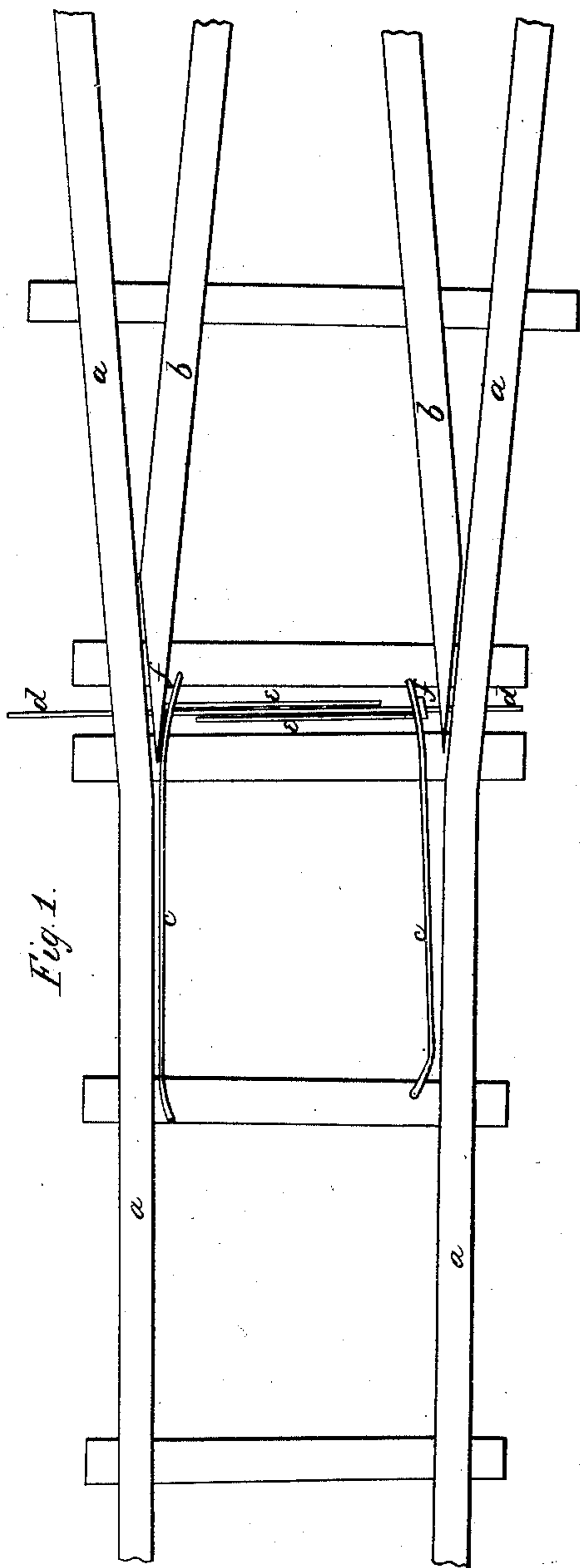


*S. H. Hodges.*

*Railroad Switch.*

*N<sup>o</sup> 27,061.*

*Patented Feb. 7, 1860.*



*Witnesses;*  
*Calvin Edgerton*  
*Charles Colburn*

*Inventor;*  
*S. H. Hodges*

# UNITED STATES PATENT OFFICE.

SILAS H. HODGES, OF RUTLAND, VERMONT.

## RAILROAD-SWITCH.

Specification of Letters Patent No. 27,051, dated February 7, 1860.

*To all whom it may concern:*

Be it known that I, SILAS H. HODGES, of Rutland, in the county of Rutland and State of Vermont, have invented a new and Improved Railroad-Switch, of which the following is a full and exact description, reference being had to the accompanying drawings and to the letters therein.

Figure 1, is a plan of a rail-road track with branches and the improved switch. Fig. 2, is a side-view of the switch rod, with the catches attached. Fig. 3, is a view from above of the same.

The rails are constructed and arranged in the following well known manner. The rails (*a a*) of the single track are protracted without interruption, and form the outside rails of two branch tracks. The inside rails of these branch tracks (*b b*) approach the outside ones so near as barely to permit the flange of the wheel to pass between. They are beveled off next to the outside rails, and brought to a point, still preserving the same distance from them. They are all permanently fixed, and so arranged that, when an engine on either of the double tracks reaches the junction, the tread of the wheel will reach over the point of the inside rail, and, before it leaves the point, will run upon the rail of the single track. A like result will follow when an engine runs from the single track past the junction; the tread will rest upon the point of the short rail on the proper side, before it leaves the rail of the single track.

The switches (*c c*) play upon a pivot, and are bent inward at that end, so as to insure the entrance of the wheel flange. They lie, near the other end, upon the switch rod, (*d*) but are not attached to it permanently, nor to one another. But, when the switch rod is drawn either way, the switches are carried with it by means of two catches (*e e*) hung upon pivots on the switch rod. The switch upon one side is thus brought into close connection with the point of the short rail on that side; and it thus forces the wheel of an engine coming from the single track upon the double track on that side. From the point of the short rail the switch bends inward so as to permit boss or cam (*f f*) attached to the catch to rise up between the

switch and the rail. If now, an engine comes upon one double track, when the switch is adjusted for the other, the flange of the wheel will press down this boss, and with it the catch, so as to release the switch, which it will throw aside, and pass on unobstructed. The switch must come so near the rail at the proper point, as to insure its being crowded aside by the flange when the switch is disengaged from the catch; and the boss must rise high enough to insure the catch being sufficiently depressed, and be made with a slope on the top so that the wheel-flange will mount it.

Instead of the above catch (*e*) an axle or swivel may be run through the switch, with a wing or arm on the inside to catch in the switch-rod and secure the switch to it. Another wing or arm on the outside of the switch must be so constructed, that the flange of a wheel coming on the wrong track will depress it, and disconnect the first from the switch-rod, and with it the switch. Other devices may be employed for the same purpose.

Switches have been already used in connection with a similar arrangement of rails, making a close connection with the short rail like the above, but obstructing an engine coming on the wrong track, unless removed by hand. Others have a sufficient opening between the switch rail and the point of the short rail to allow the wheel flange of such an engine to pass. I set up no title to either.

What I claim and desire to secure by Letters Patent is—

A switch (*c*), and catch (*e*), used in connection with rails, all constructed and arranged as above described; the switch being attached to the switch rod only by the catch, so that it will be held firm, and insure an engine taking the side track for which it is adjusted, though it will be disengaged and thrown aside by an engine coming on the other track, and leave it a free passage, as shown above.

S. H. HODGES.

Witnesses:

CALVIN EDGERTON,  
CHARLES COLBURN.