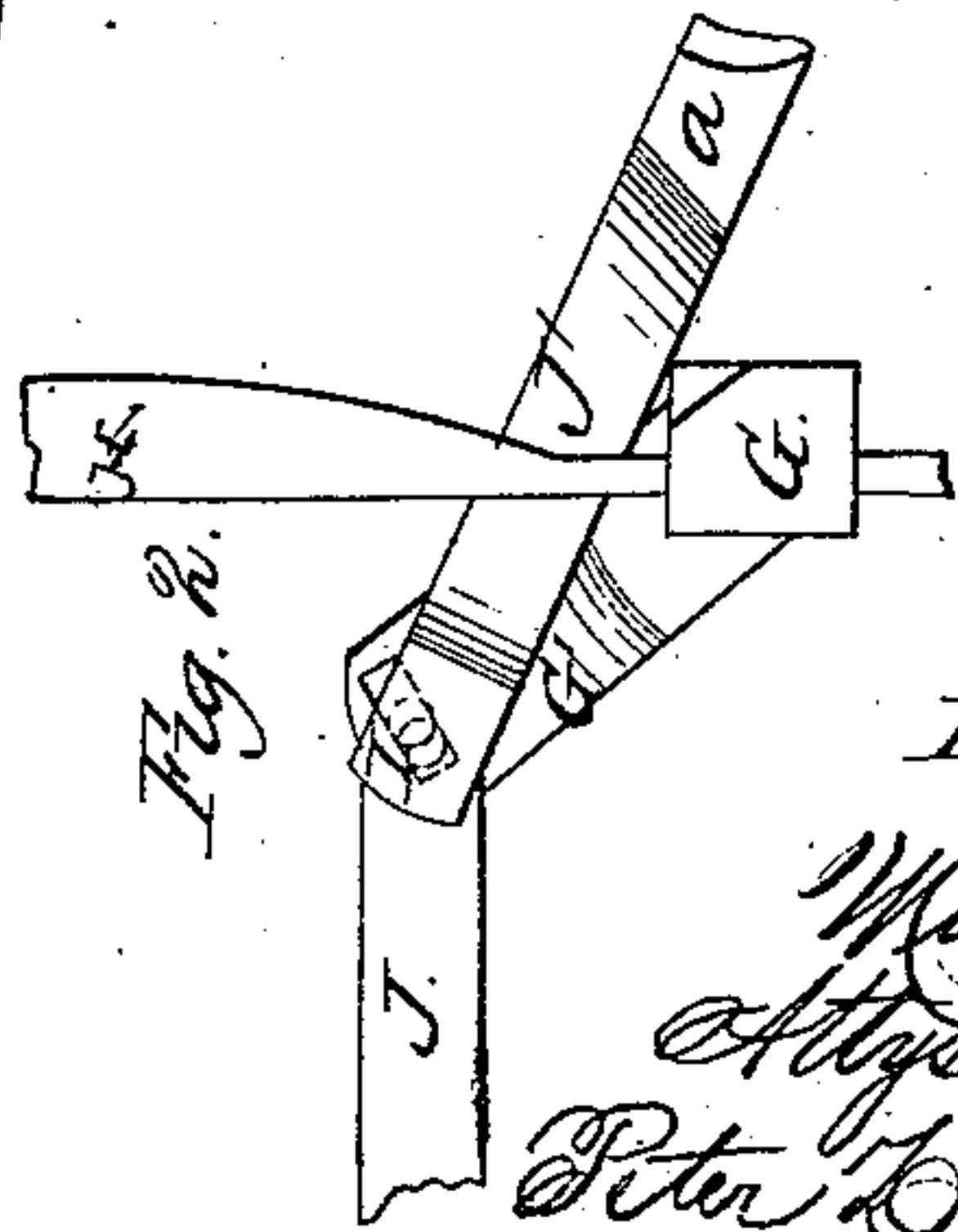
