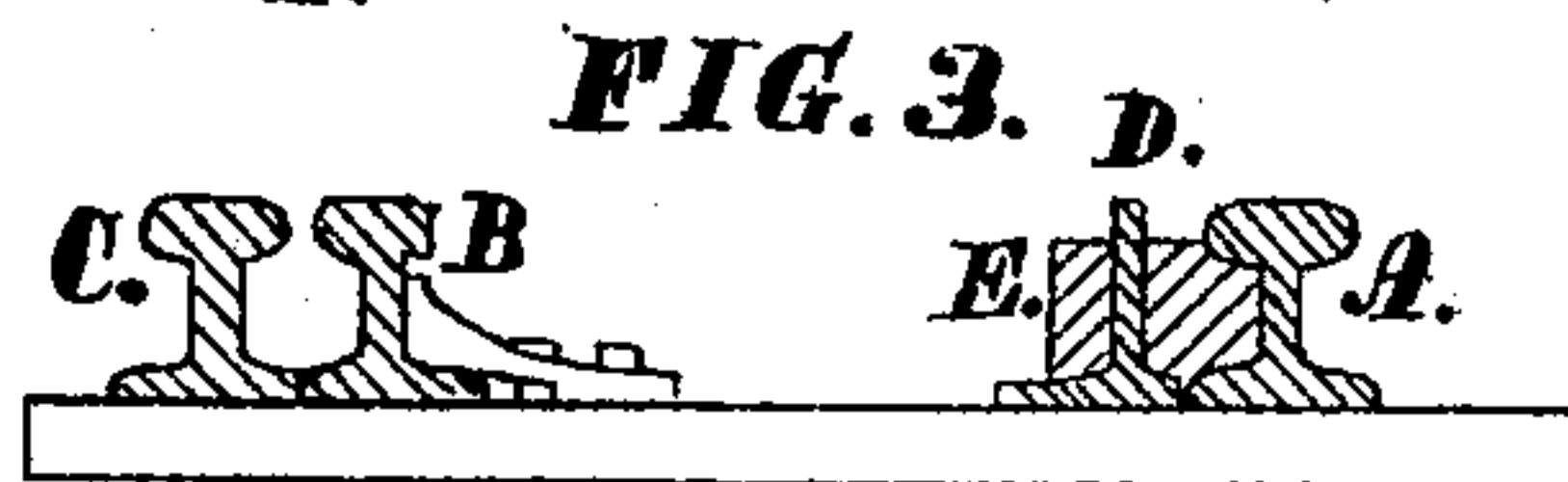
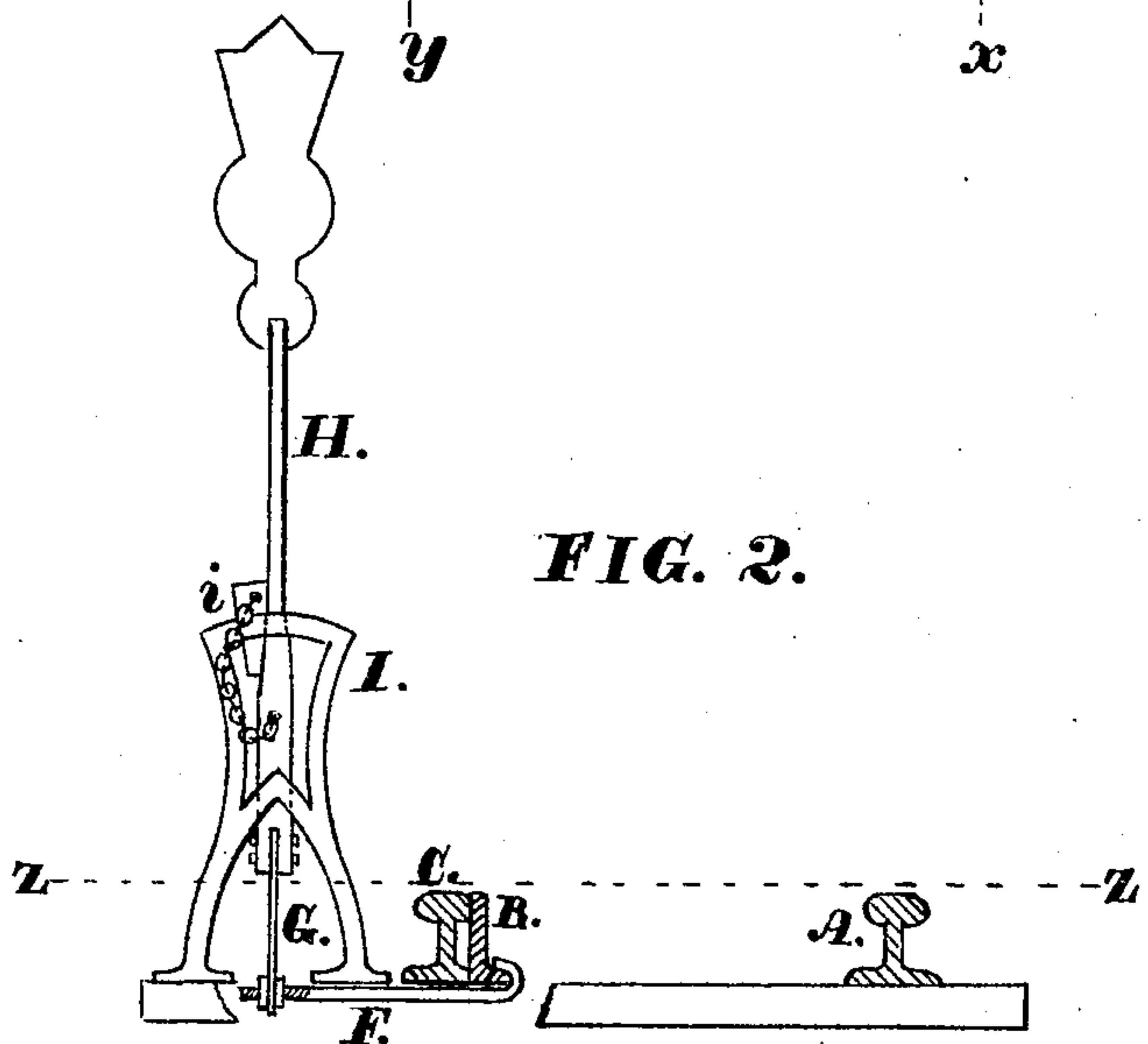
