(No Model.)

A. A. STROM.

RAILWAY SWITCH.

No. 457,905. Patented Aug. 18, 1891.

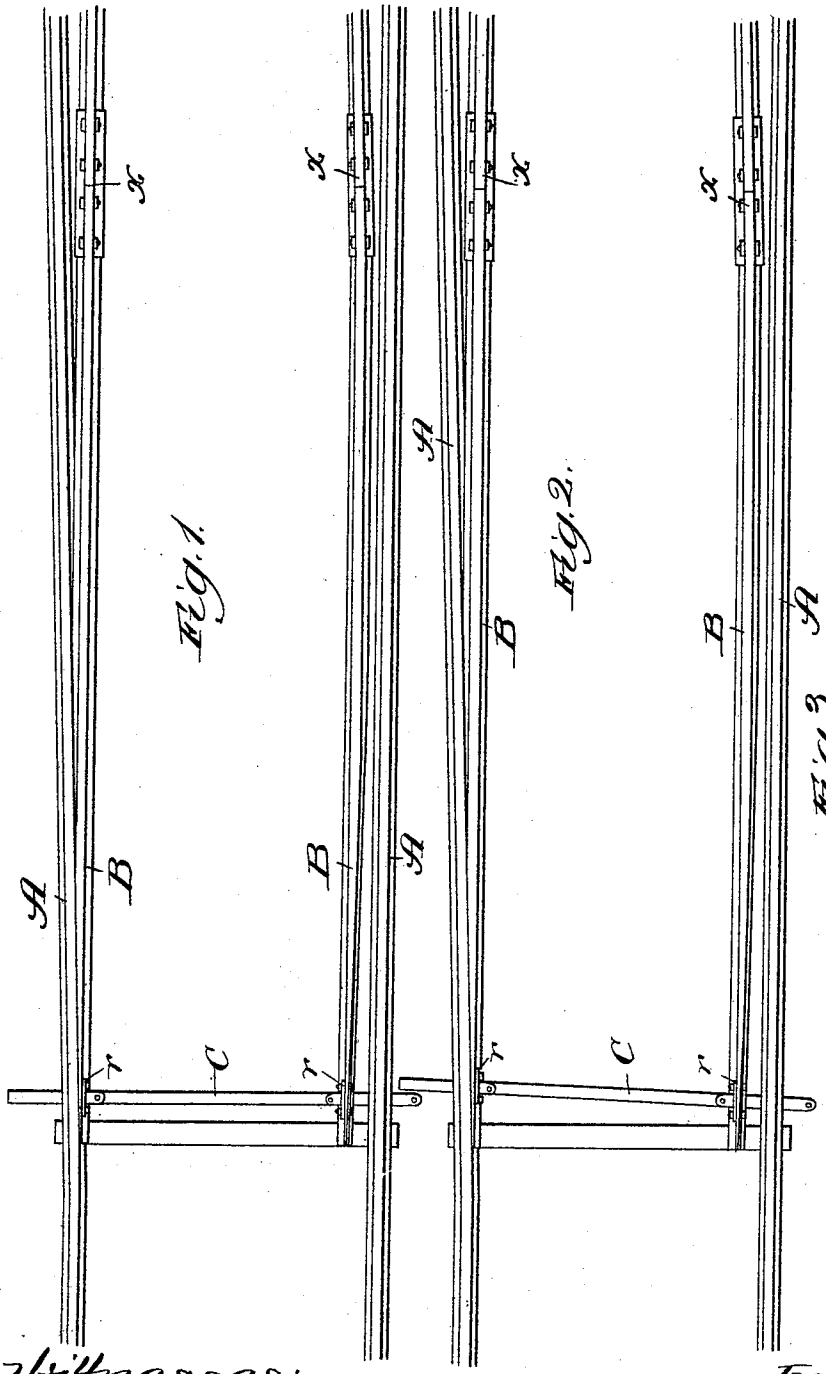


Fig. 1.

Fig. 2.

