

C. H. Haskins,

Railroad Switch,

N^o 42944.

Patented May 31, 1864

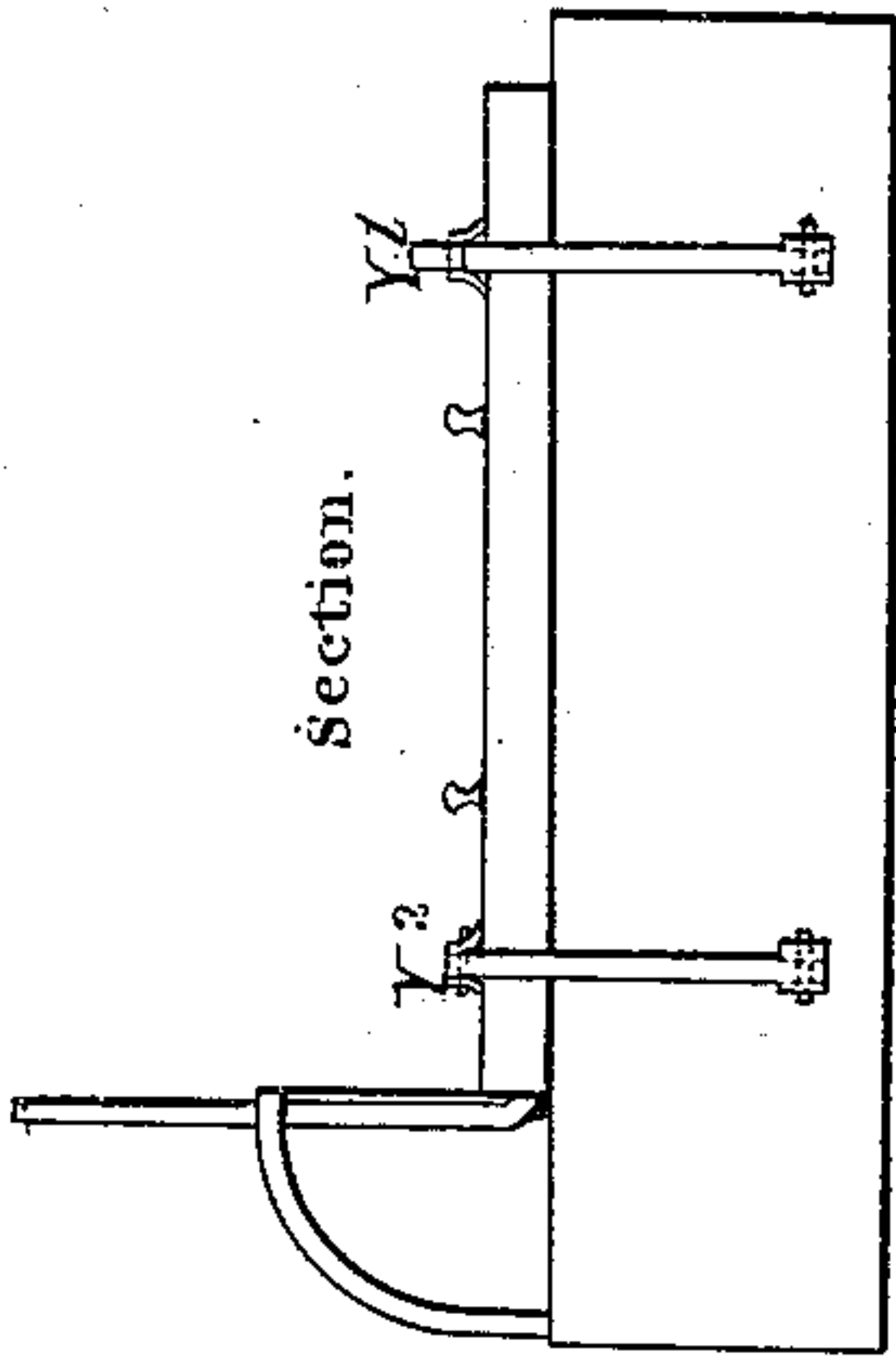


Fig. 3

Fig. 1

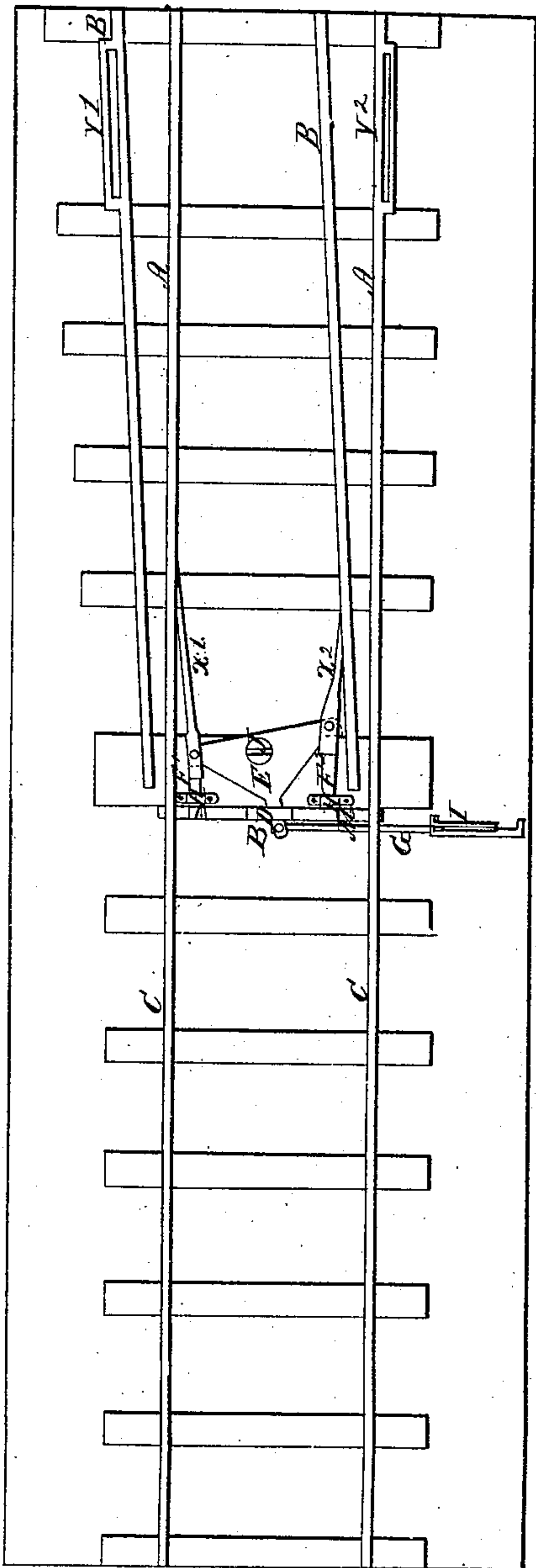


Fig. 2

