

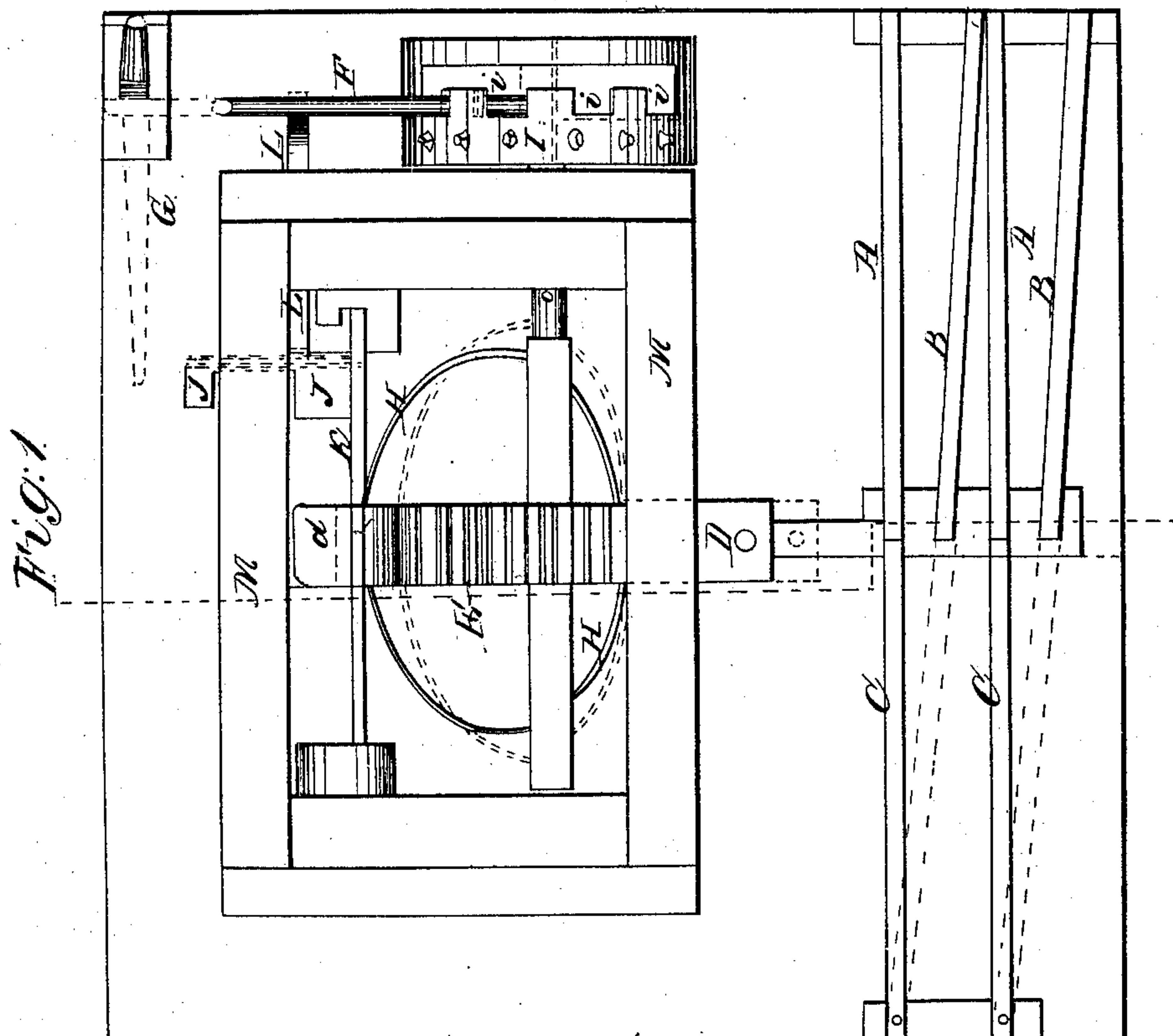
Sheet 1 - 2 Sheets.

J. F. Jones,

Railroad Switch,

N^o 62,544

Patented Mar. 5, 1867.



Witnesses;
Geo. W. Russell
Julon B. Kemmer

Inventor;
Munn & Co
Attorneys for
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Supl.

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Fig. 3.

