

A. Hartman,

Railroad Switch,

N^o 58,818.

Patented Oct. 16, 1866.

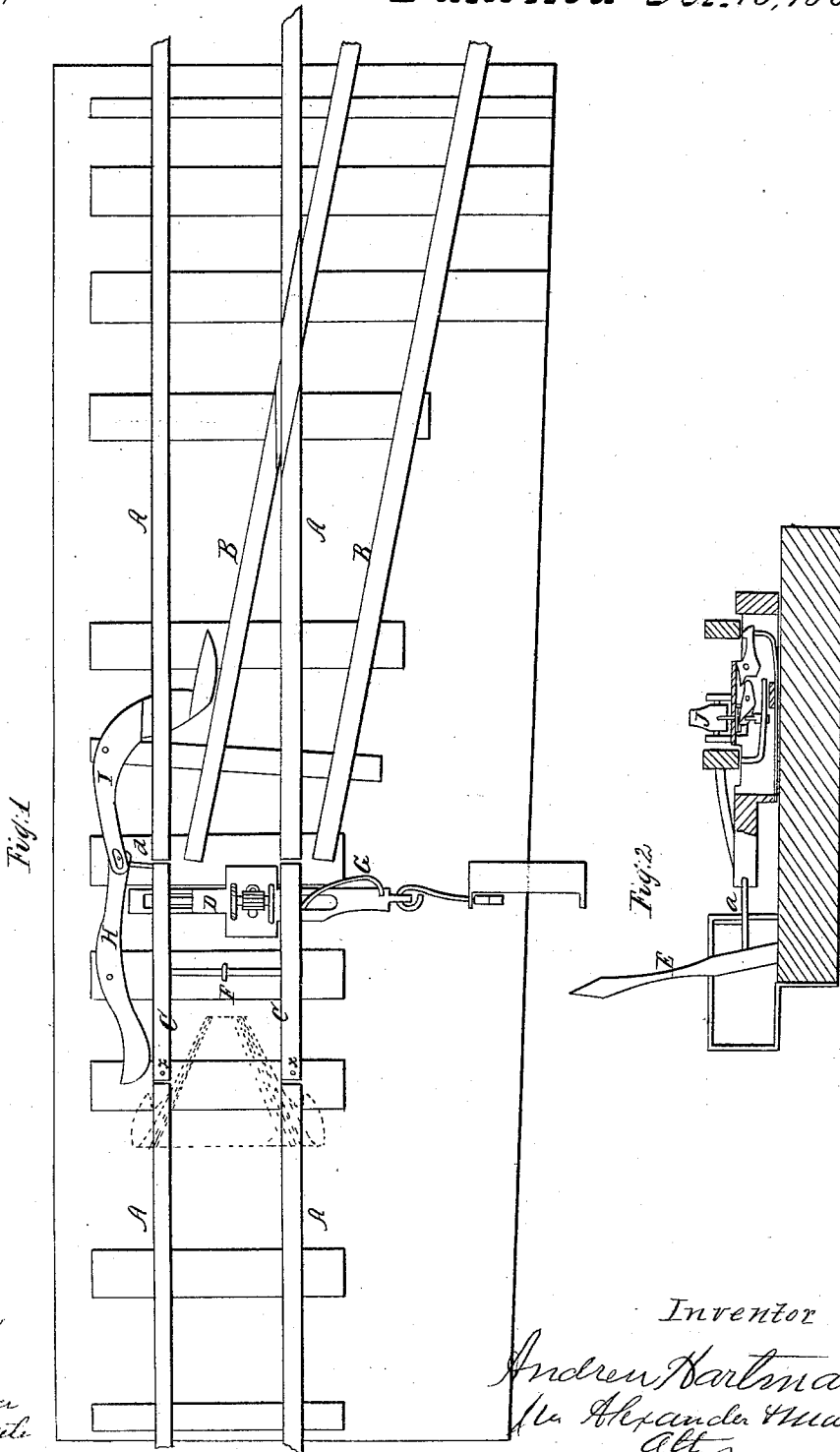


Fig. 1

Fig. 2

Witnesses

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UNITED STATES PATENT OFFICE.

ANDREW HARTMAN, OF CANTON, OHIO.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. 58,818, dated October 16, 1866.

To all whom it may concern:

Be it known that I, ANDREW HARTMAN, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Railroad-Switches; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, A A represent the rails of the main track, and B B the rails of a side track, connecting by switch-rails to the main track.

C C represent the switch-rails, which are pivoted, as shown at *x x*, at one end, so that their pivoted ends will always form connection with the main rails or track. The other ends of the rails C are movable. These ends are connected together by means of a bar, D, which underlies them. This bar D is connected by a rod, *a*, to a lever-handle, E. This lever-handle moves the two switch-rails C C when desirable. The rails C C are also connected together by means of a rod, F. The movable ends of the rails C are not permanently attached to bar D, but may slide sidewise upon said bar without its moving.

G represents a spring, one end of which is secured to bar D and the other presses against one of the rails C.

H and I represent two irregular-shaped levers with beveled ends, which are connected together at their inner ends by a pin on one sliding or stationary in a groove or slot in the other. The pin which connects these two levers connects a rod, *d*, to them, which said rod *d* also connects with one of the rails C. The levers H and I are pivoted near their centers to two of the cross-ties under the rails, as shown. The object of these levers, when used with the foregoing-described devices, is to operate the switch-rails by the use of a small device on the cow-catcher.

The nose of a cow-catcher is represented in red lines, and to this nose is connected by pivots at its forward end two small bars with beveled ends, which drop down by the side of the rails when desired, and operate upon the levers H and I, and, by means of them, upon the rails C, throwing said rails C in connection with the side rails, B B.

The bars which operate the levers H and I are connected at their rear ends by means of a rod, and by this rod they are lowered to op-

erate upon the levers spoken of, or are raised so that they will not touch them.

When a train coming toward the switch desires to switch off the bars on the end of the nose are dropped, and when the engine reaches the switch-rails its cow-catcher moves the rails as described, so that they connect with the rails of side track, B B. When the rails C C are thus moved by the engine, and form connection with the rails B B, a catch under said rails C C holds them in this position until the train passes over. Upon the last car of the train a device is intended to be made which will strike the turning-lever J, (seen in Fig. 2,) which will throw the catch out and allow the spring G to push the rails back to connect with the main rails.

A device for catching the rails C is shown under the turning-lever J; but this device may be varied in its form and any known device may be used for a catch for the rail, which can be loosened by the turning of lever J in either direction.

When the train desires to leave the switch its cow-catcher operates upon lever I in a manner similar to the way it operated upon lever H, and the rails C are thrown in connection with the side rails to allow said train to pass to the main rails; and after it (the train) has passed, its rear car, with its device, which may consist simply of a depending rod, operates upon turning-lever J, and the rails C are again thrown back to the main rails by spring G.

Having thus fully described my invention, what I claim is—

1. The turning-lever J, when used with the bar D, rails C C, and a catch under said rails, as and for the purpose specified.

2. The spring G, when used with the rails C C, the lever J, and catch under the rails C, as and for the purpose herein specified.

3. The arrangement of the levers H and I, the rails C C, and bar D with the turning-bar J, spring G, and lever E, for operating the switch automatically as well as by hand, substantially as specified.

In witness that I claim the foregoing I have hereunto set my name in presence of two witnesses.

ANDREW HARTMAN.

Witnesses:

GEO. W. RAFF,
W. W. CLARK.