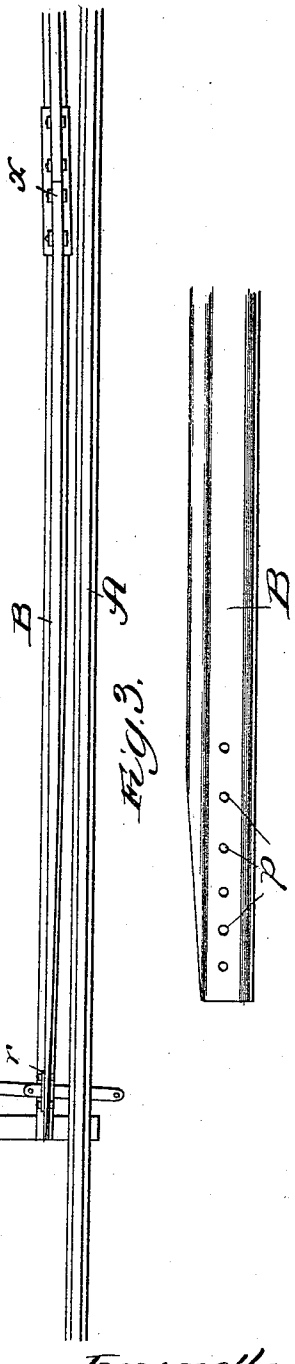


Fig. 3.

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UNITED STATES PATENT OFFICE.

AXEL A. STROM, OF AUSTIN, ASSIGNOR TO THE STROM MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS.

RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 457,905, dated August 18, 1891.

Application filed May 6, 1891. Serial No. 391,798. (No model.)

To all whom it may concern:

Be it known that I, AXEL A. STROM, a citizen of the United States, residing at Austin, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Railway-Switches, of which the following is a specification.

My invention relates to an improvement in so-called "split switches." The point-rails of split switches are liable to defective operation by reason of lost motion resulting from the wear or disarrangement of parts. They are also liable to be or become bent, and thus to disarrangement of their gage, which tends to prevent them from being thrown completely—that is, to bear at the ends of their throw—against the main rails.

The object of my improvement is to adapt the connecting medium of the point-rails to afford readily-operative gage-adjusting means and to that end I adapt the tie-bar connecting them to be adjusted backward and forward with relation to the points to spread the rails farther apart and bring them closer together, as the nature of the adjustment required may demand.

As in my pending application for Letters Patent, Serial No. 390,420, filed on the 25th day of April, 1891, a single tie-rod is deemed sufficient and preferred for connecting the point-rails, though more than one tie-rod may be used.

In the accompanying drawings, Figure 1 is a plan view representing a section of railway-track and a split switch therein provided with my improvement. Fig. 2 is a similar view of the same, showing my improvement in a modified form. Fig. 3 is a broken view in side elevation showing the point of a switch-rail provided with a series of perforations in its web as one means for permitting the adjustment of my improved device.

A A are the main rails, and B B the point-rails, the latter being fastened at *x*.

C is a tie-bar connecting the point-rails at any desired portion of their length, preferably near their points, as shown, the connection being illustrated as made through the medium of clips *r*, fastened to the point-rails by bolts passed through them into perforations *p* in the series thereof shown in Fig. 3, or otherwise, in a manner to adapt the ends of the tie-bar to be set at different points of the length of the switch-rails.

As shown in Fig. 1, the tie-bar extends at a right angle to the point-rails and is adapted, as by removing the bolts in the clips *r*, to be moved at both ends toward or from the pointed ends of the rails to spread them farther apart or permit them to be moved closer together, this means of adjustment depending for efficacy upon the normal convergence of the switch-rails toward their points.

Another form of my improved adjusting means is shown in Fig. 2, wherein the tie-bar C is set to extend obliquely from one switch-rail to the other. This construction requires but one end of the tie-bar to be moved with relation to the point of the adjacent rail either to cause the bar to extend nearer to a right angle between the switch-rails, thus to spread them farther apart, or more obliquely to enable the rails to be brought closer together.

In either case the fastening-bolts for the tie-bars may be inserted through the proper holes *p* in the webs of the point-rails, though the perforations may be in the flanges of the rails, and other suitable adjustable fastening means may be devised and used for the purpose without departure from the spirit of my invention. Furthermore, it would be within my invention to connect the switch-rails from beyond their points at extensions therefrom; or a known form of rectangular frame, comprising re-enforcing-bars at the inner sides of the webs of the point-rails and connected by tie-rods, may, for my purpose, be rendered adjustable by sliding it backward or forward, with relation to the points, between the rails to effect their adjustment and adapting it to be secured at the position of its adjustment.

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

1. In combination, a split switch and a con-

necting medium for the switch-rails adjustable lengthwise thereof to set the gage, substantially as described.

2. In combination, a split switch and a tie-bar C, connecting the switch-rails and adjustable lengthwise thereof to set the gage, substantially as described.

3. In combination, a split switch and a tie-bar C, extending obliquely between and connecting the switch-rails and adjustable at one end lengthwise of the adjacent rail to set the gage, substantially as described.

AXEL A. STROM.

In presence of—
J. W. DYRENFORTH,
M. J. FROST.