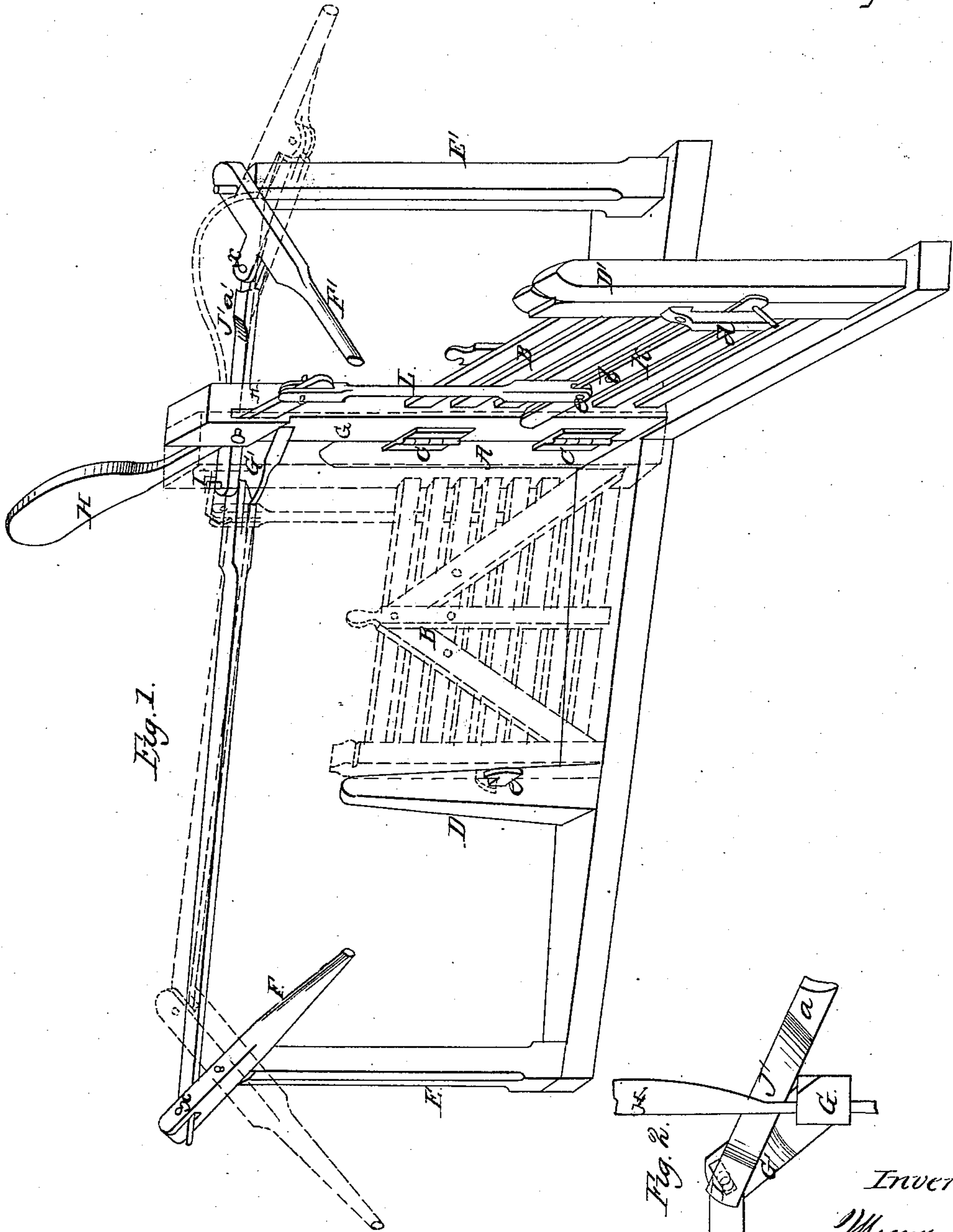


