D. HALDEMAN.

Railway Switch.

No. 94,738. Patented Sept. 14, 1869.

Fig: 1.

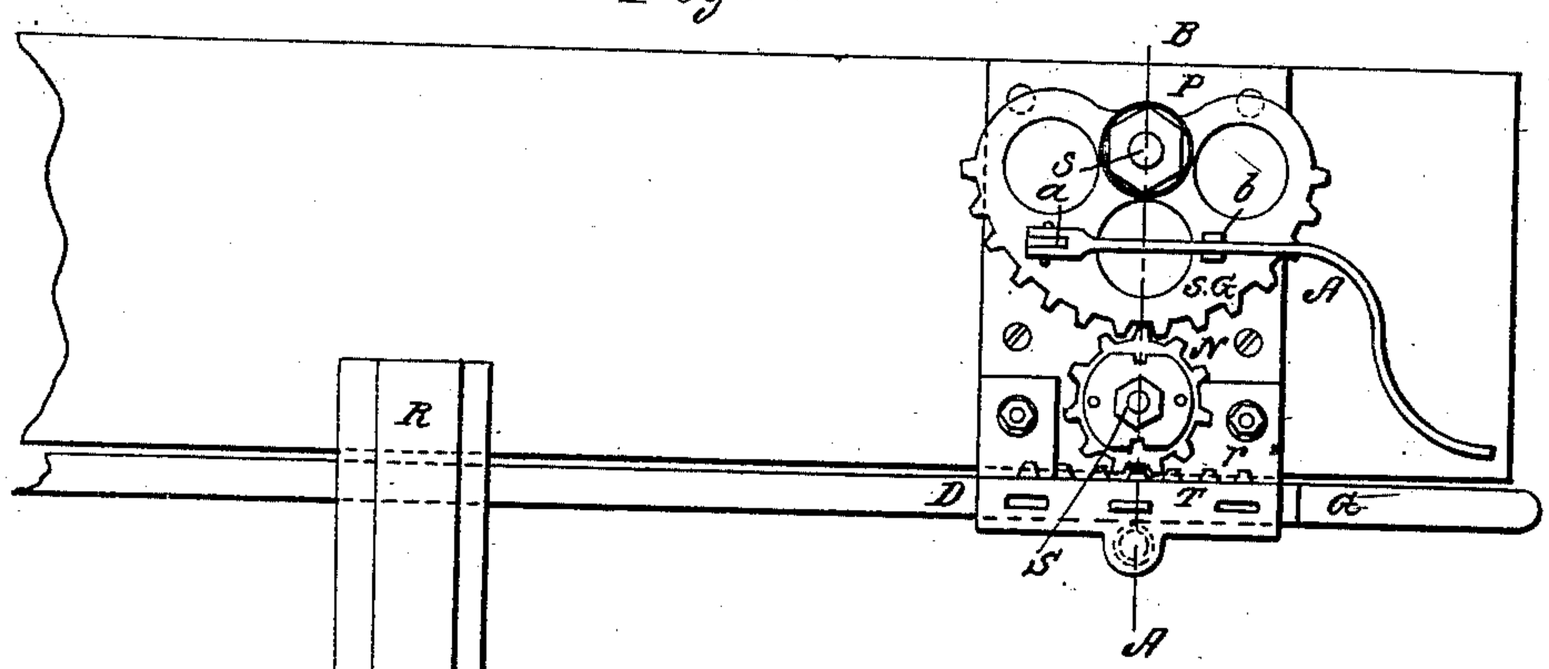


Fig: 2.

