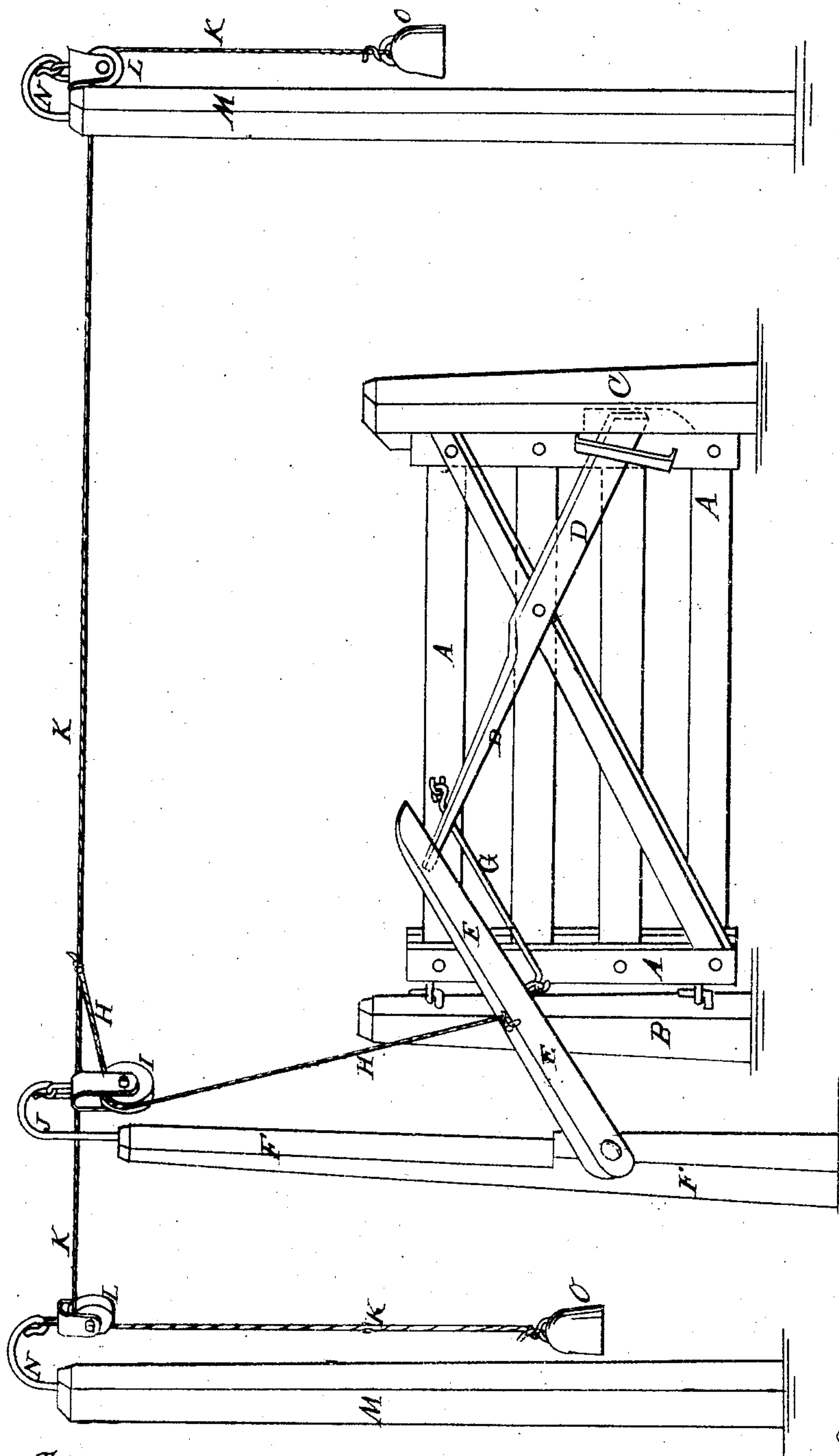


E. Roth.

Gate.

N^o 76251

Patented Mar. 31, 1868.



Witnesses
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ELIAS ROTH, OF NEW OXFORD, PENNSYLVANIA.

Letters Patent No. 76,251, dated March 31, 1868.

IMPROVEMENT IN GATES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ELIAS ROTH, of New Oxford, in the county of Adams, and State of Pennsylvania, have invented a new and useful Improvement in Gates; 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 drawings, forming part of this specification.

The figure is a perspective view of a gate illustrating my improvement.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improvement in the means for opening, closing, and fastening gates, so that they may be opened and closed without its being necessary for the driver to get out of the carriage, or from any desired distance from the gate; and it consists in the construction and combination of the various parts by which these objects are effected, as hereinafter more fully described.

A is the gate, B is the rear post to which the gate is hinged, and C is the front post to which the said gate is latched, about the construction of which parts there is nothing new. D is the latch by which the gate A is fastened shut, and which is pivoted to the body of the gate, as shown in the figure. The forward end, the latch D, is weighted or made heavier, so that when left free, the said forward end may drop away from the post C, allowing the gate to be swung open. The forward end of the latch D, to fasten the gate, enters a vertical slot or groove in the forward side of the post C, as shown in dotted lines in the figure. The latch D is operated to fasten the gate, and held in position, holding the gate fastened by the lever E, the forward or free end of which rests upon the rear or lighter end of said latch, as shown in the drawing. The other end of the lever E is pivoted to the post F, or some other equivalent support at a short distance from the rear post B, as shown in the figure. The lever E is connected with the gate A by a connecting-rod or bar, G, one end of which is pivoted to the middle part of said lever, and the other end of which is pivoted to the upper part of the gate A, a little in front of the rear end of the latch D, as shown in the figure. To the lever E, at or near its middle part, is attached the lower end of the cord H, which passes over the pulley I, swivelled to the upper end of a bent arm, J, attached to the upper end of the post F, or swivelled to some other suitable support. The other end of the cord H is connected with the ends of the cords or wires K, as shown in the figure. The cords or wires K pass around guide-pulleys, L, swivelled to posts M, or to other suitable supports, or to curved arms N attached to said posts or supports at the points from which it is desired to open or close the gate. Two or more cords or wires K may be used according to the number of points from which it is desired to operate the gate. O are weights, attached to the free ends of the cords or wires K, and which should be only of sufficient weight to keep the said cords or wires K taut. When the gate A is closed, the free end of the lever E rests upon the rear end of the latch D, holding the gate fastened. To open the gate, by pulling upon the end of one of the cords or wires K, the lever E is raised, drawing the gate A with it by means of the connecting-rod or bar G. As the lever E approaches a vertical position, the momentum of the gate carries the said lever past its vertical line or dead-point, and the weight of the said lever, as it drops down upon the other side of the post or support F, draws the gate fully open. The gate is closed in a similar manner, the free end of the lever E, as the gate closes, dropping down upon the rear end of the latch D, and securely fastening the gate.

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

1. The combination of the pivoted lever E and connecting-rod or bar G with the gate A, substantially as herein shown and described, for the purpose of opening and closing the gate.

2. The combination of the rope H, swivelled pulley I, two or more ropes or wires K, and pivoted pulleys L, with each other and with the lever E and posts F and M, or equivalent supports, substantially as herein shown and described, and for the purpose set forth.

ELIAS ROTH:

Witnesses:

SAMUEL McTAGGERT,
WILLIAM D. EMMERT.