J. Alcorn,

R.R. Switch.

No. 113,002. Patented Mar. 28. 1871

Fig. 2.

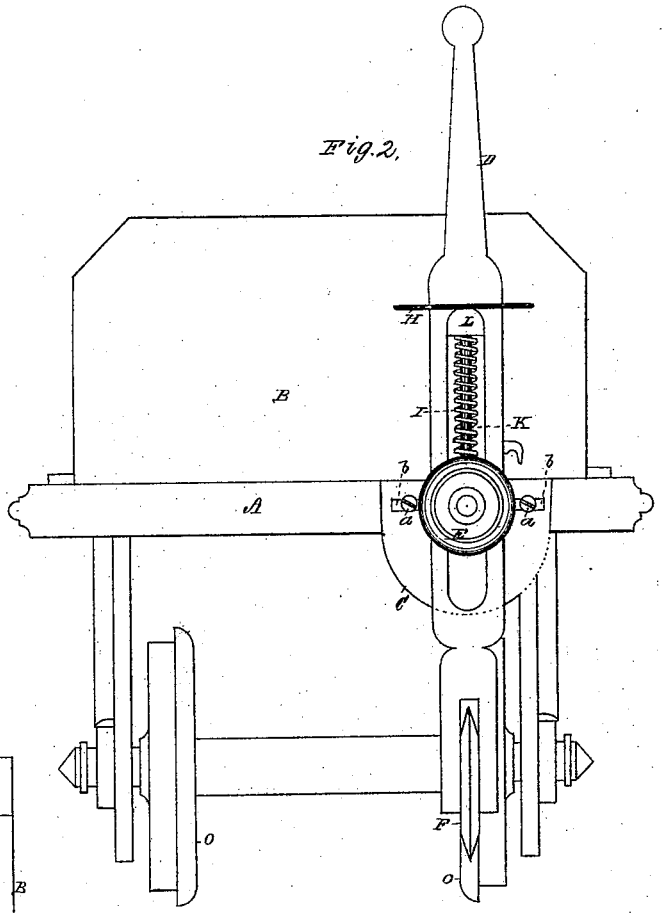
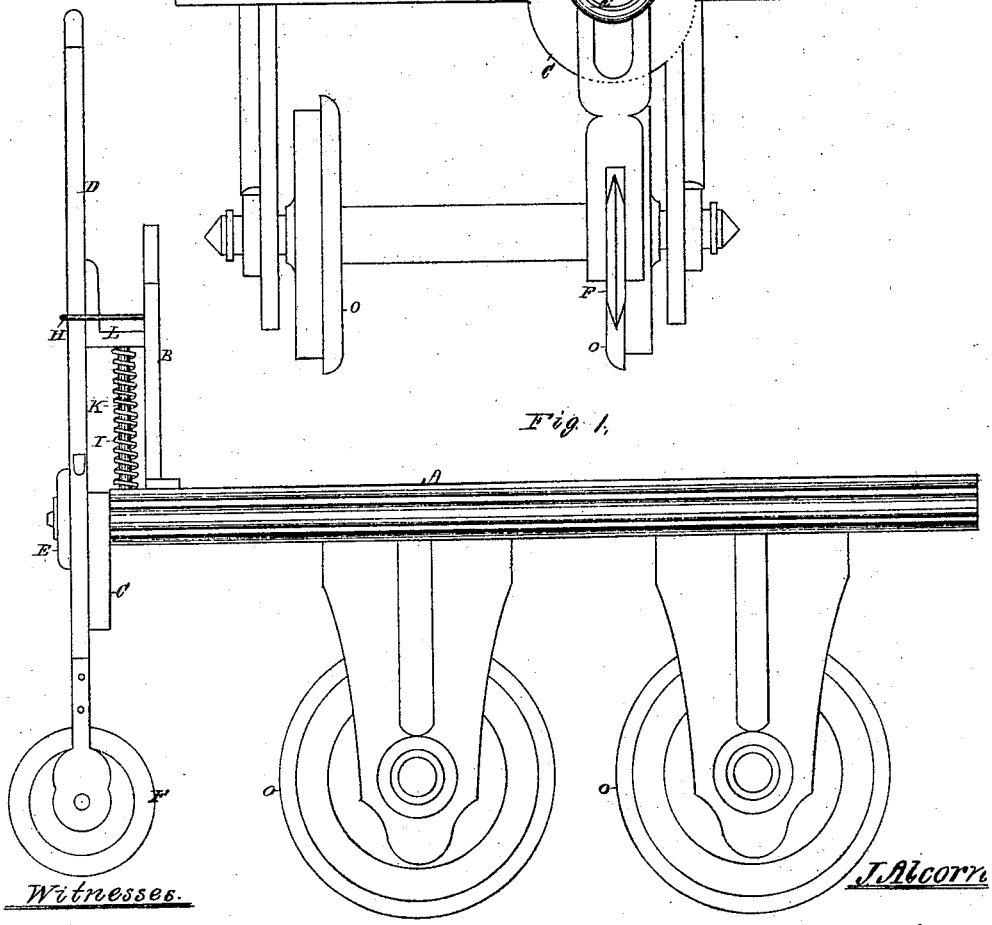


Fig. 1.