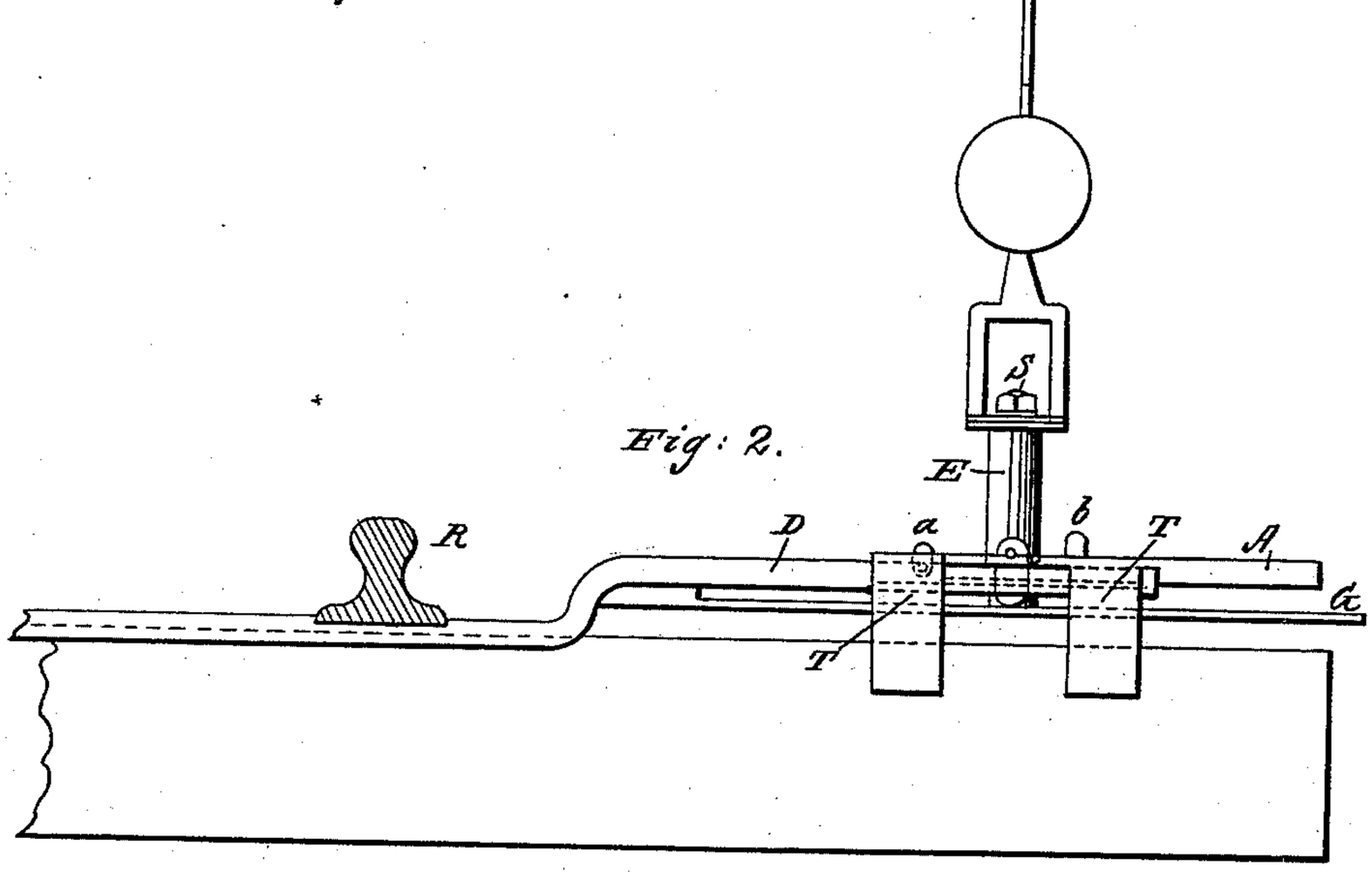
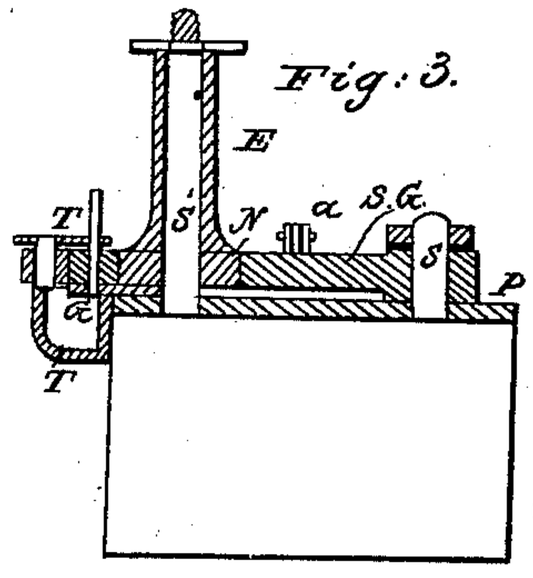


