(No Model.)

A. LOWE.

RAILROAD GATE.

No. 326,306. Patented Sept. 15, 1885.

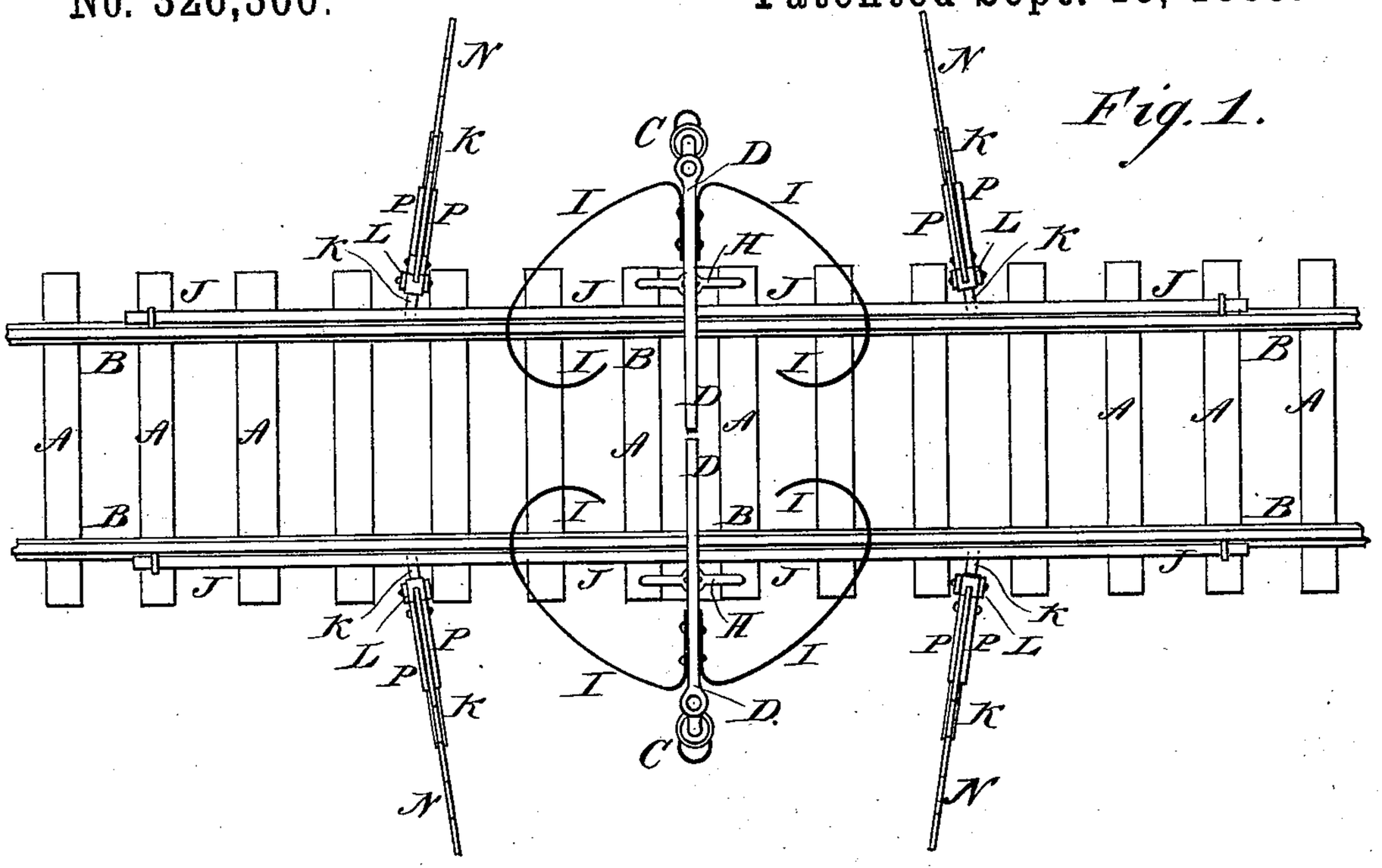

Fig. 1.

