R. S. MINER.
Railroad-Switch.

No. 217,234. Patented July 8, 1879.

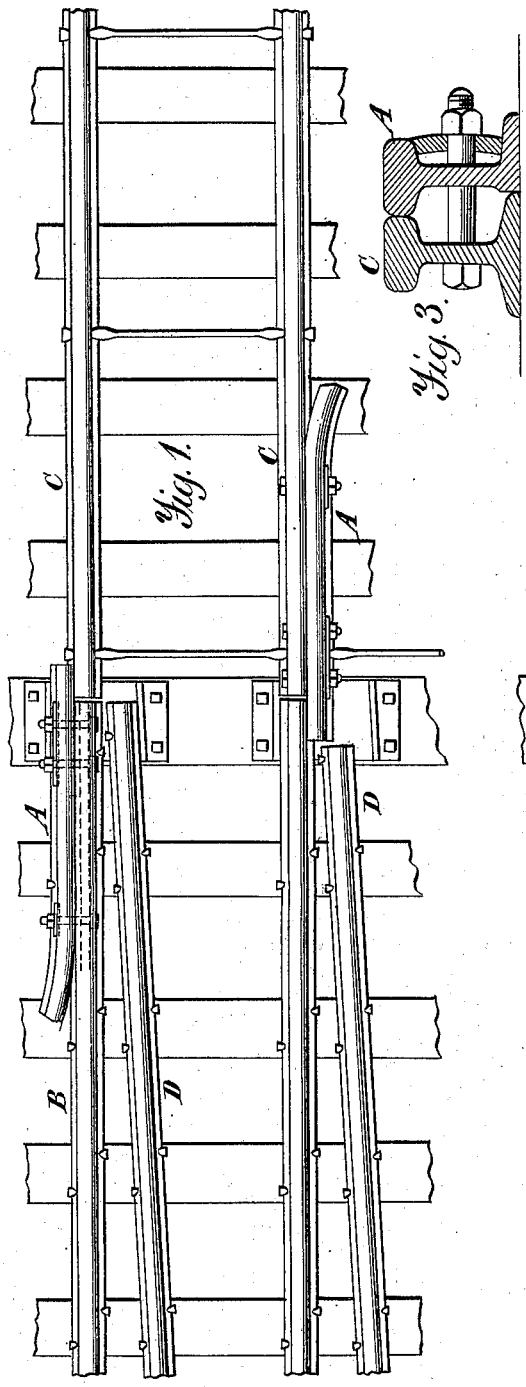

Fig. 1.

Fig. 3.

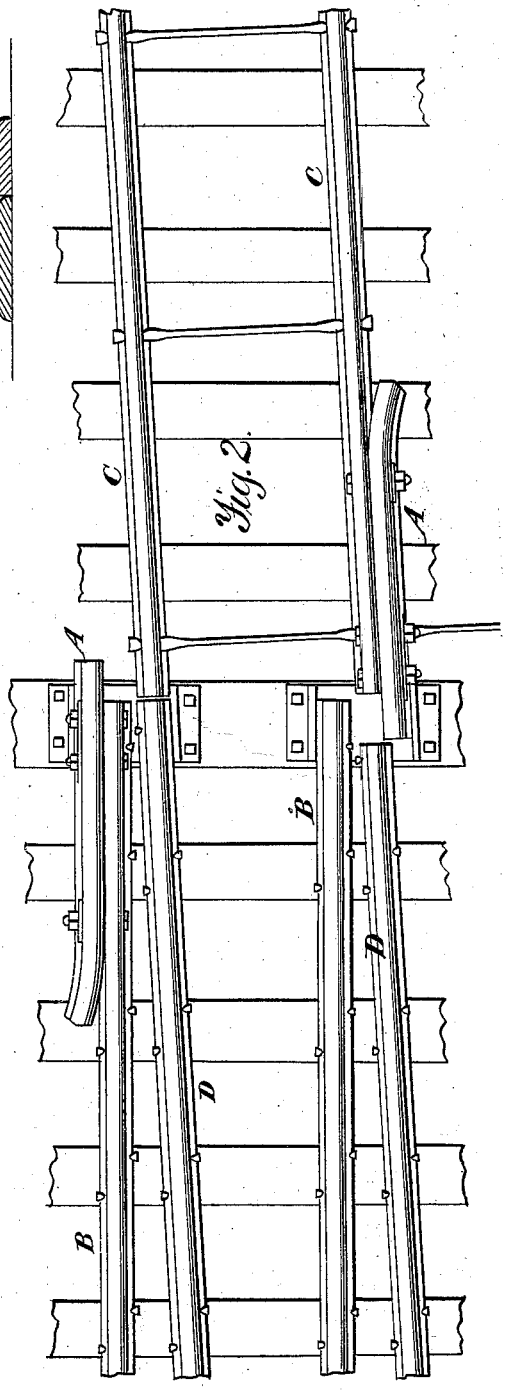

Fig. 2.