P. L. Miller,

Automatic Gate,

N^o 64,551.

Patented May 7, 1867.



Witnesses:
Geo A. Morrison.
Chas. A. Pettit.

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Attty for
Peter L. Miller
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Suply

United States Patent Office.

PETER L. MILLER, OF MECHANICSBURG, PENNSYLVANIA.

Letters Patent No. 64,551, dated May 7, 1867.

GATE.

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, PETER L. MILLER, of Mechanicsburg, in the county of Cumberland, and State of Pennsylvania, have invented a new and useful Improvement in Gates; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which are made part of this specification, and in which—

Figure 1 is a perspective view.

Figure 2 is a detached view showing a plan of the end piece of the gate and its attachments.

This invention relates to that class of gates which are arranged so that a person on horseback or in a carriage may operate them without the trouble of alighting; and the improvement consists in so constructing the gate and arranging the levers by which it is operated that it can be opened and closed without raising it, and consequently avoiding the necessity of the use of any peculiar form of hinge. Also, in an arrangement for raising and lowering the latch so as to fasten the gate in its open and closed positions.

In the drawings, A is the post, to which the gate B is hung by hinges. C D D' are the posts to which the gate is fastened in its open and closed positions; and E E' are the posts on which the levers F F' are fastened for operating the gate, and which are made of such a height that the levers may be easily reached by a person on horseback. All of these posts may be set in the ground, as in ordinary fences, or may be secured in a bed-piece which rests on the surface of the ground, as shown in the drawings, the latter form being preferable, as it retains the different parts in the same relative positions, whereas in the other form the posts would be likely to settle unevenly, and thus render the gate inoperative. The end-piece G of the gate B is made of such a height that the weighted lever H, fulcrumed in its upper end, may have its bearing parallel (or nearly so) with the levers F F'. This end-piece is provided with a horizontal slotted arm, G', through which the constructing pin I of the rods J J' passes, the opposite ends of the rods being pivoted in the levers F F', as shown at x x, the position being such that there is no dead-centre. The rod J' is provided with enlargements a a', which serve as cams to raise the weighted end of the lever H, and through it the latch, (as will hereafter be described,) the slot in arm G' allowing the levers and rods to be moved a sufficient distance to bring the enlargement a under the lever H to raise the latch before they begin to act on the arm G'. The latch K is pivoted at b to the body of the gate, and at c to the rod L, which connects it with the short end of the weighted lever H in such a manner that the weight of the long end of lever H will have a tendency to hold the latch down, the motion of it being limited by the bracket d in which the latch moves. The latch rests in the catches e e' on posts D D', or in corresponding notches in the posts.

The operation is as follows: Either one of the levers F F' being moved outward or away from the gate, the enlargement a of rod J' is drawn or forced under the weighted end of the lever H, thus raising it and depressing the short end, and with it the rod L, and the short end of the latch K, raising the opposite end and unfastening the gate. The motion being continued, the pin I is brought to bear on the end of the slot in the arm G', pressing the arm back and turning the gate. The lever H being carried with it, passes from the enlargement a, allowing the latch to drop until the gate has been turned until the gate comes in contact with the catches on the posts. When the lever is again raised by the enlargement a', which holds it suspended until the motion is completed. When it passes from the enlargement, allowing the latch to drop into the notch in the opposite post, as shown in red in the drawings. The gate is closed by returning the levers to their former positions. Instead of the rod J' being provided with two enlargements, as described, it may have but one, so constructed that the lever will be raised and held suspended until the motion is completed, when it will be dropped. When the gate is placed where two fences intersect each other at right angles, the rails may be fastened to the posts A D E and E', thus making them part of the fence.

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

1. The end-piece G, provided with slotted arm G', in combination with the levers F F', pin I, and rods J J', as and for the purpose set forth.
2. The rod J, provided with an enlargement or enlargements a a', substantially as and for the purpose described.
3. The pivoted latch K, in combination with the lever H, rod L, rod J', and bracket d, as and for the purpose described.
4. The combination and arrangement of the posts A D D' E E' and bed-piece, substantially as and for the purpose set forth.

To the above specification of my improvement I have signed my hand this twelfth day of March, 1867.

P. L. MILLER.

Witnesses:

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GEO. A. MORRISON.