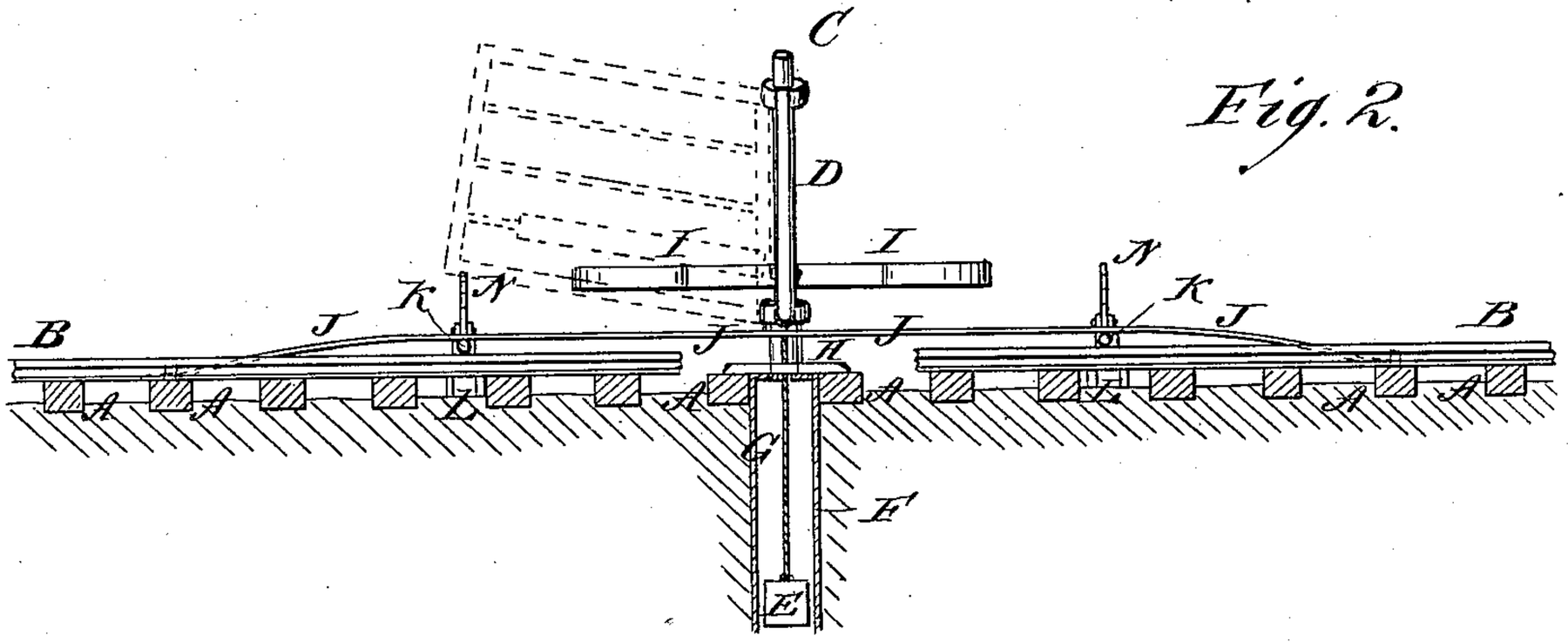

Fig. 2.

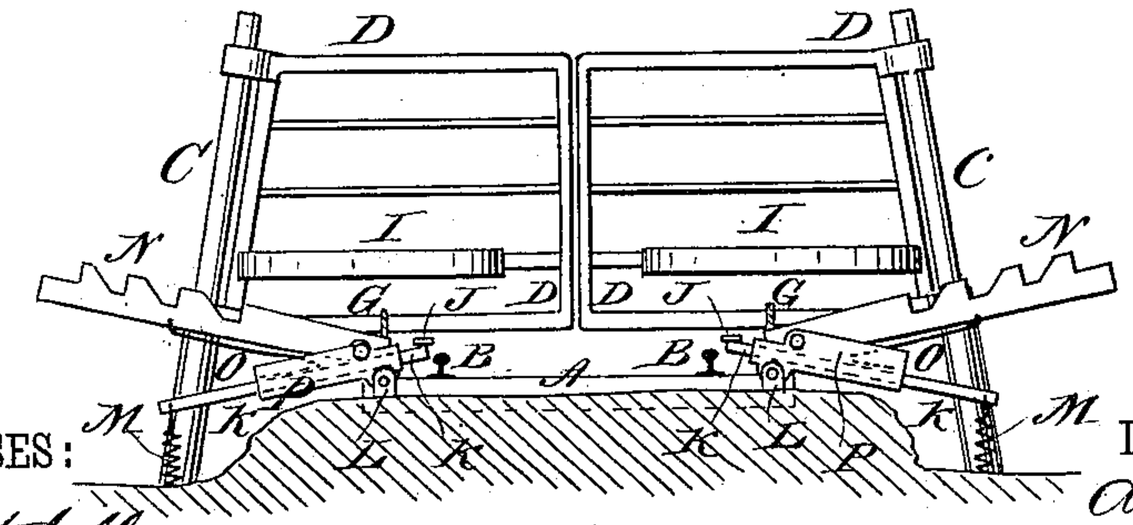

Fig. 3.

