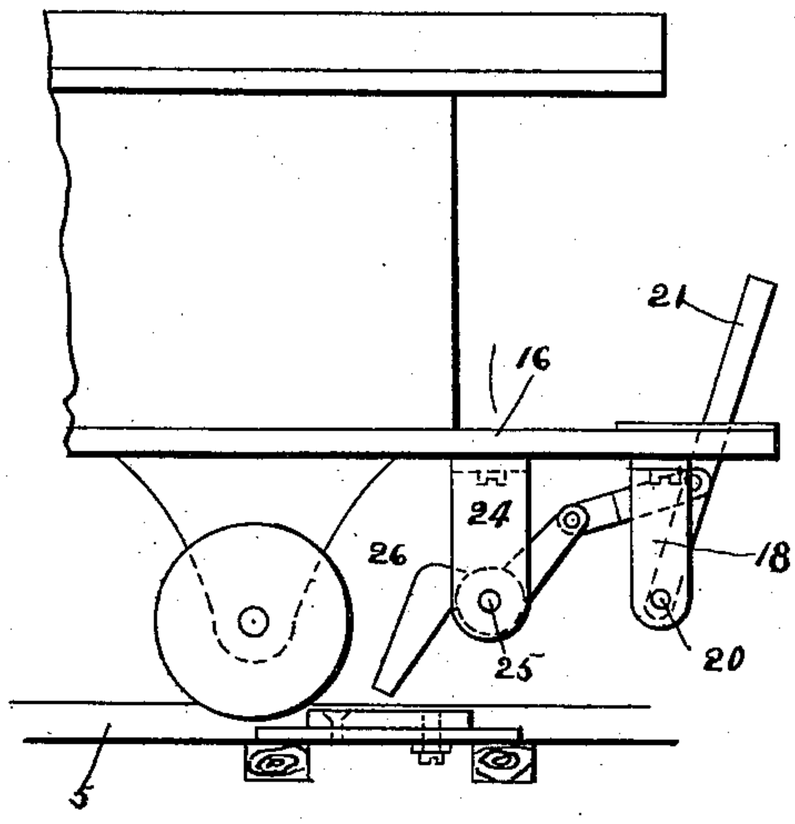


Fig. 2

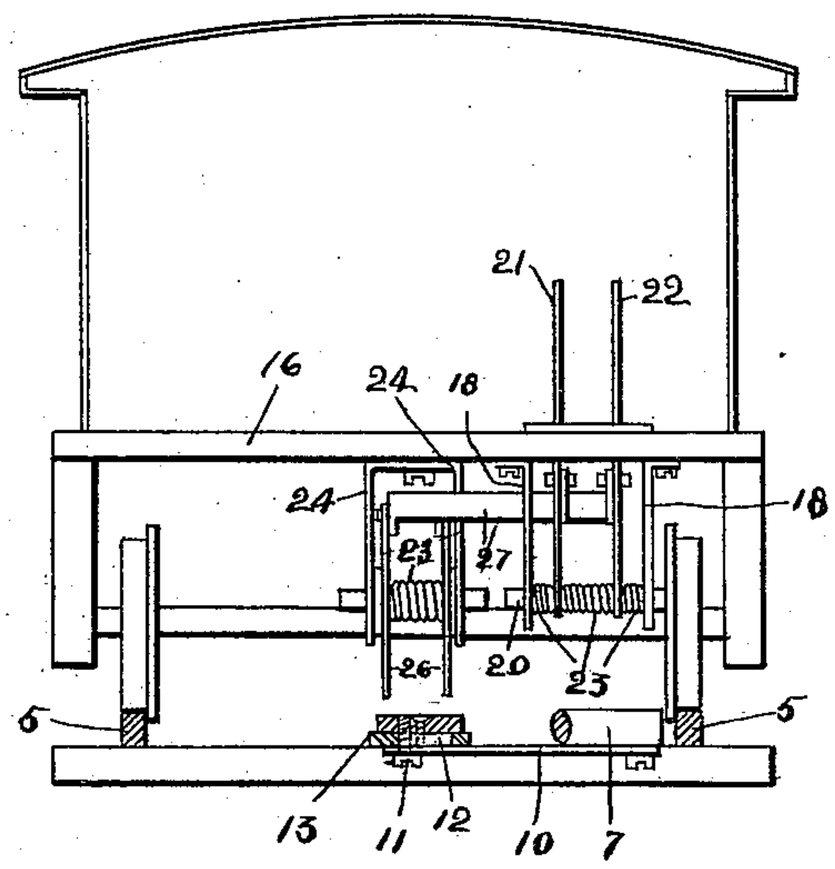


Fig. 3

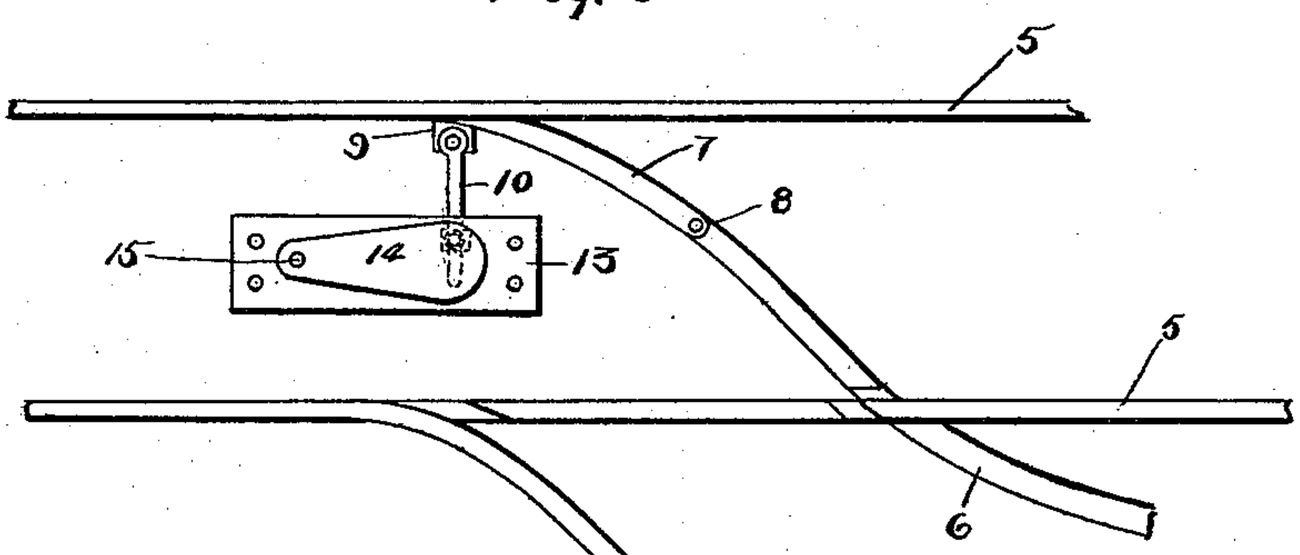
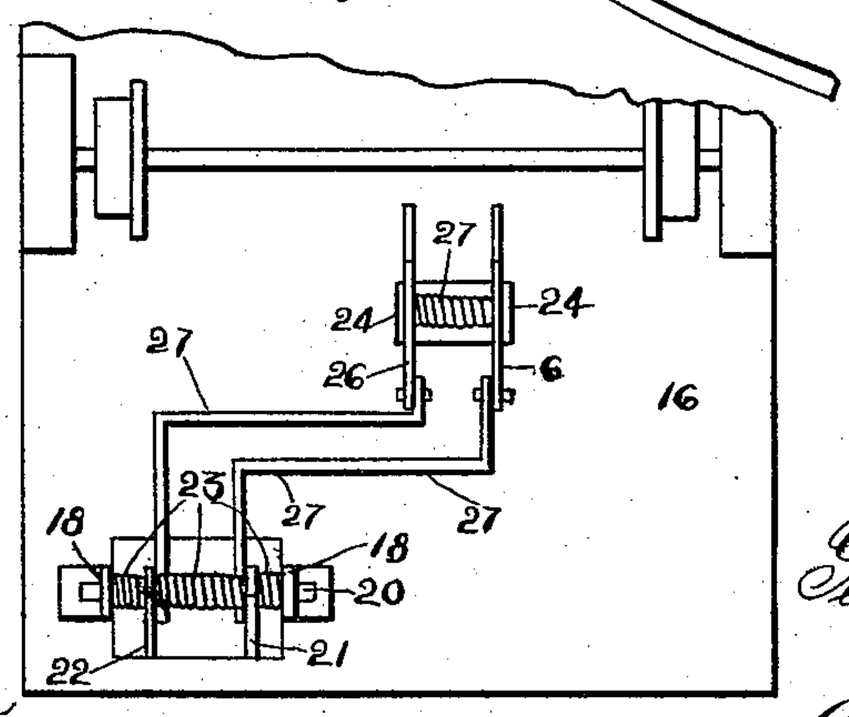


Fig. 4



WITNESSES

J. A. Brophy

C. Gerst.

INVENTOR

George M. Hilbert Jr.

BY

Edgar Tate & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE MORRIS HILBERT, JR., OF MOUNTAIN TOP, PENNSYLVANIA.

RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 581,026, dated April 20, 1897.

