

T. Daly *Railroad Switch*

N^o 90,241.

Patented May 18, 1869.

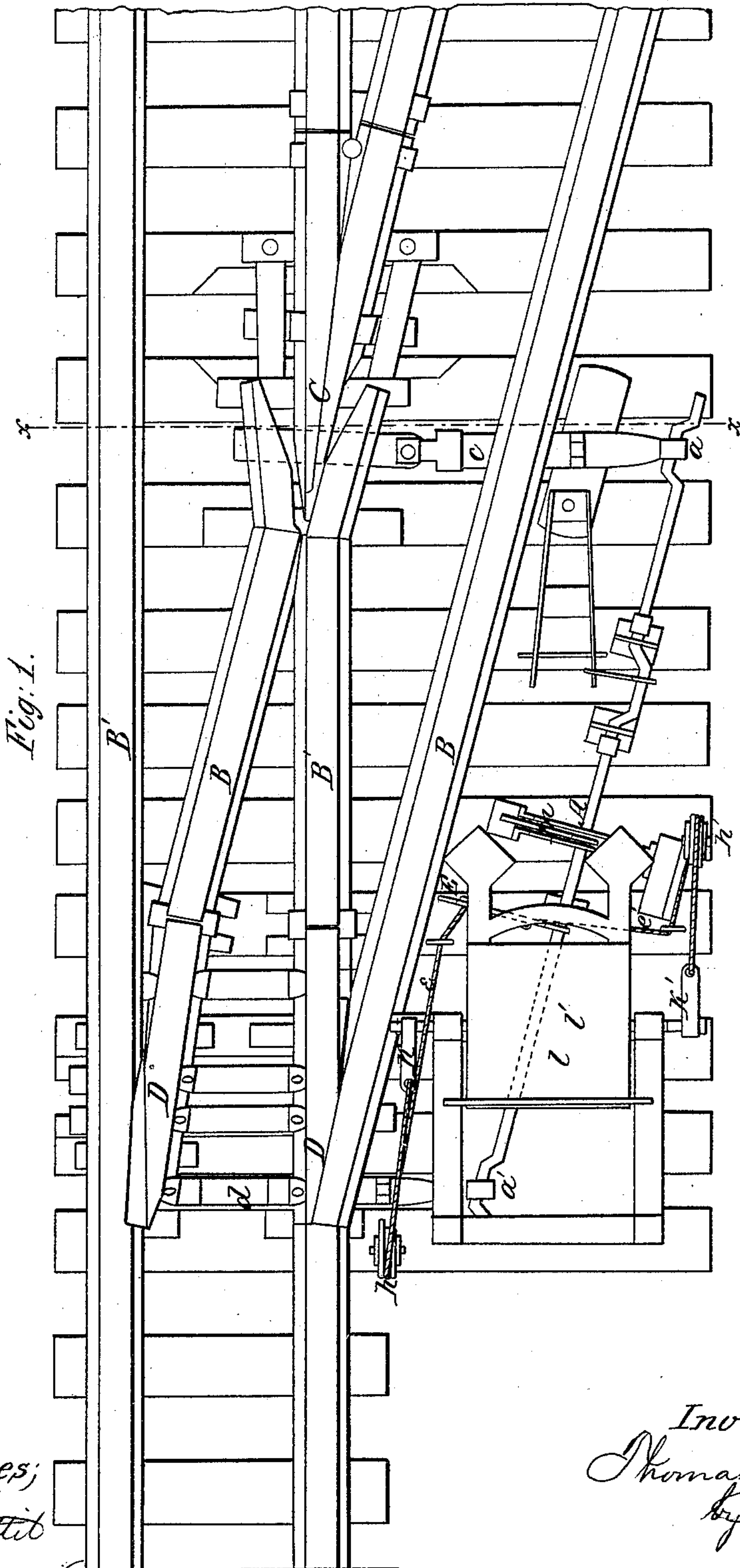


Fig. 1.

