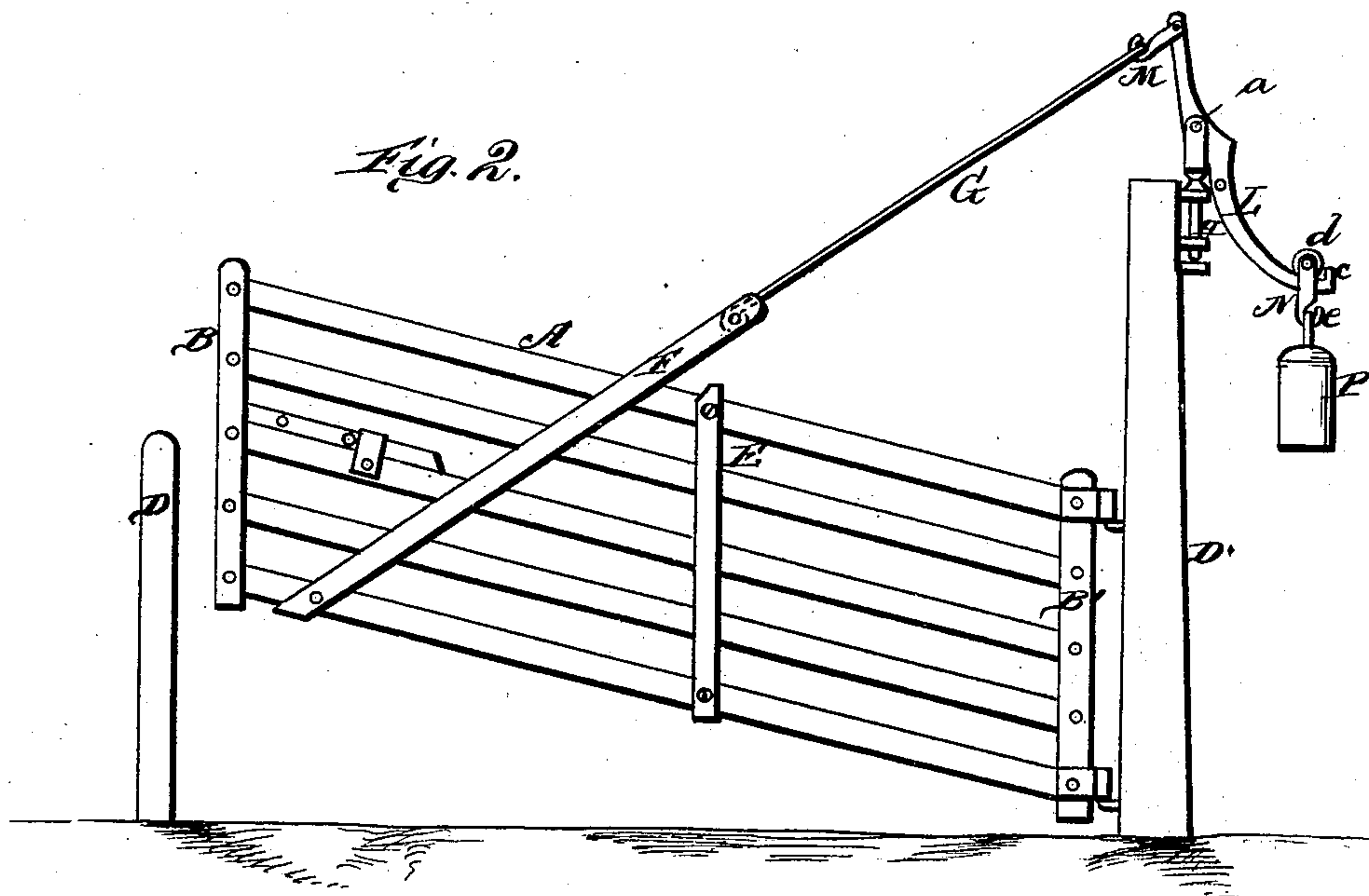
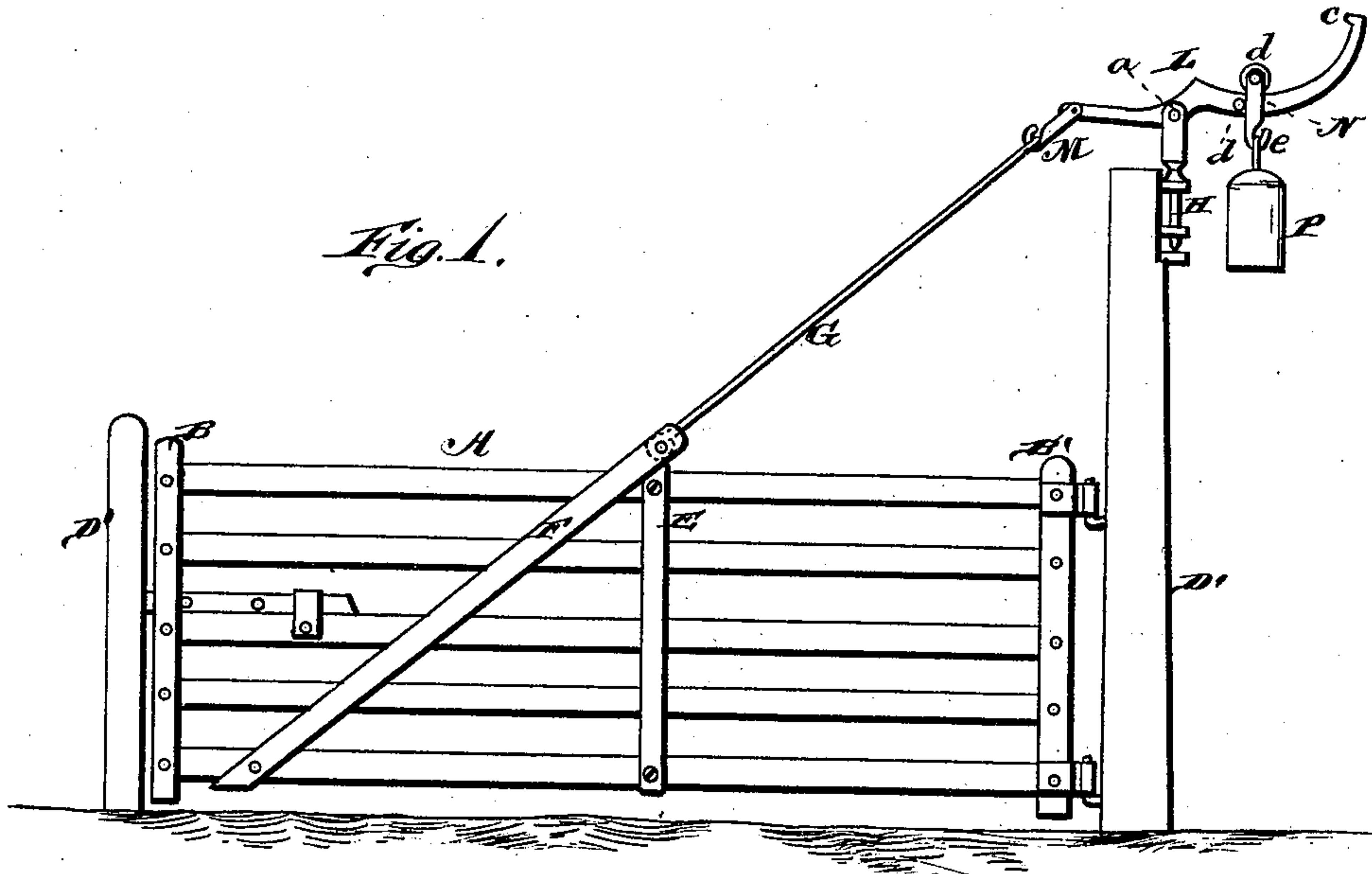


