

(No Model.)

H. HARTWELL.
RAILWAY SWITCH.

No. 574,481.

Patented Jan. 5, 1897.

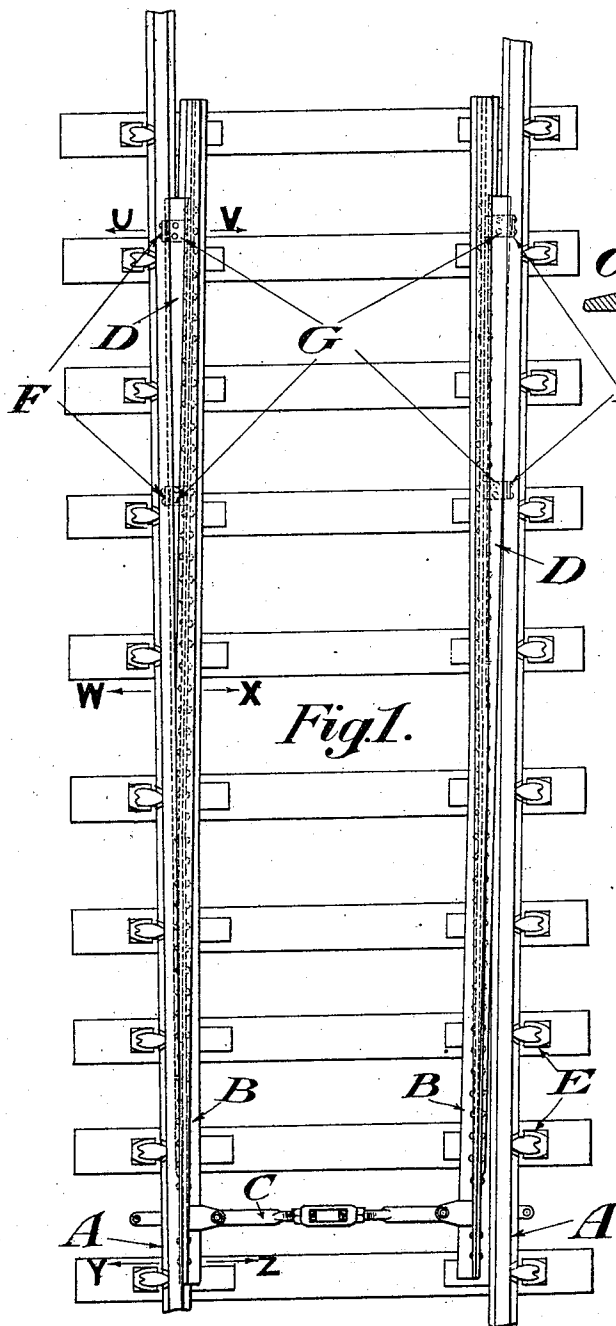


Fig. 1.

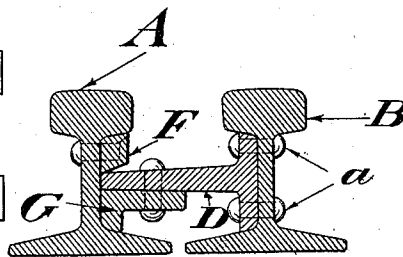


Fig. 2.

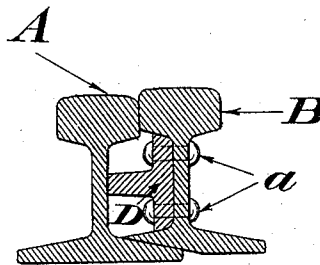


Fig. 3.

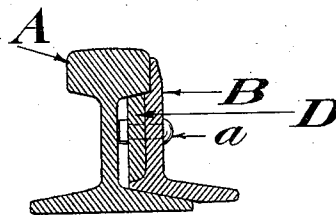


Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

HARRY HARTWELL, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE
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RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 574,481, dated January 5, 1897.

Application filed October 7, 1896. Serial No. 608,148. (No model.)

To all whom it may concern:

Be it known that I, HARRY HARTWELL, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Railway Split Switches, of which the following is a specification.

My invention relates to split switches, and has for its object the provision of a continuous bearing of the working point-rail against the stock-rail.

By my invention I am enabled to transmit the thrust from all parts of the switch-rail to the stock-rail, thus affording a very rigid and lasting structure.

My invention comprises the use of a T-bar, or other suitable shape, fastened to the outside of the point-rail, and other details of construction, to be hereinafter pointed out.

Referring to the drawings, Figure 1 is a top view of a split switch embodying my invention. Figs. 2, 3, and 4 are vertical sections on the lines *u v*, *w x*, and *y z*, respectively.

A A are the stock-rails, and B B are the point or switch rails, connected together by the usual tie-bar C. To the web of each of the point-rails B B a T-bar D is secured by the rivets *a a*, passing through the flanges of said T-bar, which is thus held in a horizontal position. The T-bar is on the side of the point-rail adjacent to the neighboring stock-rail. The end of the web of D is longitudinally tapered, so that when the point-rail is made the switch or working rail the T-bar will bear continuously against the web of the stock-rail. Besides affording this continuous bearing the T-bar is adapted to serve as a reinforcement to the point-rail.

At suitable longitudinal locations I rivet the bars F F and angles G G, F F being secured to the under side of the T-bars and being so shaped at their ends as to fit the contour of the stock-rail where they come in contact therewith and G G being secured to the web of the stock-rail on the side adjacent to the point-rail and being adapted to bear against the upper side of the T-bar. The purpose of F F and G G, as clearly shown in

the drawings, is to guide the T-bar in its normal horizontal position, thus preventing any tendency on the part of the point-rail toward oblique movement.

I wish to be understood as not limiting myself to the shape of the bars D D as here shown, nor to the point-rails as the parts to which the said bars are fastened, for it will be readily seen that the stock-rails may be used for this purpose, nor to the use of the pieces F F and G G when their use is unnecessary, nor to other precise details herein described.

What I do claim, and desire to protect by Letters Patent, is—

1. In a split switch, braces continuous throughout the length of the point-rail and adapted to transmit the transverse strain from the working point-rail to the stock-rail.

2. In a split switch, braces continuous throughout the length of the point-rail, adapted to transmit the transverse strain from the working point-rail to the stock-rail and adapted to reinforce said point-rail.

3. In a split switch, point-rails to each of which is secured a brace, said brace being adapted to bear continuously against the adjacent stock-rail, when said stock-rail is idle.

4. In a split switch, point-rails to the web of each of which are secured the flanges of a T-bar, said T-bar being so tapered as to adapt it to bear continuously against the adjacent stock-rail when said stock-rail is idle.

5. In a split switch, in combination, the T-bars D, D secured by their flanges to the point-rails of said switch, the webs of the T-bars being in a horizontal position and being longitudinally tapered at the ends of their webs, the pieces F, F and G, G adapted to guide the webs of D, D in a horizontal plane, all substantially as, and for the purpose, set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

HARRY HARTWELL.

Witnesses:

JOHN H. KENNEDY,
RALPH RICHARDSON.