Witnesses.
A. Ruppert,
J. G. Mason

R. S. Miner,
Inventor.
By D. P. Holloway & Co.
Attys.

UNITED STATES PATENT OFFICE

ROLAND S. MINER, OF LA FAYETTE, INDIANA.

IMPROVEMENT IN RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. **217,234**, dated July 8, 1879; application filed June 3, 1878.

To all whom it may concern:

Be it known that I, ROLAND S. MINER, of La Fayette, county of Tippecanoe, and State of Indiana, have invented a certain new and useful Improvement in Railroad-Switches; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents the plan of my railroad-switch closed for passage on the main track, with so much of the main track shown as will illustrate my invention. Fig. 2 represents the plan of my railroad-switch open for the passage from the main track upon the side track, and from the side track upon the main track. Fig. 3 represents, on an enlarged scale, a detail of the switch not so distinctly seen in the other figures, being a cross-section of the main-track rail and the attachment thereto, said attachment constituting, in part, my invention, as hereinafter explained.

Similar letters of reference, where they occur in the separate figures, denote like parts in all of the drawings.

It is a well-known fact that the ordinary railway-switch, known as the "stub-switch," and used by nearly all railroads throughout the country, is constructed in such a manner that there must necessarily be an open joint, so that the movable rails may be operated, no provision being made to protect the ends of the rails at this open joint, or to prevent the breaking of the switch-chair, or to relieve the danger of injury to the switch by the hammering of the wheels of passing engines and cars.

The object of my invention is to form a continuous rail or bearing for the tread of the wheels of all engines and cars in their passage over the switch when closed for the main track.

By the continuous rail thus made by my invention, the ends of the rails are protected from being bruised, battered, or destroyed, the switch-chair is less liable to be broken, and the danger of breakage of the wheels or machinery is lessened, and all shock to passing engines or cars is removed.

To enable others skilled in the art to make and use my invention, I now proceed to describe the same with reference to the accompanying drawings.

The permanent straight track is represented at B B, Figs. 1 and 2, the permanent portion of the side track or turn-out at D D, Figs. 1 and 2, and the switch or movable portion of the track at C C, Figs. 1 and 2.

A A, Figs. 1 and 2, represent the attachments, the application of which to the main and switch rails constitutes my invention, and A, Fig. 3, a cross-section of the same. The attachment A is a piece of an ordinary T-rail, of which the flange on one side is cut away, as shown in Fig. 3. When the attachment is placed alongside of a rail, with the heads of the rail and attachment in close contact, the flange of the rail and the vertical plane formed by cutting away the flange of the attachment, as shown in Fig. 3, will also be in contact.

The attachment A is fastened in this manner, by means of the bolts and nuts shown in Figs. 1, 2, and 3, to the outer fixed rail, B, and the inner movable rail, C, so as to lap a number of inches on the outer movable rail, C, and inner fixed rail, B, when the switch is closed for passage on the main track, as shown in Fig. 1.

The action of the attachment A is as follows: The tread of a wheel passing from the rail B to the rail C, or from the rail C to the rail B, is received and supported upon the attachment A at the instant of passing the open space between the rails B and C, thus preventing injury to said rails B and C. When the switch is open for passage from the main track upon the side track, or from the side track upon the main track, the inner attachment, A, moves with the inner movable rail, C, while the outer attachment, A, remains stationary with the stationary rail B, Fig. 2. The action of said open switch is the same in all respects as that of the ordinary stub-switch when open, and need not be described.

The movable rails C C are shifted by the rod E, connected with an ordinary switch-lever or any mechanism desired.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

1. The combination, with the rails of the

main and side track, the outer rail of the main track having a bearing-block attached to the outer side thereof and extending beyond the end of the rail, while the end of the opposite rail of the main track extends beyond the end of the rail of the side track of the switch-rails, one of which has a bearing-block attached to the side thereof, and arranged to project beyond the end of the rail, substantially as described.

2. In a railway-switch, the combination, with one of the main-track rails having a bearing-block secured to the outer side thereof, said bearing-block being of sufficient length to overlap the joint between the ends of the main-track rail and switch-rail, of one of the switch-rails having a bearing-block secured to the outer side thereof, and adapted to overlap the joint between the ends of the main-track rail and switch-rail, substantially as described.

ROLAND S. MINER.

Witnesses:
CHARLES B. STUART,
T. A. STUART.