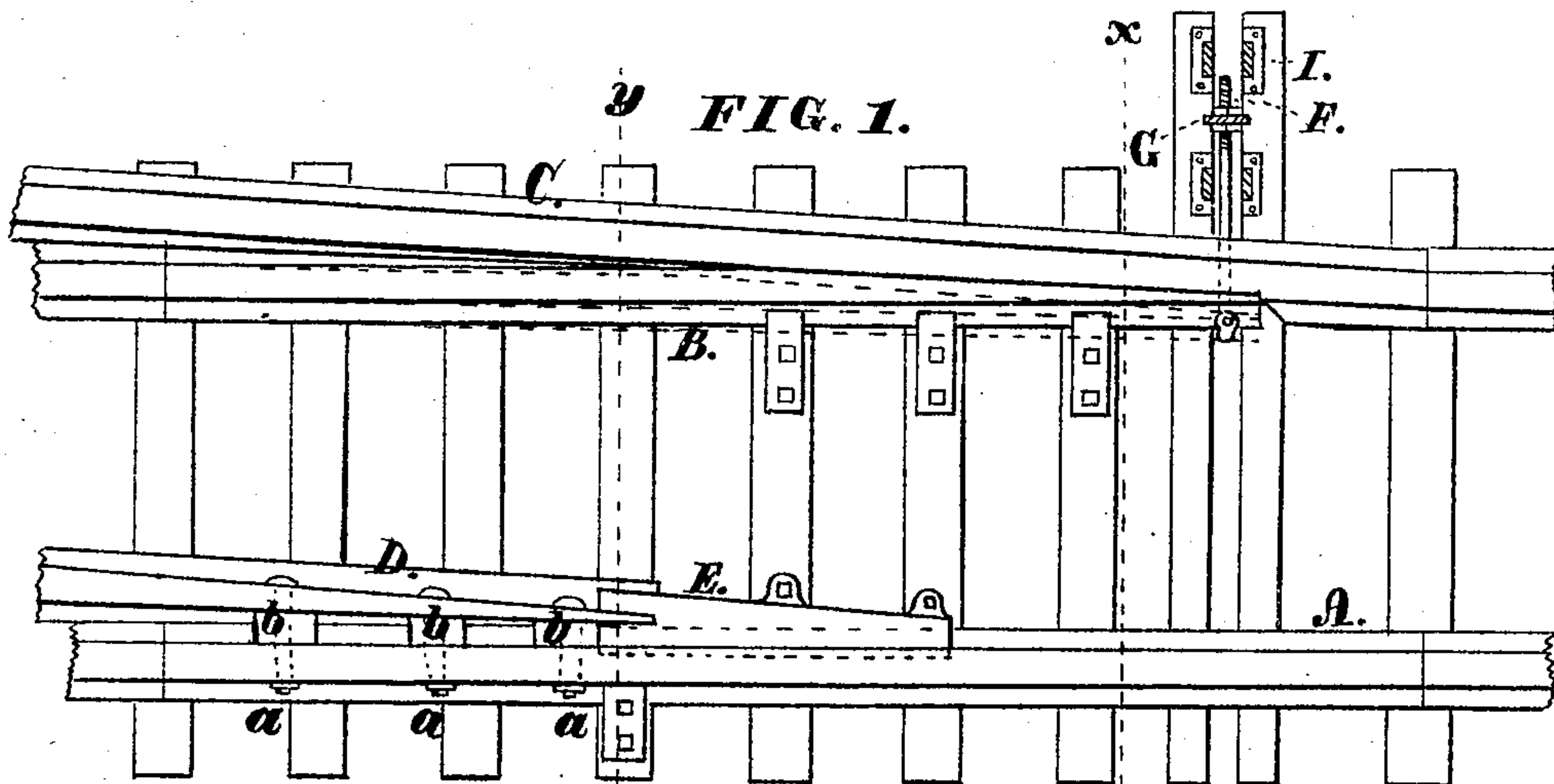