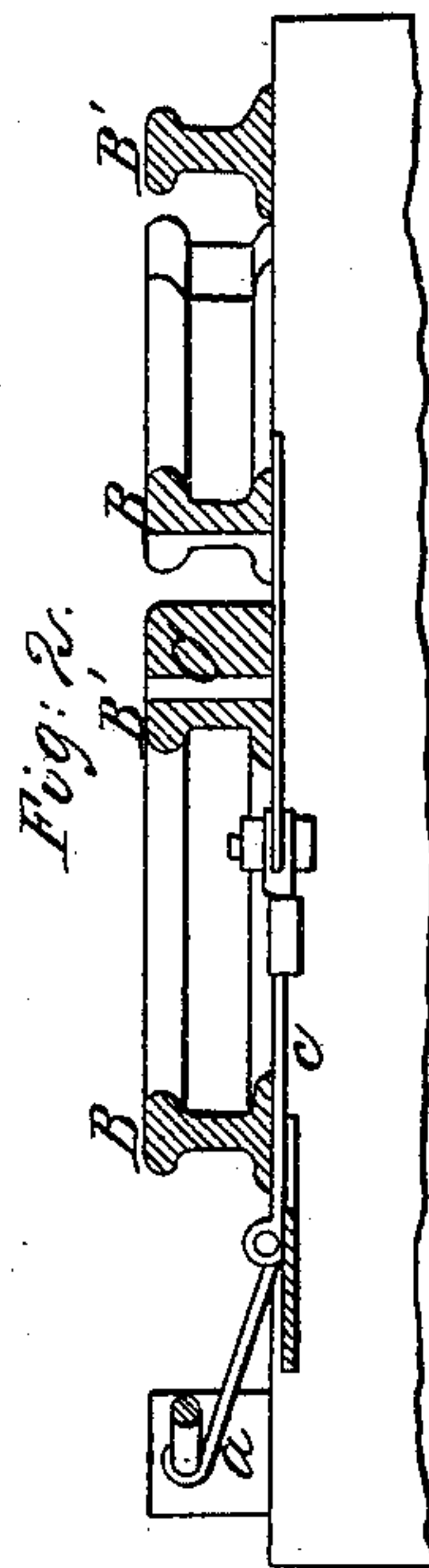


Fig. 2.

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THOMAS DALY, OF ERIE, PENNSYLVANIA.

Letters Patent No. 90,241, dated May 18, 1869.

IMPROVED RAILROAD-SWITCH AND SIGNAL.

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, THOMAS DALY, of the city and county of Erie, and State of Pennsylvania, have invented a new and improved Railroad-Switch; 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, and

Figure 2, a transverse vertical section in the line x , fig. 1.

This invention consists in a novel and useful apparatus for simultaneously operating the switch and signal of a railroad by one and the same movement, so that every time the switch is changed, the signal shall also be changed so as to show the proper color.

In the drawings—

A represents a shaft placed in suitable bearings, alongside a railroad-track, B B, &c., at the point of intersection of the same with the track B' B'.

The usual construction of switches is exhibited at the point C, where the two inner rails, B B', cross each other, and the points D D', where said inner rails cross the two outer rails B B'.

The shaft A has two cranks, $a a'$, to which are joined, respectively, rods $c d$, connecting said cranks with the switch-rails C D.

Both cranks project from the shaft in the same direction, so that C may always complete a track with either D or D'.

An arm, E, projects from the shaft A, in the same direction as the cranks.

From the outer end of the arm E, pass two chains, $e e'$, in opposite directions, which are led under sheaves, $h h'$, on opposite sides of the shaft, and run thence to angle-arms $k k'$, which project in opposite directions from the shaft l , which sustains the lantern l' , to one side of which is attached a green signal, and to the

other side a red, so placed on the lantern, that when one is up the other is down.

The shaft l rotates in bearings in the top of posts of suitable height to show the signals.

The shaft A is operated by an arm, m , projecting from it in the same direction as the arm E.

As the apparatus is represented as arranged, the switches are so adjusted as to complete the track B B, the red signal is up, and the green one down, out of sight, and red lights show on both sides of the lantern, all which indicates that trains may safely pass in either direction on the track B B.

The moment the switches are shifted so as to complete the track B' B', the signals and lantern show green on both sides, which indicates safety on the track B' B', and danger on the other track. The apparatus is infallible, as long as it is in working-order.

The ends of the shaft A are to be made of elastic steel, and the bearings should be placed at some distance from the end of the shaft, in order, that in case a train should accidentally pass on the track to which the switches were not adjusted, the yielding of shaft might afford the train some chance to shift the switches itself.

Disclaiming all forms and constructions of switch and signal, except that herein shown and described,

What I claim as new, and desire to secure by Letters Patent is as follows, viz:

In combination with the rails B B' D D O, and crank-shaft, A, constructed and operating as herein specified, I claim the cranks K K' and their shaft, the two signals $l l'$, the cords $e e'$, and the sheaves $h h'$, all arranged and combined as shown, for the purpose of operating the signals and switch simultaneously in the manner described.

Witnesses:

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