(No Model.)

R. H. HAWKES

RAILROAD SWITCH.

No. 457,776. Patented Aug. 18, 1891.

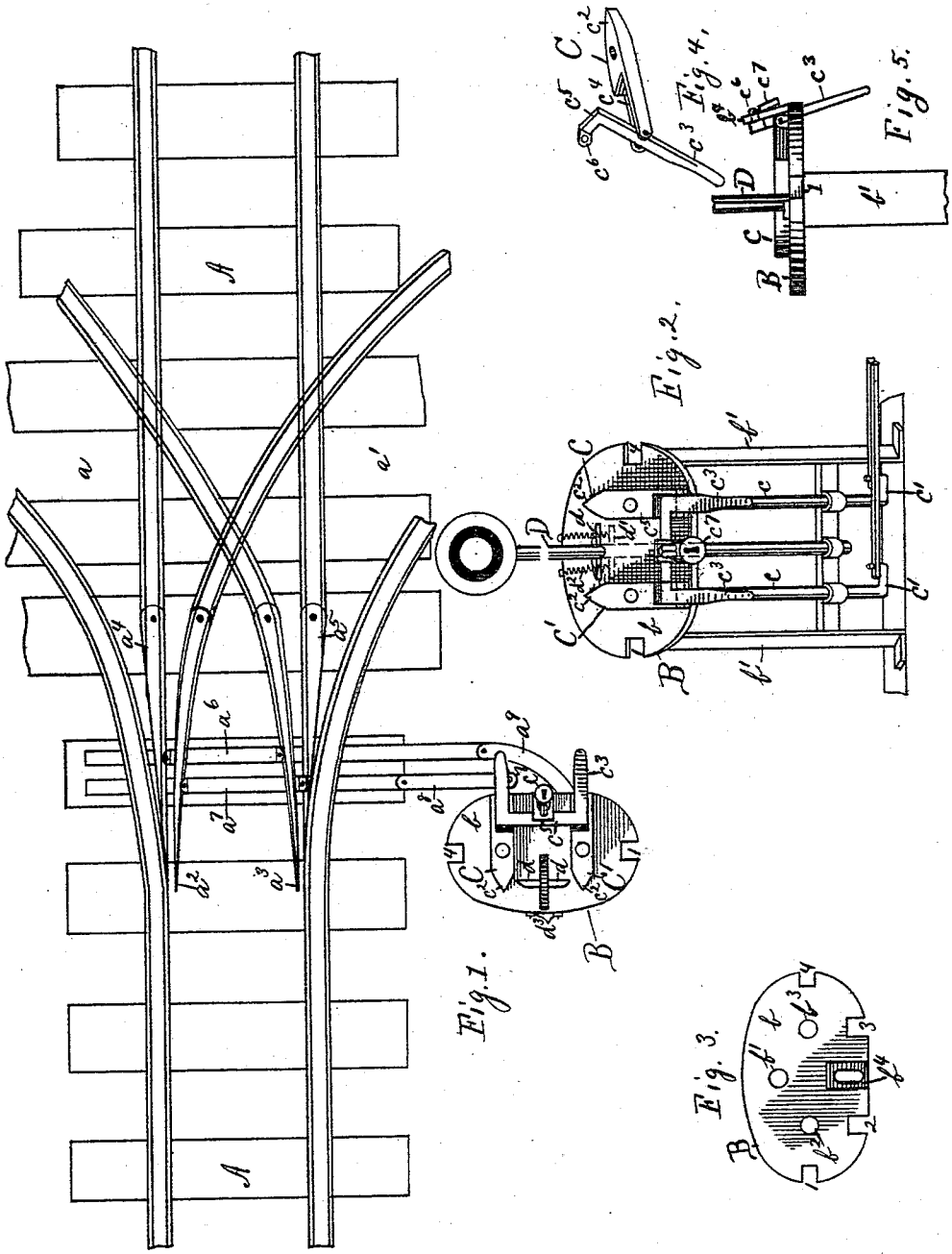


Fig. 1.

Fig. 4.

Fig. 5.

Fig. 2.

Fig. 3.

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RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 457,776, dated August 18, 1891.

Application filed March 5, 1891. Serial No. 383,866. (No model.)

To all whom it may concern:

Be it known that I, RICHARD HUMPHRY HAWKES, a citizen of the United States, residing at Boughton, in the county of Nevada and State of Arkansas, have invented certain new and useful Improvements in Railway-Switch Stands; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to mechanism for operating railroad-switches; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a top plan view of my invention. Fig. 2 is a detail view of the table and attachments in perspective. Fig. 3 is a top plan view of the table-top, and Fig. 4 is a detail perspective view. Fig. 5 is an end view of the top of the table, showing the position of flange b^4 and handle c^3 locked therein.