T. J. REYNOLDS.
Railway Switches.

No. 145,013.

Patented Nov. 25, 1873.



Witnesses:
Theo Coleman,
John W. Rogers

Inventor,
Thomas J. Reynolds.
Per Chas B. Housum
-Atty-

UNITED STATES PATENT OFFICE.

THOMAS J. REYNOLDS, OF IRVINGTON, ILLINOIS.

IMPROVEMENT IN RAILWAY-SWITCHES.

Specification forming part of Letters Patent No. **145,013**, dated November 25, 1873; application filed November 5, 1873.

To all whom it may concern:

Be it known that I, THOMAS J. REYNOLDS, of Irvington, county of Washington and State of Illinois, have invented a Railroad-Switch, of which the following is a specification:

The object of my invention is to so construct a railroad-switch that a train passing over the same in either direction, on either the main track or siding, will not be thrown from the track if the switch should be misplaced; and in the form of a piece of metal, to hold and protect the point of the pointed and stationary switch-rail, as is more fully described.

Figure 1 is a plan of a railroad-switch embodying my invention, the switch-stand broken on the dotted lines *z z*, Fig. 2; Fig. 2, a section on the dotted line *x x*, Fig. 1; and Fig. 3, a section on the dotted line *y y*, Fig. 1.

A represents one of the rails of the main track. The rail B, also forming a part of the main track, is a pointed and planed rail. C is one of the rails of the siding, planed out to receive the end of the pointed rail B. D is a planed and pointed rail of the siding. This rail is secured to the rail A by bolts *a a a*, washers or lugs *b b b* being placed between the rails. The end or point of the rail D is placed in a slot in the piece of metal E. This piece is formed so as to fit close to the rail A, and is spiked to the ties, and is intended to receive the flange of the wheel until the wheel passes over it and the tread is on the pointed rail D, and also to protect the end of the pointed rail. A connecting-rod, F, passes under, and is secured to, the end of the rail B, and the outer end of the rod is secured to a spring, G, this spring being a part of the target-rod H.

The switch is operated as follows, viz: As shown in Fig. 1, the switch is closed, and the main track clear for trains passing in either direction. As shown by the dotted lines, the switch is open for the siding, the target-rod being held in the switch-stand I by the wedge *i*. Should a train on the main track come from the left when the switch is in the latter-named position, the flange of the wheel, pressing on the rail B, will force it over to the rail C, the spring being of sufficient strength to allow of the rail B being moved with the target-rod; and yet the pressure of the flanges of the wheels will bend the spring so that the rail B will be moved to the rail C; and, also, should the switch be placed for the main track, (a train coming from the siding to the main track,) the flanges of the wheels will press the rail B from the rail C, opening the switch.

By this arrangement it will be impossible for the train to be thrown from the track when moving in either direction over the switch, if the switch-rail B should be misplaced.

I claim as my invention—

1. The combination of the rails C B, rod F, spring G, and target-rod H with the rails A D and piece E, as and for the purpose set forth.

2. The combination of the piece E with the rails A D and lugs *b b b*, as and for the purpose set forth.

THOMAS J. REYNOLDS.

Witnesses:

NIC GRIBLING,
L. F. BARTON.