Application filed January 23, 1897. Serial No. 620,393. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MORRIS HILBERT, Jr., a citizen of the United States, residing at Mountain Top, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Switches, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to railway-switches; and the object thereof is to provide an improved switch apparatus which is particularly adapted for use in connection with tramway-cars, a further object being to provide a switch-operating mechanism which is adapted to operate devices connected with the platform of a car.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of the end of a car provided with my improvement and showing a part of the switch; Fig. 2, an end view thereof; Fig. 3, a plan view of the switch and the operating devices connected therewith, and Fig. 4 a bottom plan view of the end of the car shown in Figs. 1 and 2.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings, reference being made to Fig. 3, I have shown at 5 the main rails of a railway-track and at 6 the rails of a side track or switch, and the said switch is provided at one side of the track with the usual switch bar or tongue 7, which is pivoted at 8, the rail on the opposite side of the track being provided with a switch-rail integral therewith and a groove in the upper part thereof for the passage of the flange of the wheel, and in the practice of my invention I form on the free end of said tongue an inwardly-directed shoulder or projection 9, with which is pivotally connected a rod 10, which extends inwardly to near the center of the main track and which is provided at its inner end with an upwardly-directed pin 11, which passes through a transverse slot 12, formed in a plate 13, which is secured in position centrally and longitudinally of the main track, and the pin 11 is secured to the wider end of a triangular plate 14; the narrower end of which is pivoted to the plate 13 at 15.

The wider end of the plate 14 is in the direction of the switch, and by moving the same laterally the switch may be opened and closed, as will be readily understood, and in practice I connect with the platform of a car devices by which this plate 14 may be operated, as hereinafter described, and these devices are shown in Figs. 1, 2, and 3, in which the reference-numeral 16 designates the platform of a car, to the bottom of which and preferably near one side and adjacent to the forward end thereof are secured hangers 18, the lower ends of which are connected by a shaft 20, on which are mounted two levers 21 and 22, which project upwardly through the platform of a car.

The lower ends of the levers 21 and 22 are held in proper relative position on the shaft 20 by spiral springs 23, which are mounted thereon, and secured centrally of the bottom of the platform of the car and near the rear end thereof are two other hangers 24, the lower ends of which are connected by a shaft 25, on which are mounted two crank-levers 26, which are separated by a spiral spring 28, and one end of each of the crank-levers 26 projects backwardly and downwardly and the other end forwardly and upwardly, and said crank-levers 26 are connected with the levers 21 and 22 by angle-arms 27.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

The levers 21 and 22 may be operated to open and close the switch, as will be readily understood, the operation of one of said levers serving to force the free end of the plate 14 in one direction, and the operation of the other serving to move it in the opposite direction, and the opening and closing of the switch will depend on the direction in which said plate 14 is moved. This result is accomplished by depressing the backwardly and downwardly directed ends of the levers 26, so as to cause them to strike the plate 14, and the shape of the plate 14 produces the hereinbefore-mentioned result as the car passes thereover.

This device is simple in construction and operation and is well adapted to accomplish the result for which it is intended; and,

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

1. In a railway-switch the combination with the main rails of a railway-track of a pivoted plate mounted longitudinally of the track between said rails, and being wider at one end than the other, said plate being pivotally connected with the switch and means connected with the platform of a car for operating said plate, comprising two levers 21 and 22, which are held on a shaft 20, in a predetermined manner by spiral springs 23, which are mounted thereon, the said shaft being held in position by two hangers 18, and rearwardly of the hangers 18 are two hangers carrying the shaft 25 in which two crank-levers 26 separated by the spiral spring 27 are mounted, the lower ends of said crank-levers being adapted to engage the said pivoted plate, and the upper end being pivotally connected with the levers 21 and 22 by links, all substantially as shown and described.

2. In a railway-switch the combination with the main rails of a railway-track, of a pivoted plate mounted longitudinally of the track between said rails and being wider at one end than the other, said plate being connected at its wider end with a rod which is pivotally connected with a switch tongue or bar, the rail on the opposite side of the track being notched or grooved, for the passage of the flange of the car-wheel and means connected with the platform of a car for operating said plate, comprising two levers 21 and 22, which are held on a shaft 20, in a predetermined manner by spiral springs 23, which are mounted thereon, the said shaft being held in position by two hangers 18, and rearwardly of the hangers 18 are two hangers carrying the shaft 25 in which two crank-levers 26 separated by the spiral spring 27 are mounted, the lower ends of said crank-levers being adapted to engage the said pivoted plate, and the upper end being pivotally connected with the levers 21 and 22 by links, all substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 15th day of January, 1897.

GEORGE MORRIS HILBERT, JR.

Witnesses:

MORRIS BUSH,

NEWTON FISHER.