My invention is described as follows:

It consists of a main track A, having the side tracks a and a'. Side track a is provided with the tongue a^3 and side track a' is provided with the tongue a^2. The tongues a^4 and a^5 belong to the main track. The tongues a^4 and a^3 are connected by the rod a^6, which passes under the rails and out beyond the end of the tie on one side of the track, and tongues a^5 and a^2 are also connected by a rod a^7, which also passes out beyond the end of the tie on the same side as rod a^6. The outer ends of said rods are provided with the pivoted extensions a^8 and a^9. On one side of the track is placed in a suitable position a table B, having the top b and suitable legs b'. The top b is provided with the notches 1, 2, 3, and 4, Fig. 3, perforations b', b^2, and b^3, and flange b^4, provided with a perforation. Through the perforations b^2 and b^3 pass the upper ends of the upright shafts c, the lower ends of which are provided with the elbow-extensions c', and on their upper ends are rigidly secured the blocks C and C′, the rear ends of which are beveled or provided with noses c^2, and in their front ends are pivoted handles c^3. (See Fig. 4.) The blocks are further provided with slots c^4 to receive the rear ends of the pivoted handles when the same are swung into a horizontal position. Said pivoted handles are further provided with the angular extensions c^5, having the perforated lugs c^6, adapted to pass through the perforation in the flange b^4 and secured therein by means of a lock c^7 or equivalent device. On the elbow-extension of the upright shaft c are pivoted the free ends of the pivoted extensions a^8 and a^9, respectively.

Through the perforation b' in the table-top b passes an upright shaft D, the upper end of which is provided with a target or other signal, and a cross-piece d, which works on the upper face of the table, and on the under face of the table and attached to said shaft D is a similar cross-piece d', (see dotted lines, Fig. 2,) to the ends of which are secured the springs d^2, which hold said shaft in one position. The tension of said spring is regulated by the nuts d^3. (See Fig. 1.)

My invention is operated as follows: When it is desired to run the cars on the main track, the blocks C and C′ are in the position as shown in Fig. 1, and the tongues of the switches are in the shown position. When it is desired to run the cars on the side track a, the lock c^7 is removed from the perforation in the lugs c^6, attached to the angular extension c^5 of the pivoted handle c^3 in the block C′. The handle c^3 is then raised to a horizontal position, and the said block by means of said handles is revolved toward notch 1, and when said handle c^3 is over said notch it is allowed to fall down in said notch and thereby hold the tongues a^3 and a^4 firmly in position. When the block C′ is turned, the upright shaft c, attached to said block, is swung around and the rod a^6, attached to the elbow end of said shaft, is drawn toward the table and the tongues attached to said rod are brought into the desired position. When the block C′ swings around toward notch 1, the nose c^2 on the rear end of said block engages the cross-piece d on the target-shaft D and causes said shaft to swing around at right angles, and when the block C′ is brought back to its former position the springs d^2 will pull

the shaft D back to its normal position. When it is desired to run the cars on the side track a', the handle in block C is operated in a similar manner, as described, and the block C, shaft c, rod a^7, attached to the under side of switch-tongues a^5 and a^2, arc also operated in a similar manner, and when this switch is operated it will be seen that the target will be turned at right angles in a similar manner, as described. Therefore it will be observed that when the switches are set for a clear main line the signal is parallel to the track; but when either switch is set for the siding the signal is at right angles to the track.

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

1. The mechanism for operating a switch, consisting of the table B, having in its top the notches 1, 2, 3, and 4, and suitable perforations, blocks C′ C, having the noses c^2 and pivoted handles c^3, shafts c, having the elbows c', adapted to connect with and operate the switch-tongues by means of rods a^7 and a^6, and target-shaft D, having the cross-pieces d and d' and adapted to be held in position by springs d^2, substantially as shown and described.

2. The combination of the table B, having the perforation b', perforated plate b^4, and notches 1, 2, 3, and 4, rod D, pivoted in said peforation b' and in a corresponding socket in the base of said table and carrying on its upper end a signal, cross-piece d', rigidly secured to said rod under the top of the table, coil-springs d^2, one end attached to each end of said rod and their other ends to the periphery of the table, rod d, rigidly attached to said rod D, working on the upper face of said table, and blocks C, pivoted to said table through the perforations $b^2 b^3$ and having the noses c^2 and pivoted handles c^3, said blocks and springs adapted to operate said target, substantially as shown and described, and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD HUMPHRY HAWKES.

Witnesses:

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