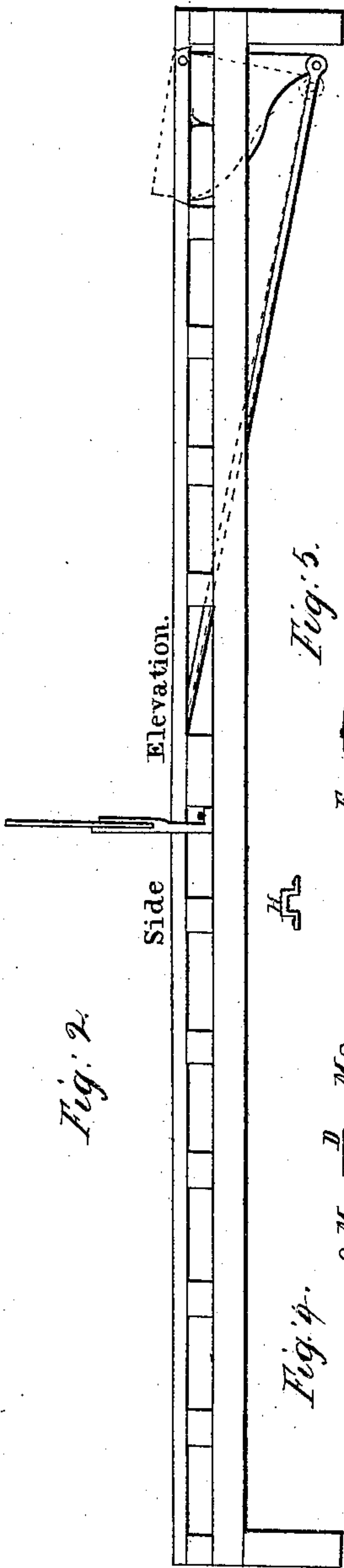


Fig. 5

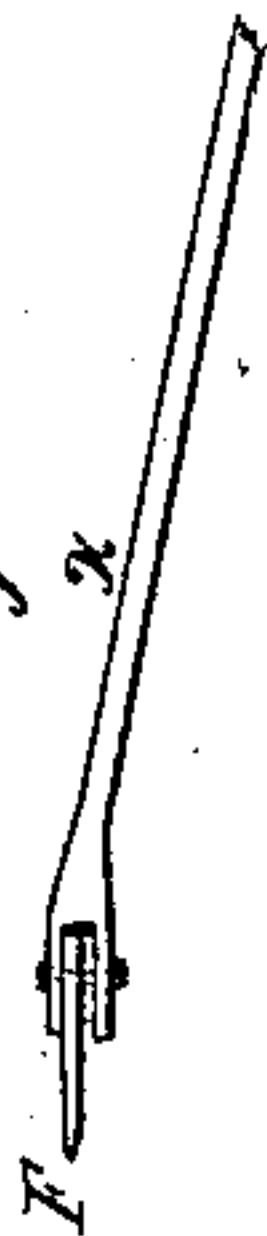


Fig. 4



*Witnesses:
William Holmes
Chas. E. Hux*

*Inventor;
C. H. Haskins.*

UNITED STATES PATENT OFFICE.