Witnesses.

Chas. Gould

F. C. Hale

J. Alcorn

by his attorney

A. P. Hale

United States Patent Office.

JAMES ALCORN, OF CHARLESTOWN, MASSACHUSETTS, ASSIGNOR TO GEORGE R. KELSO, OF SAME PLACE.

Letters Patent No. 113,002, dated March 28, 1871.

IMPROVEMENT IN APPARATUS FOR OPERATING RAILWAY-SWITCHES.

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

To all persons to whom these presents may come:

Be it known that I, JAMES ALCORN, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Operating Railway-Switches; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 denotes a side elevation of a railway truck-frame and its dasher having my invention applied thereto.

Figure 2 is a front elevation thereof.

My invention has reference to a simple and effective means of operating the switch-rail of turnouts in horse railway-tracks, the object being to dispense with the extraordinary manual power required to adjust the switch and operate the same directly from the car.

In the said drawing—

A denotes the common truck-frame of a railway-carriage, mounted upon four wheels, O O O O, and provided with a dasher, B, in the ordinary manner.

To the front part of the frame A a segmental plate, C, is affixed, by means of adjustable-screws, *a a*.

To this plate the actuating-lever or hand-bar D is pivoted by means of a flanged stud, E, the said lever having a longitudinal slot, *b*, made therein, and being otherwise so formed and applied as to be capable not only of moving upward and downward, but of being vibrated or turned upon the said stud, as to fulcrum either to the right or left, as circumstances may require.

Within the forked lower end of this lever a friction-wheel, F, is disposed, as seen in the drawing, or, if preferable, the latter wheel may be dispensed with and the said lower end be formed wedge-shaped.

H is a check or guard, applied to the dasher to prevent too great lateral vibration of the lever.

I is a spring, which is coiled spirally around a rod, K, attached to an arm, L, affixed to the rear part of the lever, and extending down and through a hole made vertically through the frame A, the object of such spring being to retract the lever, after having been forced downward, and maintain it in its normal position when not in use.

I do not limit my invention to arranging the actuating-lever in front of the dasher, as it may be disposed in rear thereof for this purpose.

Nor do I restrict myself to the use of a segmental adjusting-plate, as the lever may be applied, by means of a flanged or headed fulcrum-pin, directly to the dasher or to the front of the car; but the segmental plate enables the lever to be readily adjusted with respect to the medial line of the adjacent railway-wheel, as well as to be readily applied to or removed from the carriage whenever desirable.

Although I have shown the device as applied to only one end of the car, each car should be provided with one at each of its ends, the handles thereof being so disposed as to be readily grasped and operated by the driver.

My invention so made and applied is adapted to both opening and closing the switch-rail of a turnout, as may be desirable, and with equal facility, the actuating-lever or its wheel being so hung that when at rest its medial lines, and that of the wheels of the carriage upon the same side, are in the same vertical plane, so that, in operating the switch, the driver of the car has only to notice, in approaching a turnout, whether the switch-rail is open or closed, then move the hand-lever to the right or left in accordance therewith, at the same time pressing it downward so that its lower end shall impinge against the requisite side of the switch, when, by a slight lateral vibration of the lever in the proper direction, the switch will be properly adjusted.

I do not claim, broadly, operating the switch of a railway turnout by means of devices affixed to the car, as I am aware that several attempts to this end have been made; but such have been their complication and liability to get out of order as to be of no practical value, and have been discarded.

Neither do I claim the device, nor any feature thereof, or any part thereof, as shown and described in Letters Patent No. 91,663, and granted to Daniel Pike, June 22, 1869, as my invention differs therefrom both in construction and mode of operation.

I claim—

1. As a means of operating the switch-rail of a turnout in railway-tracks, the lever D, formed and pivoted to the car or segmental plate C in manner as described, and so as to be capable of being moved vertically and vibrated laterally, as and for the purpose set forth.

2. In combination with the same, the retracting mechanism or rod K and spring I, and the check or guard H, as and for the purposes set forth.

JAMES ALCORN.

Witnesses:

F. P. HALE,

F. C. HALE.