Miner & Merrick,

Railway Switch.

No. 109141. Patented Nov. 8. 1870.

Fig. 1.

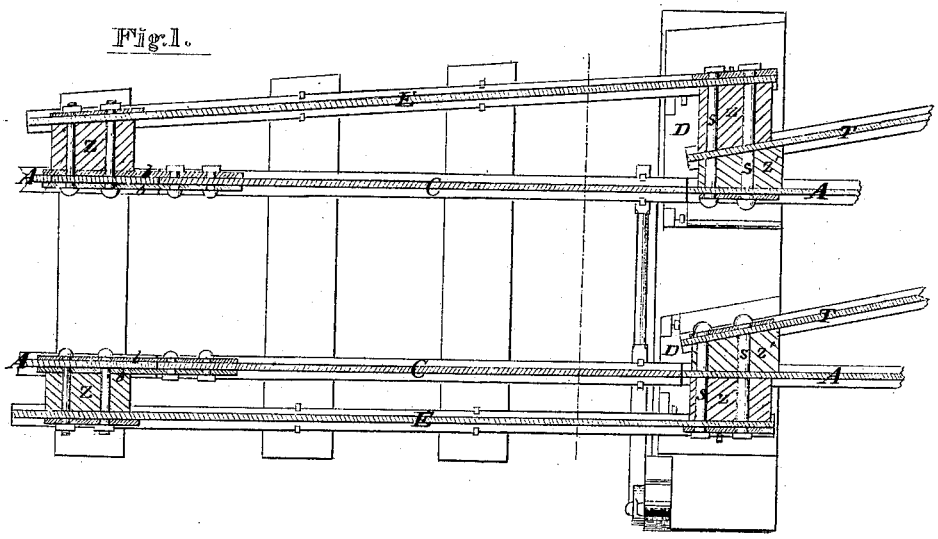


Fig. 2.

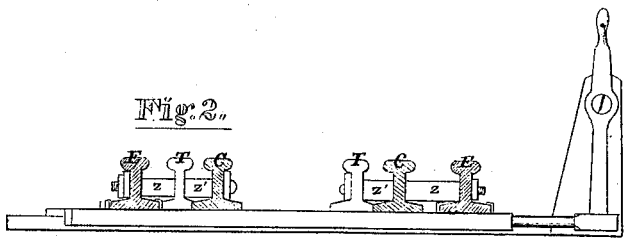
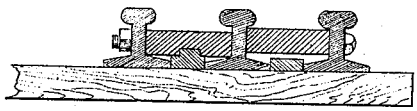


Fig. 3.



Witnesses

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JOHN MINER AND SILAS MERRICK, OF NEW BRIGHTON, PENNSYLVANIA.

Letters Patent No. 109,141, dated November 8, 1870.

IMPROVEMENT IN RAILWAY-SWITCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, JOHN MINER and SILAS MERRICK, of New Brighton, in the county of Beaver and State of Pennsylvania, have invented a new and valuable Improvement in Railroad-Switches; and we 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 annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a top view of our invention.

Figure 2 is a vertical transverse section of the same.

Our invention relates to means for preventing the chairs and rails from closing in upon and binding or falling away from the switch-rails of a railroad track, and consists in the construction and novel arrangement of blocks or wedges, whereby certain outside or independent rails or bars of iron are secured firmly to the chair at one end, and to the main track at the other, whereby the switch-rails are held to their places, independently of any support from themselves, the whole driving force of the rolling-stock being transferred to the outside bars.

The letter A of the drawing designates the main track-rails at one end of the switch, the switch-rails being attached thereto by means of the springing fish-plates *b*.

C represents the switch-rails.

D, the chair or bed-plate, in which are seated the ends of the main and branch track-rails.

On each side of the switch are spiked to the ties the independent bars E. Old worn-out rails may here serve an excellent purpose.

At one end the rail E is secured to the main track-rail by bolts passing through the ordinary bolt-holes and the broad block Z, which is designed to bear against the stem of the rail between the flanches, and to prevent the same from moving endwise without carrying with it the outside rail E.

At the other or movable end of the switch the rail of the main track is bolted to the branch track-rail T, a similar block being placed between the rails, and perforated, for the passage of the bolts.

In the same manner a block is introduced between the rail of the branch track and the outside rail E, the same bolts *s* passing through all three of the rails and firmly binding them together.

It is thus evident that the rails E will maintain a constant distance between the heel of the switch-rails and the ends of the rails in chair D.

The block or wedge Z', between the diverging track-rails, is provided with a tenon or mortise, by means of which it is connected with the chair underneath, which is provided with a corresponding mortise or tenon, as the case may be.

What we claim as our invention, and desire to secure by Letters Patent, is—

In combination with the blocks Z Z', perforated for the passage of the bolts, the track-rails A T, chair or bed-plate D, and the outer binding-rails E, when constructed and arranged to keep the track-rails in the proper position with respect to the switch rails C, as specified.

In testimony that we claim the above, we have hereunto subscribed our names in the presence of two witnesses.

JOHN MINER.
SILAS MERRICK.

Witnesses:
CHAS. HOOPS,
R. E. HOOPES.