CHARLES H. HASKINS, OF ST. LOUIS, MISSOURI.

IMPROVED RAILROAD-SWITCH.

Specification forming part of Letters Patent No. 42,944, dated May 31, 1864.

To all whom it may concern:

Be it known that I, CHARLES H. HASKINS, of the city and county of St. Louis, in the State of Missouri, have invented a new and useful Improvement in Railroad-Switches; and I do hereby declare that the following is a full and exact description, reference being had to the accompanying drawings and the letters of reference thereon.

This invention relates to that class of switches which are moved automatically, or by the action of the locomotives or cars passing over them; and it consists of apertures made in one rail of the main track and in one rail of the side track, in which apertures are placed cams or levers, so arranged in the slots of the rails as to project above the same sufficiently to cause the locomotive or car wheels passing over them to depress them, thereby imparting motion to a rod or rods connected with them, and by them to the switch or rails to be moved, and thus returning them to their proper position, should they from any cause become displaced; and it further consists of a triangle or right-angle lever fastened to the cross-bar, or in some manner attached to it, on which the rails rest, or which fasten or connect the two switch-rails together. To each end or to the two short arms of this triangle or right angle lever are attached latches, made to work through grooves formed in a bar for that purpose. The free ends of these latches are made to rise upon an inclined surface formed upon the bar connecting the two outer ends of the switch-rails. This bar is also provided with slots or grooves, into which the latches drop or spring from the inclined planes or surfaces and fasten and retain the switch in its proper position. This cross-bar has near its center longitudinally a slot, through which the long point of the triangle or right-angle lever passes. To the end of this triangle or right-angled lever is attached, after passing through the slot in the bar, as described above, a rod, which is attached at its other end to the hand-lever or target, by which this switch may be moved by hand as an ordinary switch.

A A represent the rails of main track; B B, rails of side track; C C, switch-rails; D, cross-bar at free end of switch-rails; E, triangle by which switch is moved; F², latch which locks switch on side track; G, switch-rod running

from point of triangle E, and attached to hand-lever or target on switch-frame; I H H, two collars through which latches F' and F² work freely forward and backward, or upward and downward, but not laterally; J, center-pin upon which triangle E turns; K, slot in cross-bar D, (see Figure 4,) through which the point of E passes; X' and X², connecting-rods from triangle E to treadles in track-rails Y Y; M' M², notches in cross-bar D, into which (see Fig. 4) latches F' and F² spring to hold switch-rails in position either track.

In all figures like letters refer to like parts.

Action: The switch may be moved by hand by moving the target or frame I, or by the wheel of an engine or car rolling upon either one of the treadles at Y Y, which may be elevated to the position shown by the dotted line of Y, Fig. 2. When, either by the target or the treadles, the switch is moved, its action is as follows: The slot K in cross-bar D is sufficiently long to allow E to move without moving bar D, until latch F' is drawn back out of the notch in bar D. Then the point of E moves bar D, thus moving the switch-rails C C from tracks A A to B B. The latch F² meanwhile is moving forward, and as notch M has not yet reached the point to be entered by F², the latch F² rises on top of bar D, and when D, sliding under F², has brought notch M under the latch F², it springs downward into M and fastens the switch-rails into their new position.

The treadles Y Y are elevated or depressed by the movement of the switch-rails C C—that is to say, when the switch is in the position shown in Fig. 1—that is, upon the main track—then the treadle on the main track Y² is depressed to allow the trains to pass in either direction, and the treadle Y' on the side track is elevated, (see dotted line of Y, Fig. 2,) and a train passing from the side track toward the switch must, by the rolling of the first wheel of the engine or other suitable device, depress Y', drawing upon rod X, attached thereto, and changing the switch precisely as described above, at the same time elevating Y² on the main track as a guard for the first train coming on main line toward the switch. The treadle upon the track for which the switch is right is always depressed—that upon the track for which the switch is wrong is always elevated.

The action and movement of all the parts is the same in either direction, whether accomplished by movement of the target, by hand-power, or the depression of the treadles by wheels or other devices.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the treadles with the slotted rails at Y Y.

2. The combination of the treadles at Y Y, a rod or rods, X X, and a triangular lever, E.

3. The combination of the triangular lever E with the latches F' and F² and a rod or cross-bar, D, connecting the rails to be moved.

CH. H. HASKINS.

Witnesses:

C. B. CRANSON,
F. A. FOLLETT.