Fig: 3.



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United States Patent Office.

DANIEL HALDEMAN, OF MAHANOY CITY, PENNSYLVANIA.

Letters Patent No. 94,738, *dated September* 14, 1869.

IMPROVED RAILWAY-SWITCH.

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, DANIEL HALDEMAN, of Mahanoy City, in the county of Schuylkill, and State of Pennsylvania, have invented a new and useful Improvement in Railway-Switches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan view of my improvement in railway-switches.

Figure 2 is a side elevation of same.

Figure 3 is a sectional view through the line A B.

The nature of my invention consists in constructing a railway-switch that can be easily operated, and instantly detected when opened or turned in the wrong direction.

To enable those skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On top, and near the end of the tie on which the variable rails rest, and connect with the main or right and left-hand tracks, is secured a metal plate, P, provided with two standards, S and S′, of different heights.

On the standard S is placed, and works, a segmental gear, S G, which gears with a pinion, N, placed on the lower part of the standard S′.

On top, and at one end of the plate P, and extending out a short distance from the tie, is bolted a metal strap, T, which serves as a guide and lock for the rod D, which connects with the rails R.

On the end and side of the rod D, which works in the strap T, is secured a straight rack, *r*, in which the pinion N works.

The top of the strap T is provided with a series of rectangular openings, and on the side of the same a semicircular projection is formed, to which is attached a small stud provided with a roller, for the purpose of allowing the rod D to move freely.

On the under side of the rod D, and passing through strap T, and extending beyond so as to form a foothold, is a spring, G, on top; and in the centre of said spring is fastened a staple, which passes through the rod D, and up through one of the openings in the top of the strap T, according to the movement of the rod D.

Encircling the standard S′, and revolving around it, is a tube, E, the lower part of which rests on, and is connected with the pinion N. The upper part is provided with a flange, on which is placed an adjustable day or night-signal, the same being kept in position by means of a nut passing over the head or top of the standard.

On top of the segmental gear S G is formed a small upright, *a*, and an open jaw-piece, *b*.

The upright *a* has pivoted to it a lever, A, which fits in and is kept in place by means of the open jaw, *b*.

In operating the switch, the foot is placed on spring G and pressed down, thus relieving the staple from the opening in the upper part of the strap T. The segmental gear S G is then turned by means of the lever A to the right or left, which revolves the pinion N and sets the signal. The pinion at the same time carries with it the rack on the rod D. This moves the said rod, and at the same time the variable rails connected with it. When the rails reach each connecting-track in turn, the staple on spring G passes up into the proper opening in the top of the strap T, and thus locks and holds the rails firmly in place. When desired, a padlock can be placed through the eye in the upper part of the staple.

It will be obvious from the above description of the switch, that the signal will act as a tell-tale should the rails not be in proper position.

Having thus described my invention, its construction and operation,

What I claim, and desire to secure by Letters Patent of the United States, is—

The combination and arrangement of the plate P, standards S and S′, segmental gear S G, pinion N, rod D, provided with a rack, strap T, spring G, and lever A, so as to operate substantially in the manner and for the purpose specified.

In testimony whereof, I have signed my name, in the presence of two subscribing witnesses.

DANIEL HALDEMAN.

Witnesses:

CARL SCHEURMANN,

WM. RICHARD, Jr.