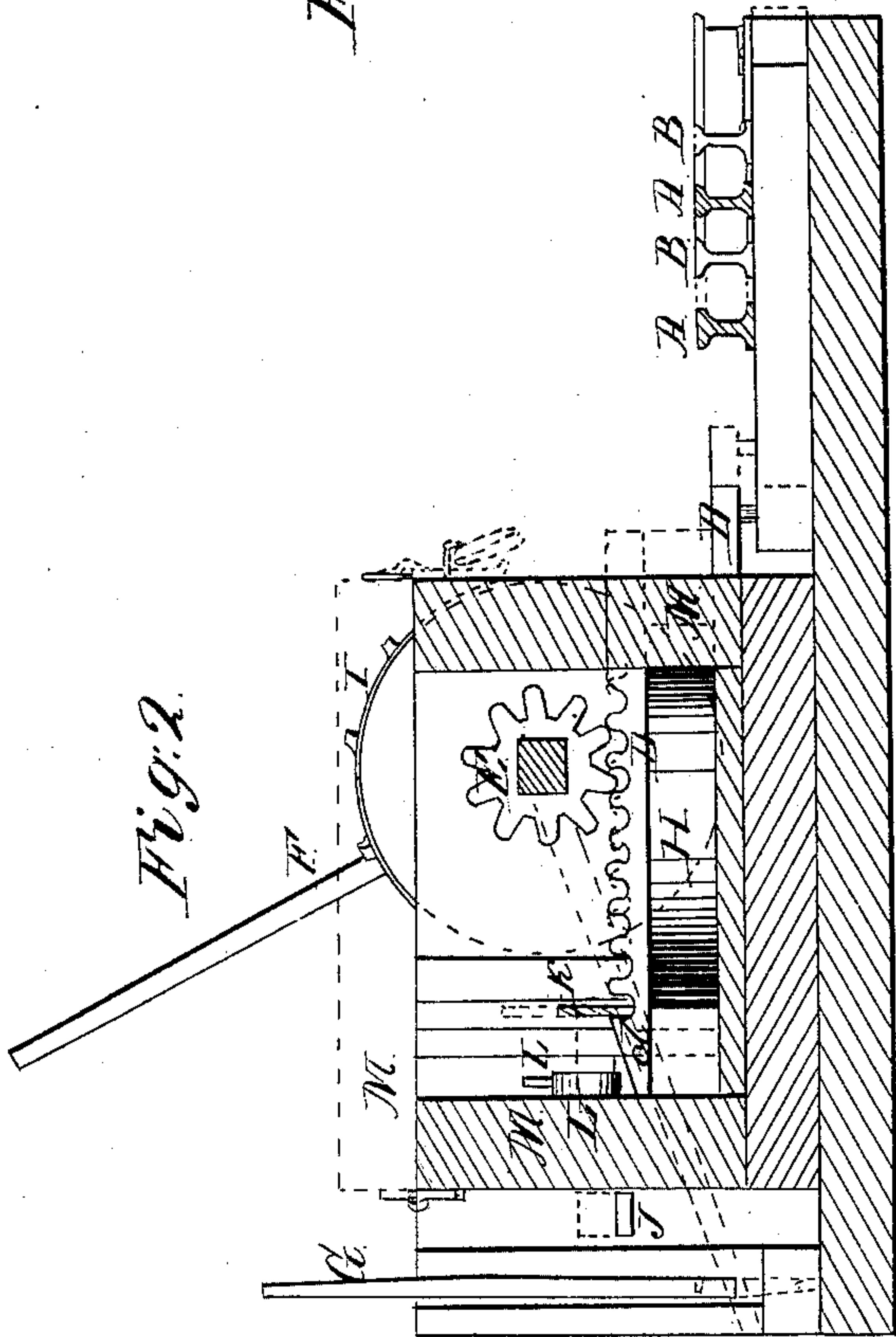


Fig. 2.

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United States Patent Office.

JUDSON F. JONES, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 62,544, dated March 5, 1867.

IMPROVEMENT IN SWITCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JUDSON F. JONES, of the city and county of Washington, and District of Columbia, have invented a new and improved Self-Closing and Self-Locking Railroad Switch; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable one skilled in the art to which the invention appertains to make use of it, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a plan view.

Figure 2 is a vertical section.

This switch-lock holds the switch upon the main track except while forcibly and temporarily held upon the turn-out. When the switch-lever is released a spring returns the switch to the main track, the locking-bar automatically engaging with a tooth of the switch-bar. The locking-bar cannot be disengaged except by the key, which elevates it, and is released for subsequent engagement by the descending switch-lever.

In the drawings, A A are the rails of the main track, and B B the siding. C C are the switch-rails; D is the switch-bar, which has on its upper side teeth which are engaged by those of the cog-wheel E, which is rotated by the lever F to run the switch on to the siding. As a more convenient mode of holding down the switch-lever and giving a greater command when the train is moving, a secondary lever, G, is used to hold down the end of the lever F. The motion of the lever F, when exerted, is constantly against the power of the elliptic spring H, the latter constantly tending to restore the switch to the main track, and as the switch-bar returns the lock slides up the inclined portion *d* of the switch-bar, locking behind the first tooth, as seen in fig. 2. The notches *i i* in the segment I are intended to adapt the lever to move the switch to different tracks. It is the design that the end of the lever F shall rest upon the ground, and it is adjusted into such one of the notches *i i* as shall give it the required range to move the switch rail, more or less, to bring it into correspondence with such one of the lines of rails as may be desired. The key J, shown detached in Figure 3, is introduced at the side of the box which contains the mechanism, and when it is rotated, as shown in red lines in fig. 2, to hold up the locking-bar K, the switch-bar D can be moved by the cog-wheel E, but when the bar is down it locks the switch-bar and switch, and always shut against the main track, as it cannot be locked in any other position. The locking-bar K being up, and the switch-lever F being moved, the latter, in descending, pushes the trigger L and upsets the key J, so that it drops the locking-bar. The tooth, however, has passed the locking-bar, and the switch-bar D is free to move out. As soon as the train has been run on to the siding the lever F is released, and the spring H restores the switch and the bar D, the locking-bar K shutting down behind the tooth and locking the switch. The key J is removable, and the switch-tender carries it with him. It forms the only means of reaching the locking-lever to disengage the switch-bar. The box M encloses the apparatus, and is locked securely, so that it cannot be tampered with. The whole forms a self-closing and a self-locking switch, which is always safely locked on the main track, except when forcibly detained by the switch-guard; and the switch cannot be operated except by the one who has the key.

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

The combination of the switch-lever F, cog-wheel E, cogged-bar D, with incline *d*, gravitating locking-bar K, removable key J, and trigger L, operating substantially as described and represented.

JUDSON F. JONES.

Witnesses:

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SOLON C. KEMON.