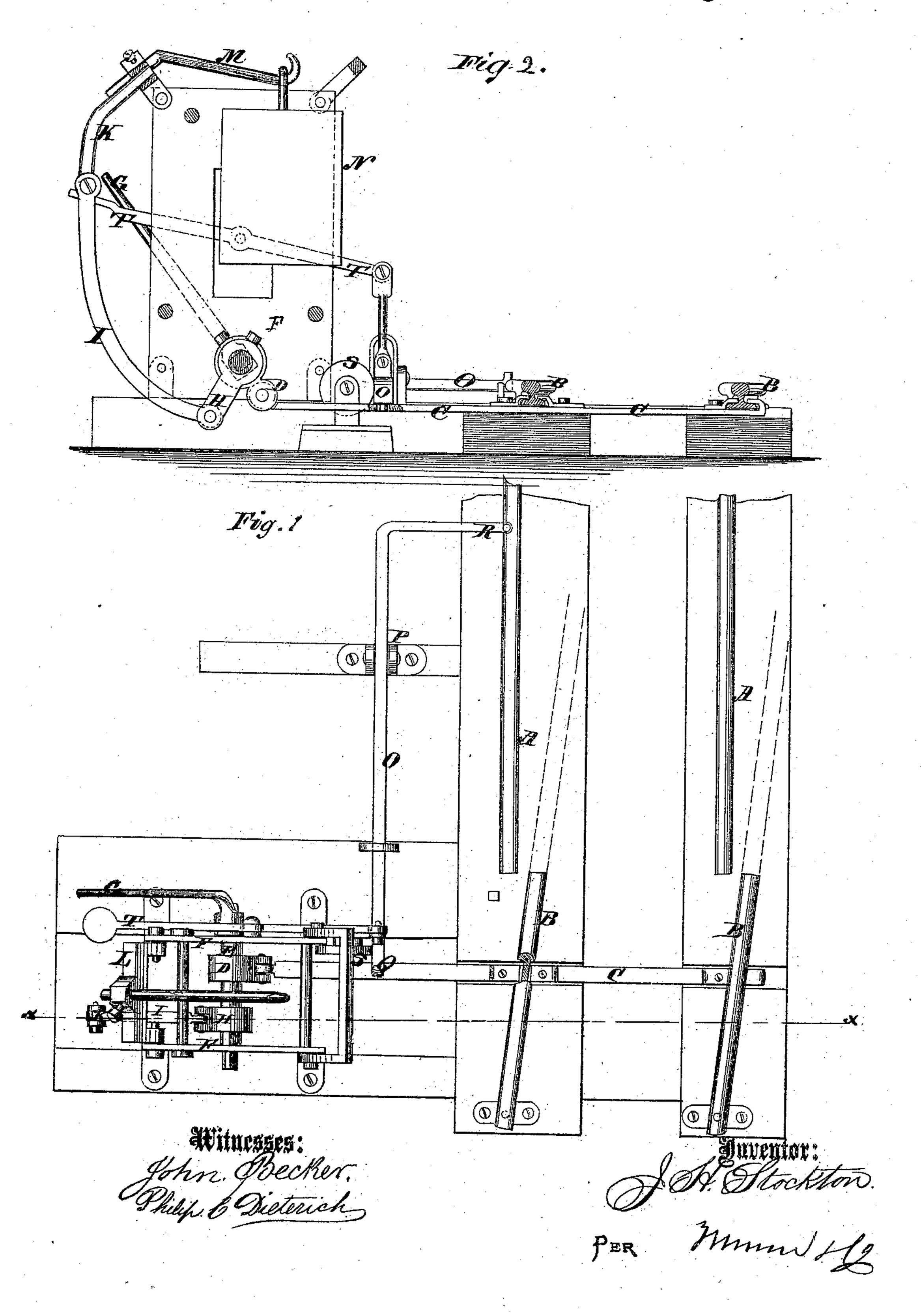
J. H. STOCKTON. RAILWAY SWITCH.

No. 106,423.

Patented Aug. 16, 1870.



United States Patent Office.

JOSEPH H. STOCKTON, OF THOMPSON, GEORGIA.

Letters Patent No. 106,423, dated August 16, 1870.

IMPROVEMENT IN RAILWAY SWITCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Joseph H. Stockton, of Thompson, in the county of Columbia and State of Georgia, have invented a new and useful Improvement in Railroad Switches; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in railroad switches, and consists in the application to the switch-rails, or the bar for moving them, of a weight and suitable levers or gears, and a holding and tripping-lever, so that the tripping-bar or lever, being moved by the wheel of the advancing locomotive or car, will trip the weight and let it fall to close the switch, all as hereinafter described.

Figure 1 is a plan view of my improved switch, and

Figure 2 is a section of the same, taken on the line x x of fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the rails of the main track;

B, the switch-rails; and

O, the sliding bar for moving the switch-rails.

This bar is connected to the arm D of an oscillating shaft E mounted in the supports or switch-box F. This shaft is provided with a hand-lever, G, or

wrench at one end, for turning it, and it has an arm, H, connected by the jointed bars I K, with the oscillating yoke L, mounted in the switch-box F at the top, and having an arm, M, whereon a weight, N, is suspended, all as shown.

O is a holding and tripping-lever, pivoted at P, to swing up and down. One end, Q, drops into a hole or notch in the the bar C, and holds it against the action of the weight. The other end, R, is so arranged relatively to one of the rails A that the front wheel of the locomotive or car will force it down, and the other end up, thereby releasing the bar, and allowing the weight to act on the switch-rails, for moving them

into line with the main rails A A, and thus afford safe passage for the train.

The lever O, at the end which connects with the bar C, is held by the pressure of the weight against a friction-wheel, S, which will turn as the said lever rises. Thus the lever is caused to work with less friction than if held by a bar or block, against which it must slide.

I may substitute gears for the bars I K, either arranging them to turn the shaft E, or the bar O may have a toothed rack at one end, to be moved by a wheel gearing with it, and operated by the weight N.

The holding and tripping-bar O may have a lever, T, connected with it, for raising it by the hands or foot, to let the switch-rails be closed when required.

Of course the apparatus may be arranged for moving the switch-rails either way. I prefer, however, to arrange it to move them into connection with the main rails, as shown.

The reverse movement is effected by the lever G,

worked either by the hands or feet.

By the addition of another trip-rod, or an extension of the rod O, suitably arranged to be moved by the wheel of the locomotive when coming from the other direction, the switch-rails may be brought in line with the main rails A, in like manner as they are herein represented, and I propose to make this application.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

- 1. The combination, with the main rails, the switch-rails, and the shifting-bar C, of the holding and tripping-lever O, and the drop-weight N, the latter being connected to the said bar, so as to move it when the lever O is tripped, all arranged substantially as specified.
- 2. The combination, with the lever O, of the friction-holding wheel S, substantially as specified.

 J. H. STOCKTON.

Witnesses:

W. C. WORRILL, NORMAN COWLES.