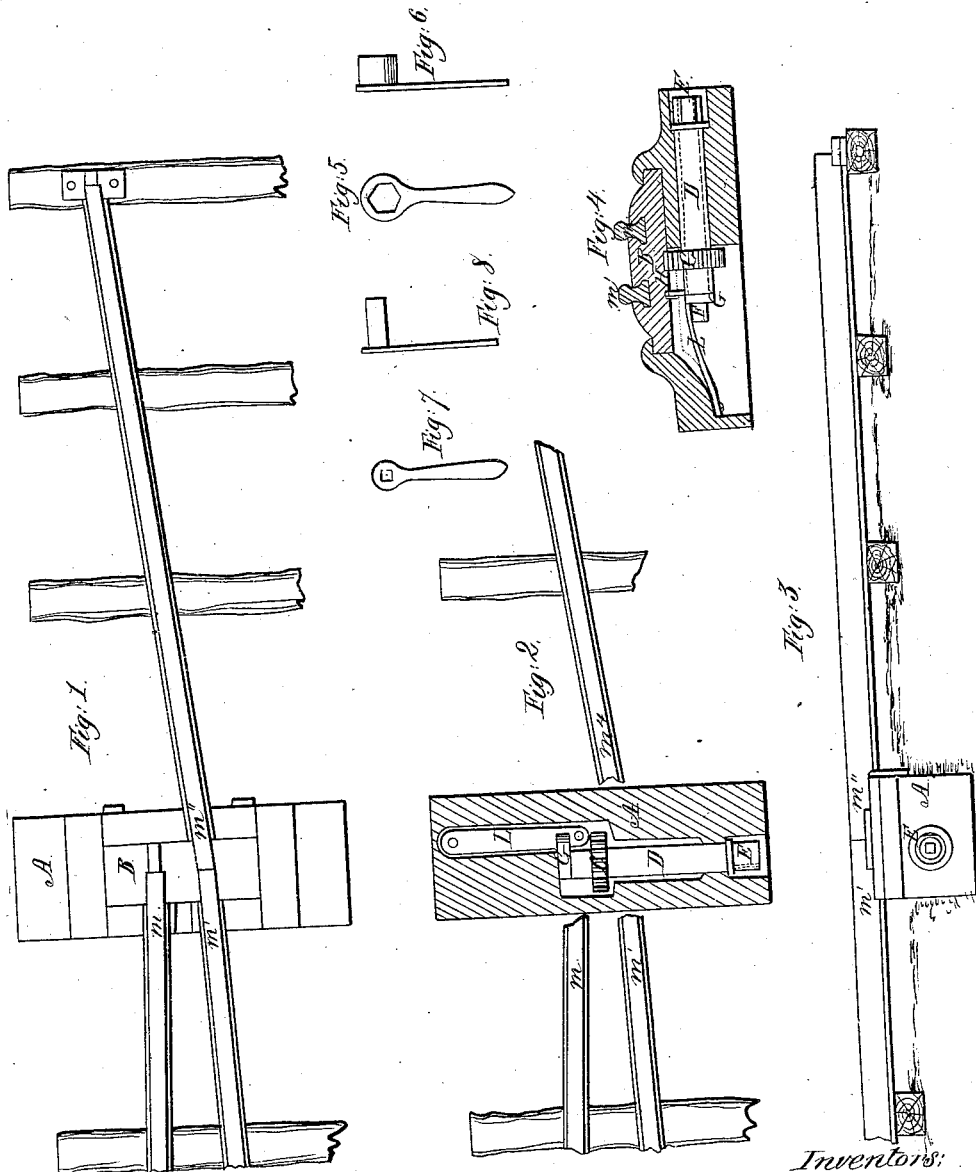


Watson & Miller,

Railroad Switch,

N^o 50,972,

Patented Nov. 14, 1865



Witnesses:
H. A. Shreve,
William Dunham.

Inventors:
Albert Watson,
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UNITED STATES PATENT OFFICE.

ALBERT WATSON AND GEORGE W. MILLER, OF SPRINGFIELD, MASS.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. 50,972, dated November 14, 1865.

To all whom it may concern:

Be it known that we, ALBERT WATSON and GEORGE W. MILLER, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented a new and useful Improvement in Railroad-Switches; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

In the drawings, Figure 1 is a plan view of my improvement; Fig. 2, a horizontal cross-section; Fig. 3, a side view, and Fig. 4 a vertical cross-section. Figs. 5, 6, 7, 8 represent the wrenches or keys used with this invention.

Our improvement consists in an arrangement by which the switch can be locked in one position, from which it cannot be removed by careless or malicious persons, or, in fact, by any one not in possession of the keys. Its construction and operation we will now describe.

In construction it consists of a block, A. On the top of this block I place the sliding chair B. In this sliding chair and the mechanism for moving and holding it consists our invention. The moving mechanism consists of a pinion, C, working in a rack on the under side of the piece B. This pinion is fastened to the shaft D, which is turned by a wrench applied at E. Through the inside of this shaft D runs another, F. On the inside end of this is a cam, G, which operates the spring L, so that when the shaft F is turned the pin H may be pulled downward out from the slide B, thus leaving it free to move.

The operation of this arrangement is simply to place the switch in the desired position, and

then, by means of wrenches applied to the ends of the two shafts at E, slide the piece B onto the end of the rail. This piece being slid onto the end of the rail completely locks it in position.

The advantages of this arrangement are obvious, for we are able to completely lock the rail in its required position, and the wrenches being taken off and carried away there is no possibility of its being opened, and the nuts or heads on the ends of the shafts at E are placed far enough into the block A to render it impossible for it to be opened with any other instrument than the proper wrenches. It is simple and compact, and consequently can be applied with but little cost.

Now, having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The sliding piece B, when used in combination with a chair, A, and the rails *m m' m''*, substantially in the manner and for the purpose set forth.

2. The combination of the shaft D and pinion C with the block A and slide B, substantially in the manner and for the purpose described.

3. The combination of the shaft F, cam G, pin H with the block A and slide B, substantially in the manner and for the purpose described.

ALBERT WATSON.
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Witnesses:

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