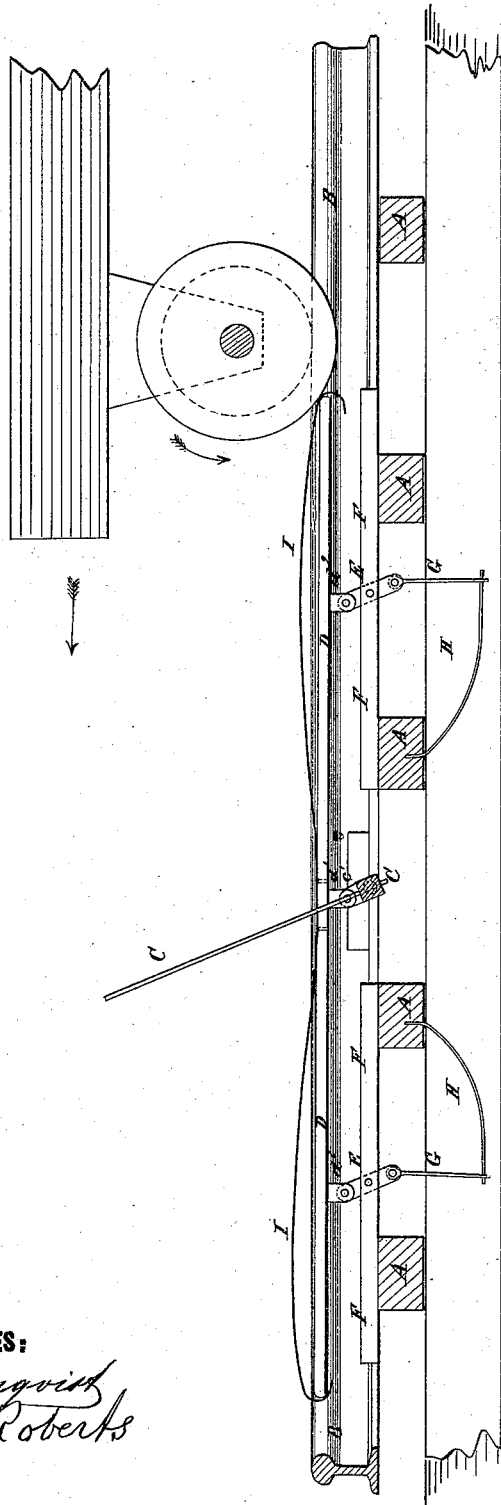


E. W. MOYER.
RAILROAD-GATE.

No. 192 706.

Patented July 3, 1877.



WITNESSES:

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INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

ELIAS W. MOYER, OF BERNVILLE, PENNSYLVANIA.

IMPROVEMENT IN RAILROAD-GATES.

Specification forming part of Letters Patent No. **192,706**, dated July 3, 1877; application filed January 19, 1877.

To all whom it may concern:

Be it known that I, ELIAS W. MOYER, of Bernville, in the county of Berks and State of Pennsylvania, have invented a new and useful Improvement in Railroad Gate, of which the following is a specification:

The figure is a view of the inner side of the rail of a railroad-track to which my improvement has been applied, the ties being shown in cross-section.

The object of this invention is to furnish railroad gates which shall be so constructed that they will be opened by the wheels of the approaching train, and will close automatically as soon as the train has passed.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A are the ties, and B is the rail, of a railroad-track. C is the gate, which is formed by attaching parallel bars to a shaft. The shaft of the gate C rocks in bearings in bars attached to the ties A, and to it in line with the parallel bars is attached a lug, *c'*, which is pivoted to a lug, *d*¹, attached to the center of the bar D. The bar D is placed at the inner side of and parallel with the head of the rail B. To the bar D, toward its ends, are attached two lugs, *d*², similar to the lug *d*¹, and which are pivoted to the upper ends of two short levers, E. The levers E are pivoted at their centers to bars F attached to the ties A in such position that the pivots of the said levers may be in line with the axis of the gate C. To the lower ends of the levers E are pivoted the upper ends of the rods G, the lower ends of which are attached to the ends of the springs H. The other ends of the springs H are attached to the ties A. The springs H are of such a strength as to draw the levers E into and hold them in a vertical position, and thus raise the gate C and hold it erect.

I is a long spring, the middle part of which is attached to the middle part of the bar D, and which is so formed that its ends may tend to rise above the ends of the said bar D. The ends of the spring I are bent downward into hook form to underlap the ends of the bar D, and prevent the ends of the said spring I from rising too high above the ends of the said bar D.

With this construction, when the wheel of an advancing car strikes either end of the spring I, the first effect is to push the spring I and bar D before it, and bringing the levers E and gate C into an inclined position, so that as the wheels advance upon the spring I and bar D they may force said spring and bar downward, bringing the levers E and gate C into a horizontal position.

As the wheels pass off the spring I and bar D, the springs H again draw the levers E into a vertical position, again raising the gate C, and the spring I and bar D ready to be operated by the car-wheels.

The spring I and bar D must be of such a length that some of the wheels will always be upon them until the whole train has passed.

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

1. The spring H, attached at one end to rods G, and at the other to ties A to bring and hold levers E in vertical position, as shown and described.

2. The spring I, attached at its middle to the middle of bar D, and having hook ends that overlap the ends of bar D, substantially as and for the purpose specified.

ELIAS W. MOYER.

Witnesses:

ALBERT F. SCHOCK,
C. G. BLATT.