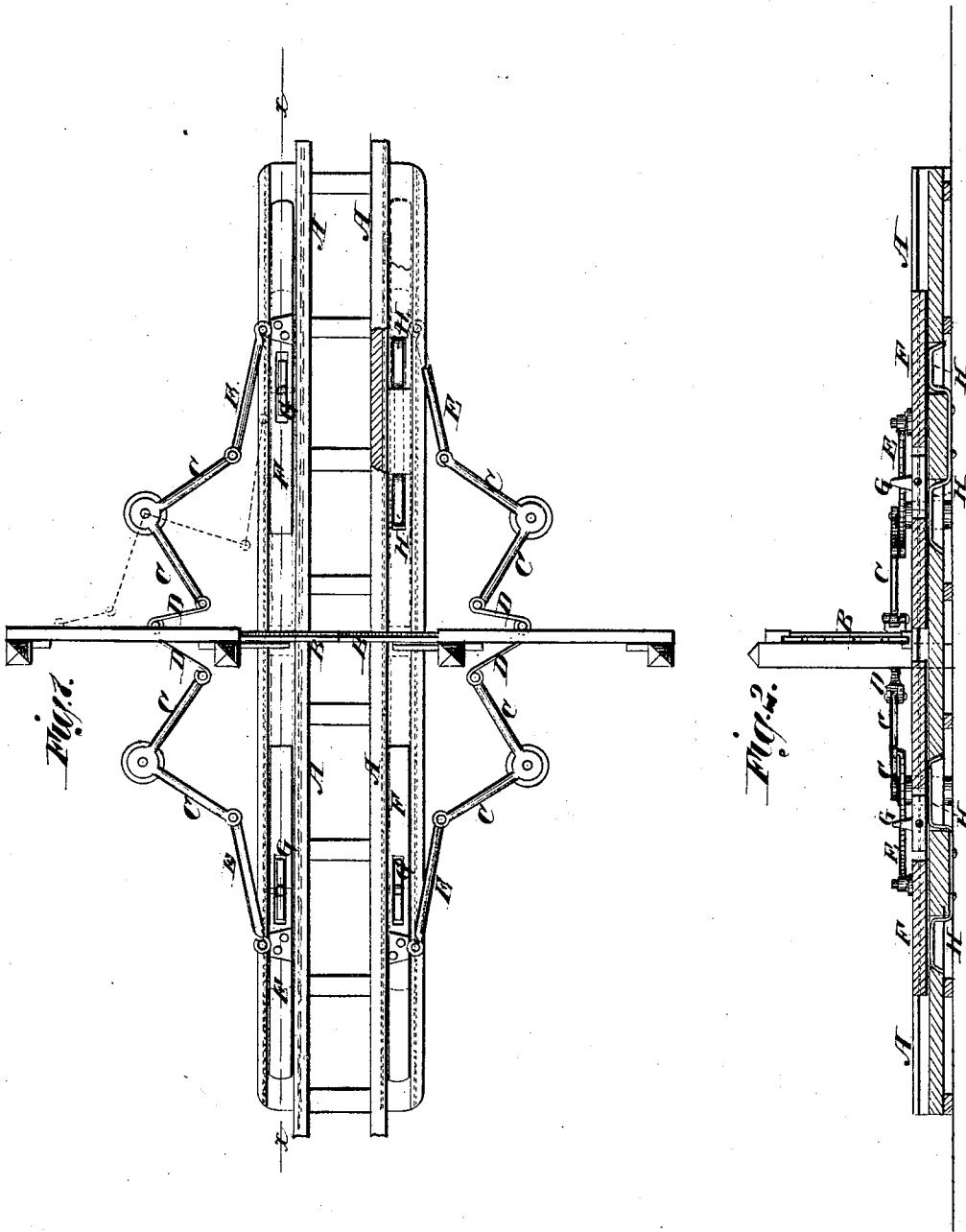


J. H. EBERHART.
Railroad-Gate.

No. 166,973.

Patented Aug. 24, 1875.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN H. EBERHART, OF SUMTER, SOUTH CAROLINA.

IMPROVEMENT IN RAILROAD-GATES.

Specification forming part of Letters Patent No. **166,973**, dated August 24, 1875; application filed July 17, 1875.

To all whom it may concern:

Be it known that I, JOHN H. EBERHART, of Sumter, in the county of Sumter and State of South Carolina, have invented a new and Improved Railway-Gate, of which the following is a specification:

My invention consists of a pair of sliding gates meeting together at the middle of the way, which are coupled on each side by a bell-crank and rods, with a slide to be moved by the locomotive to open the gate when the locomotive approaches it, and to be closed by the rear car when the train passes away, all as hereinafter described.

Figure 1 is a plan view of my improved railway-gate, and Fig. 2 is a longitudinal section taken on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the railway; B, the gates; C, the bell-cranks; D and E, the connecting-rods; F, the slides; and G dogs, by which the locomotive and rear car work the slides in passing. The slides are laid in suitable ways alongside of the rails, and the dogs project up from them sufficiently to be engaged by some part of the locomotive or projecting object upon it, and be pushed along. The dogs are pivoted to the slides in slots, extending down through them, and at each end of their travel is a spring, H, which allows them to tilt and escape from the object by which they have been struck when they have been pushed as far as required either way, and these springs throw the dog up to be engaged when the locomotive goes back.

The rods are designed to extend along the way any reasonable distance for opening the gate as much in advance of the arrival of the train as needed, and for closing it behind a long train.

For a single gate sliding entirely across the way, only one bell-crank and connections will be required.

It will be noticed that the arrangement is such that the gate can be opened by a locomotive approaching from either way, and by the opening of the gate on either side the slide is adjusted for closing, and in closing both sides are suitably adjusted for opening.

The invention is more particularly for tram-roads such as are becoming very common in some parts of the country, on which the cars are drawn by horses or steam on a small scale. Consequently short trains are used. To pass a very long train through the gates, and open and close by the engine, might require too long a connecting-rod for long trains; but the difficulty could be easily obviated with little trouble by elevated projections on the engine-truck, with a treadle on platform, in a convenient place for the engineer to put his foot on when approaching a gate, and cast loose as soon as the gates are open, so as to escape the far dogs; then, either by a permanent or elevated fixture on the rear car, the gates can be closed behind the train.

The conductor's car is always attached to freight-trains in the rear; also, sleeping-cars, which, as well as the ordinary passenger-cars, could, if required, use the elevated projections by simply fastening them down at starting out.

I would further state that the roads I have named run almost entirely through farms, and are consequently on private lands where gates are necessary, on account of stock-cattle, and occur very frequently, so that the use of these gates would save many miles of fencing and many hours of time that would be spent in opening and starting ordinary gates.

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

1. The combination of springs H with the slides F and dogs G, the springs being located at each end of the space traversed by the dogs, substantially as specified.

2. The combination of the slides F and bell-cranks C, and their connecting-rods D E, in the arrangement whereby in opening the gate sets the slide for closing it, and by closing the gate both slides are set for opening it, substantially as specified.

JOHN H. EBERHART.

In presence of—

JAMES D. BLANDING,
J. D. CRAIG.