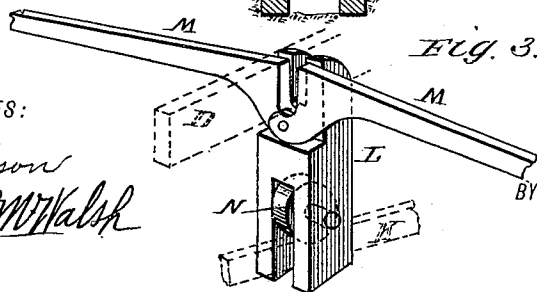
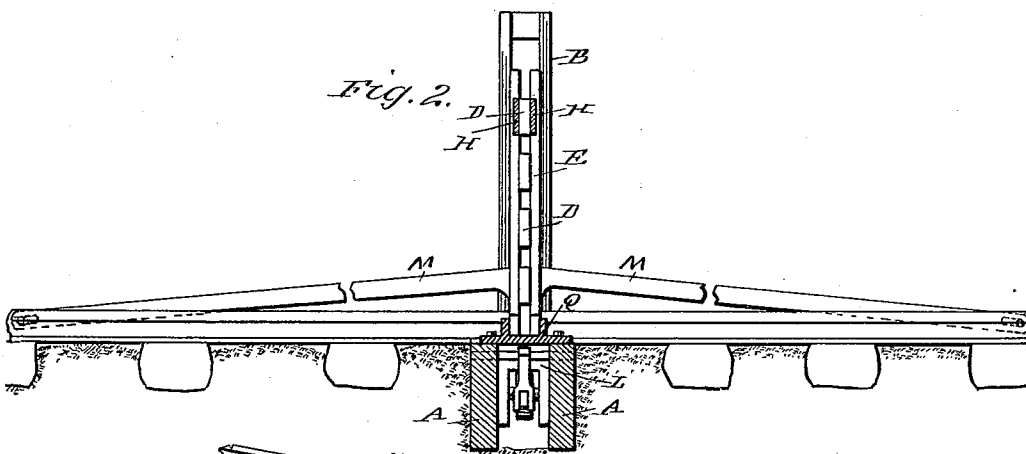
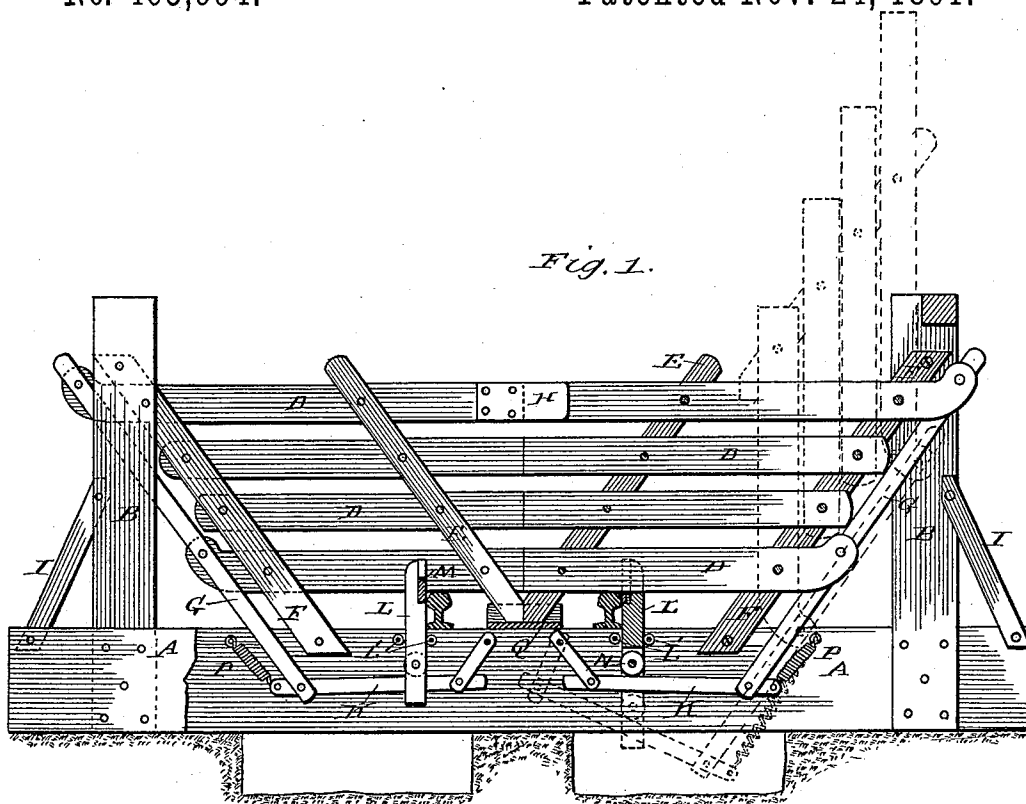


(No Model.)

C. P. LANCASTER.
RAILROAD GATE.

No. 463,994.

Patented Nov. 24, 1891.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES P. LANCASTER, OF SIMS, ASSIGNOR OF ONE-HALF TO LOUIS H. TATE, OF MONTPELIER, INDIANA.

RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 463,994, dated November 24, 1891.

