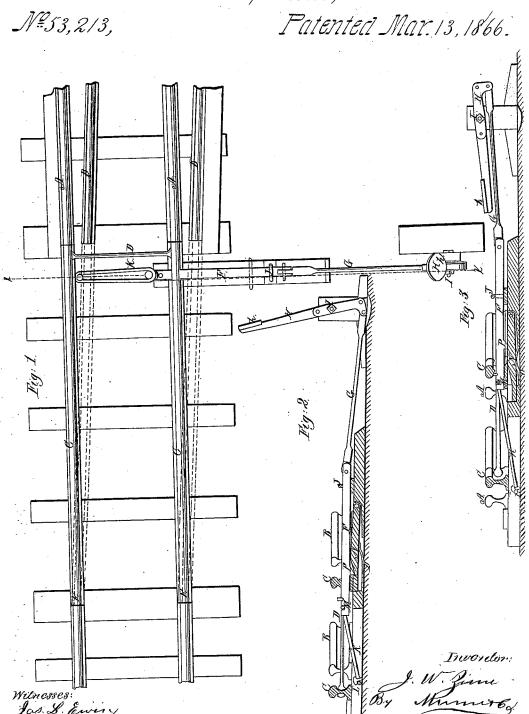
J.M.Zinn,

Railroad Switch,



UNITED STATES PATENT OFFICE.

JOHN W. ZINN, OF CALDWELL, NEW JERSEY.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. 53,213, dated March 13, 1866.

To all whom it may concern:

Beit known that I, John W. Zinn, of Caldwell, in the county of Essex and State of New Jersey, have invented a new and useful Improved Railroad-Switch; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, sufficient to enable one skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, which are made part of this specification, and in which-

Figure 1 is a plan view. Figs. 2 and 3 are sections on the line x x Fig. 1, the former showing the switch in connection with the main track and the latter in connection with the turnout.

The invention consists in the particular devices for operating the switch, which are a lever to open it or make the connection with the turnout or siding, and a spring to close it automatically when the pressure upon the lever is withdrawn.

It is the purpose of the arrangement that the switch shall only be disconnected from the main track while the switchman is holding it and shall fly back as soon as the pressure is withdrawn, so that unless actually and purposely held in connection with the turnout or siding rails, the main track will remain intact and locked in position. The movement of the switch-lever unlocks and changes the switch by one motion, when the switch-tender takes his seat upon the switch-lever until the train has passed onto the turnout. When he rises the switch is automatically restored to its former position in connection with the main track and locks itself. The switch cannot be

accidentally moved from the main track or be left in connection with the turnout.

In the drawings, A A are the rails of the main track, and B B the rails of the turnout or siding. The switch-rails C C are connected by a cross-bar, D, and pivoted at E E. F is a bar which moves horizontally in the bearing J when the lever H is vibrated, being connected thereto by the rod G, which is pivoted to them respectively. The bar F, being passed through the switch-rail and secured thereto, is made the means of its motion by the lever H, and is also connected by the elastic band K to the pin L, which tends constantly to restore the switch-rail to the normal position shown in Figs. 1 and 2. N is a latch having a spring, O, below it, and on its upper edge and near the end is a depression in which rests the projection P of the bar F when the main track is intact, the end of the latch N resting against the rail. As the bar F is moved the projection P passes down the latch N and unlocks the rail, and when the bar is restored the pro jection takes its former place in the latch N, the latter flying up and locking the rail.

Having thus described my invention, what I claim therein as new, and desire to secure

by Letters Patent, is-

The combination of the lever H, locking-bar F, spring K, switch-rails C C, projection P, and spring-latch N, constructed and operating substantially as described and represented.

The above specification of my invention signed this 18th day of January, 1866. JOHN W. ZINN.

Witnesses:

JOHN A. WIEDERSHEIM, JAMES L. EWIN.