WITNESSES:

Donn Twitchell.

C. Sedgwick

INVENTOR:

A. Lowe

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

AUSTIN LOWE, OF MINNEAPOLIS, KANSAS, ASSIGNOR TO HIMSELF AND THOMAS D. HALE, OF SAME PLACE.

RAILROAD-GATE.

SPECIFICATION forming part of Letters Patent No. 326,306, dated September 15, 1885.

Application filed January 30, 1885. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN LOWE, of Minneapolis, in the county of Ottawa and State of Kansas, have invented certain new and useful Improvements in Railroad-Gates, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of one of my improved gates, shown as applied to a section of a railroad-track. Fig. 2 is a sectional side elevation of the same. Fig. 3 is a front elevation of the same, the railroad-track being shown in section.

The object of this invention is to provide railroad-gates constructed in such a manner that they will be opened by an advancing train, and will close automatically when the train has passed, and which shall be simple in construction and reliable in operation.

The invention relates to a railroad-gate constructed with weights to close the same, and with springs to receive the impact of the car or locomotive in opening, and with yielding rails that sink under the weight of the cars and operate spring-latches that hold the gate open until the last car has passed, when said rails rise, release the latches, and allow the gate to close, as will be hereinafter fully described and then claimed.

A represents the ties, and B the rails, of a railroad-track.

C are two posts set in the ground at the opposite sides of the track and at a suitable distance from the rails B. The posts C can be inclined toward or from the track, and to them are hinged the gates D, which are made of such a length that their free ends will nearly meet at the central line of the track A B.

The gates D are closed and held closed by weights E, placed in wells F, formed in the ground at a little distance from the outer sides of the rails B. The weights E are attached to the lower ends of ropes G, which pass through guides H, and are attached to the bottom bars of the gates D.

The gates D can be made of steel or other suitable material, and to their opposite sides are attached springs I, to receive the impact of the engine or car and open the gates, to prevent the gate from being injured by being struck by the said engine or car.

At the outer sides of the rails B are placed yielding or spring rails J, in such positions as to be pressed downward by the wheels of the engine and cars and held down until the train has passed. The yielding rails J are connected with the ends of the ties A or with supports attached to the said ties. The yielding rails J, at the opposite sides of the gates D, pass over the inner ends of levers K, which are pivoted at a little distance from their inner ends to stands L, set in the ground, or to other suitable supports. The outer ends of the levers K are held down by springs M.

To the levers K, at a little distance from their fulcrums, are hinged latches N, the upper edges of which are toothed, and which are held up by springs O, interposed between them and the said levers K.

The latches N are held from lateral movement by flanges P, formed upon or attached to the side edges of the levers K.

With this construction, as the engine approaches the gate, its wheels press the yielding rails J downward and raise the latches N, and the engine, or a bar attached to the engine, strikes the springs I and pushes open the gate D, which is caught and held by the said latches N. As the last wheels of the train leave the yielding rails J the said rails rise, and the springs M draw down the outer ends of the levers K, withdrawing the latches N from the gates D, and allowing the said gates to be drawn shut by the weights E.

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

1. The combination, with hinged gates and yielding rails, of pivoted levers arranged approximately at right angles to the yielding rails, with their inner ends projecting under the same, and latches pivoted to said levers and having their free ends projecting outward, for engaging the gates when swung open, substantially as herein shown and described.

2. The combination, with hinged gates and yielding rails, of pivoted and spring-actuated

levers arranged approximately at right angles to the yielding rails, with their inner ends projecting under the same, and spring-latches pivoted to said levers and having their free ends projecting outward, for engaging the gates when swung open, substantially as herein shown and described.

3. The combination, with the gates D and the yielding rails J, of the pivoted levers K, having their inner ends projecting under the yielding rails, the spring M, the latches N, pivoted to the levers K, and the spring O, substantially as herein shown and described.

4. The combination, with the gates D, provided with the springs I, the cords G, and the weights E on the end of the cords, of the spring-rails J, the pivoted and spring-actuated levers K, having their inner ends projecting under the yielding rails, and the spring-latches N O, pivoted to said levers, substantially as herein shown and described.

5. A spring-latch consisting of a lever pivoted at one end to a standard and held by a spring at the opposite end, and a toothed spring-latch pivoted to said lever, in combination with a gate and means for operating the latch, substantially as herein shown and described.

AUSTIN LOWE.

Witnesses:
C. C. STEERS,
C. M. DURVSETTE.