Application filed April 23, 1891. Serial No. 390,109. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. LANCASTER, a citizen of the United States, residing at Sims, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in Railroad-Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

Referring to the accompanying drawings, Figure 1 represents a transverse sectional view of the railway-bed, showing the gates closed down across the same, a portion of the main beams being broken away; Fig. 2, a vertical transverse sectional view of the gates, showing the bed in longitudinal section; and Fig. 3, a detail perspective view of a portion of the operating mechanism.

The invention has relation to that class of railway-gates adapted to be automatically raised or opened by the weight of a passing train and automatically closed by suitable mechanism after the passage of the train; and it consists in certain novel features of construction that will fully hereinafter appear, and be particularly pointed out in the claims appended.

Referring to the accompanying drawings by letters, A A designate two wide parallel timbers set edgewise and extending across the road-bed under the rails thereof, these parallel timbers being separated from and rigidly connected to each other and firmly supported and anchored in the road-bed. Firmly bolted to these beams outside of the rails are posts B, each of which is composed of separated timbers and braced by inclined braces I, extending from the posts to near the respective ends of the said beams. Stationary inclined bars F extend from between the upper ends of the respective posts downwardly and inwardly and have their lower ends bolted between the bed-beams. Upon this rigid frame the folding gates and their operating parts are mounted.

The gates are of the vertically-folding variety, and they each consist of horizontal bars D, having their outer ends pivoted to the stationary inclined bars F and their inner free ends pivotally connected together by the similarly-inclined bars E, the two gates being kept

in alignment by the bifurcated metallic plate or casting H, secured upon the inner end of one of the upper rails, and by the shoe or casting Q, secured to the bed-beams and so located as to receive the lower abutting ends of the pivotal bars E. One or more (preferably the upper and lower) of the rails of each gate are extended outwardly and curved upwardly from their pivotal points, and to these extensions of each gate are pivotally secured strong rods G, which are inclined similarly to the bars F, and which have their lower ends extended in between the beams A and respectively connected to horizontal rods K, working between the same. The horizontal rods K are pivotally supported at their inner ends at points between the rails by inclined swinging links pivotally supported between the beams by horizontal bolts.

Vertical bars L are arranged to work between the beams A and against or close to the outer side of the respective rails, these bars being guided in their vertical movements by transverse bolts L' and by the beams, the said bolts being preferably provided with anti-friction rollers.

The lower ends of the bars L are bifurcated to straddle or embrace the bars K, a roller N being journaled in the respective bifurcations, these rollers resting upon the upper edges of the said horizontal bars and serving to reduce the friction and facilitate the endwise movement of the same when the vertical bars L are depressed. The upper ends of the bars L extend above the rails and are bifurcated for the reception and retention of the lower rails of the gates when the same are closed, thereby serving to assist in retaining them in alignment with each other and preventing cattle and storms from displacing or injuring them.

Pivotally connected to the upper end of each of the bars L above the rails are the adjacent ends of two long levers M, which extend outwardly in opposite directions therefrom and are arranged parallel with and close to the outer sides of the rails, the outer ends of these levers being pivoted to the adjacent sides of the rails or other convenient points. These levers are gradually inclined upward

from their outer ends and are of such a length that the treads of the wheels of a car approaching the gates from either direction will gradually depress them, thereby avoiding undue jar to the working parts.

5 The outer extended ends of bars K are connected to the base-beams by upwardly and outwardly extending contracting-springs P, which serve to keep the gates normally closed
10 and prevent undue jar in opening them.

The space between the beams A may be covered over in order to keep the rain and snow from the working parts, and housings may be constructed to inclose the gates when
15 the same are folded, if desired.

The operation of my invention is evident from the foregoing, when taken in connection with the accompanying drawings. Should a train of cars or even a single hand-car ap-
20 proach the gates from either direction, the weight thereof will gradually depress the long levers M and the vertical bars L L, whereupon the bars K and G will be moved downwardly and a little inwardly and the respective gates
25 will be raised and folded in a vertical position, as shown by dotted lines on the right side of Fig. 1. As the wheels of the last car gradually leave the long operating-levers, the contracting-springs P will restore the gates to
30 their normal positions.

It is evident that the inclined operating-levers M may be arranged upon the inside of the rails instead of upon the outside thereof, as shown.

35 Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. The combination of a pair of rails, supporting-beams under the same, posts erected on the supporting-beams, two inclined station-
40 ary bars F, two gates pivoted to said inclined bars and each having two or more of its rails extending outwardly therefrom, inclined pivotal bars connecting the respective exten-
45 sions, horizontal bars pivotally connected to the lower ends of these inclined pivotal bars, swinging links supporting the inner ends of these horizontal bars, vertical bars supported by the said horizontal bars and provided with
50 anti-friction rollers bearing upon them, and means for depressing these vertical bars, substantially as described.

2. The combination, with a pair of railroad-tracks, of folding gates extending across the same, horizontal endwise-movable bars K,
55 supported under the gates and connected to their extended rails, vertical movable bars L, connected to the bars K and extending above the track-rails, the upper ends of the said bars being bifurcated and adapted to embrace
60 the lower gate-rails, and means for depressing the said vertical bars L by the weight of an approaching car, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES P. LANCASTER.

Witnesses.

JOHN F. WEAVER,

ASHLEY G. EMSHILLER.