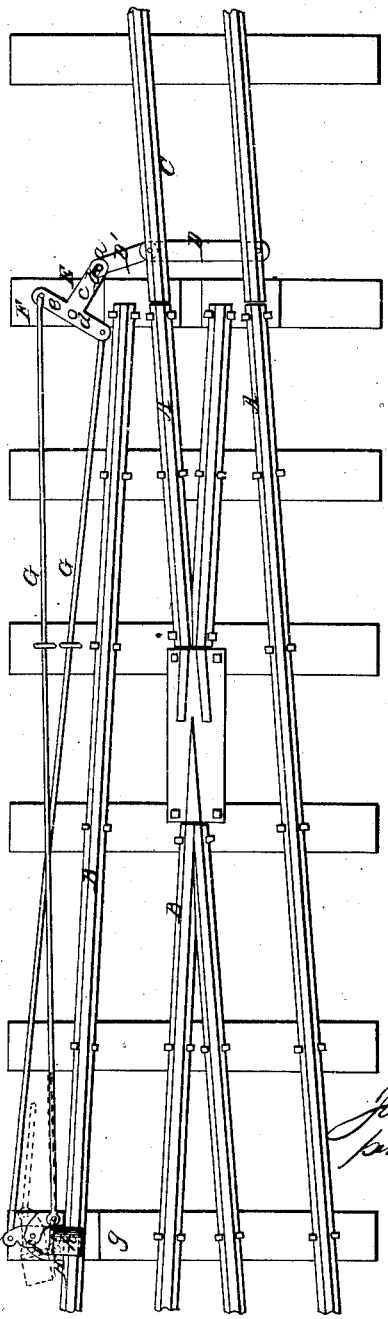
No. 45,313, PATENTED DEC. 6, 1864.

J. F. BRICKLEY.

RAILROAD SWITCH.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN F. BRICKLEY, OF HUNTSVILLE, INDIANA.

IMPROVEMENT IN RAILROAD-SWITCHES.

Specification forming part of Letters Patent No. **45,313**, dated December 6, 1864.

To all whom it may concern:

Be it known that I, JOHN F. BRICKLEY, of Huntsville, in the county of Madison and State of Indiana, have invented a new and useful Improvement in Railroad-Switches; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a plan or top view of my invention.

This invention relates to an improvement on a means employed for throwing automatically, by the movement of the switch, an obstruction or "scotch" across the rail or rails of a turn-out to prevent the cars switched off on said turn-out from passing back on the track, which means was patented by Jacob Beechler, assignor to myself, on the 19th day of July, 1859.

The within described invention consists in connecting the obstruction or scotch with the switch by two cross-rods and a T-shaped lever, arranged in such a manner as to enable the obstruction or scotch to be moved or adjusted with much less friction than formerly, the single rod and L-shaped lever used in the previous invention not working smoothly, and causing considerable embarrassment and frequently some delay in operating the switch.

A A represent the two rails of a main track, and B B the two rails of a turn-out, C being a switch arranged in the usual way, so as to be capable of forming a connection with either track, as may be desired. The two rails of the switch are connected by a cross-bar, D, the latter being connected by a link, D′, to which a T-shaped lever, E, is attached by a pivot, *a*, the latter passing through an oblong slot, *b*, in one arm, *c*, of the lever E. The lever E is connected by a fulcrum-pin, *d*, with a sleeper, F, on which the free or disengaged end of the switch rests or works.

G G are two rods, which are attached one to each end of the arm *e* of the lever E. These rods cross each other, and they are connected at their opposite ends to a bar, H, which is secured by a central pivot, *f*, to one of the sleepers, *g*, of the turn-out rails B. This bar H has a projection or hub, *h*, at one end, which, when the bar is turned in a position at right angles with the rails B B, projects over the nearest rail, so as to form a scotch, and prevent cars from passing in a direction toward the switch.

The rods G G are attached to opposite ends of the bar H, and in consequence of being crossed, it will be seen that when the switch is moved in line with the rails A A of the main track the hub *h* of the bar H will be turned over one of the rails B of the turn-out, and when the switch is moved in line with the rails B B of the turn-out the bar H will be turned off from said rail to a position nearly parallel with it, as shown in red outline in the drawing; hence it will be seen that when cars are switched off on the turn-out, and the switch moved back in line with the main rails, the bar or scotch H will be turned over one of the rails of the turn-out and the cars prevented from passing back on the main track, or sufficiently back to interfere with the travel thereon—a contingency which would be liable to occur, especially if the grade be a descending one toward the switch.

I would remark that, if desired or necessary, two scotches may be used—one for each rail, B—a connection being made between the two scotches by a rod, so that both will move simultaneously as motion is communicated to the one having the rods G connected to it.

The oblong slot *b* in the arm *c* of the lever E is necessary in order to compensate for the curvilinear movement of said lever, which would be considerable if the arm *c* were shut.

The hub *h* may, if desired, be covered with india-rubber, to avoid concussions when the car-wheels come in contact with it. By this arrangement the scotch H is moved automatically from the switch with but little friction.

I do not claim, broadly, the employment or use of a scotch operated automatically from a switch to prevent cars from passing on a turn-out upon the main rails of a track; but

I claim as new and desire to secure by Letters Patent—

The operating of the scotch H automatically from the switch C through the medium of the cross-rods G G and T-shaped lever E, connected with the switch, substantially as and for the purpose set forth.

JOHN F. BRICKLEY.

Witnesses:
JOHN HARDIN,
W. P. BRICKLEY.