B. CROSS.
Gate.

No. 206,299.

Patented July 23, 1878.



WITNESSES
Robert E. Smith
James J. Sherry

INVENTOR.
Benjamin Cross
Gilbert Smith
ATTORNEYS.

UNITED STATES PATENT OFFICE.

BENJAMIN CROSS, OF ALEXANDRIA, PENNSYLVANIA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **206,299**, dated July 23, 1878; application filed June 8, 1878.

To all whom it may concern:

Be it known that I, BENJAMIN CROSS, of Alexandria, in the county of Huntingdon and State of Pennsylvania, have invented a new and valuable Improvement in Gates; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my gate closed, and Fig. 2 is a side view of the same raised or open.

My invention relates to that class of gates in which the panels are pivoted at both ends, so that the front end of the entire gate may be raised before the act of swinging is commenced; and my invention consists in the improved means for raising and balancing such gate hereinafter set forth and claimed.

A of the drawing represents my gate, the respective panels of which are pivoted within the cleats B B'.

The letters D D' represent the front and rear posts of my gate, the latter being extended upward above the gate, as shown.

The letter E illustrates holding-bars, one on each of the panels, pivoted to the top and bottom rails of the gate.

F indicates lifting-bars, arranged one on each side of the gate in a diagonal position, as shown, and pivoted to the bottom panel only.

G represents a lifting-rod, connected with the top of bars F by a pivot, pin, or other suitable means.

The letter H represents a pin having a slotted head, and secured by suitable stirrups or otherwise to the post D'. In the slotted head of this pin H is a pivotal pin, *a*, which serves as a fulcrum for the liner K, hereinafter described, while the walls of the slots in pin H serve as guides for the same.

The letter L represents a crooked lever pivoted within the slot of pin H, and connected with the lifting-rod G by the pivoted and hooked bar M, as shown. The rear or free end of the lever L is curved upward in the manner represented on the drawings, and

is provided with a head, *c*, and stop-pin *d*'. This head and pin are intended to serve as stops to regulate the movements of the weight and roller next described.

The letter *d* represents a roller, having its journal in the head of the bifurcated block N, and its track upon the concave upper side of the lever L. This block N has a hook, *e*, at its lower end, to which is attached the pendant weight P.

It is obvious that all the parts herein described may be constructed either of wood or metal, at will.

The gate is hinged to the rear post D', and its front end is raised by suitable pressure upon the rear end of the lever L, raising the front end. A slight movement of said lever either to the right or left will serve to open the gate in the opposite direction.

It is obvious that when the gate is raised, as shown on Fig. 2, the weight P, resting against the head *c*, will serve to hold it in that position so long as may be desired, and that by gently raising the rear of lever L the roller will travel along its curved track until it is stopped by the pin *d*'. This last-mentioned movement will restore the gate to the position shown on Fig. 1.

Care should be taken to add such weight only to the lever as will serve as a balance, and aid the operation in the opening and closing movements.

I am aware that weights have been heretofore used in connection with pulleys for actuating a gate, and therefore lay no claim to the invention thereof.

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

The combination, with a gate, of the lifting-rod G, curved lever L, traveling roller *d*, and weight P, constructed and arranged substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BENJAMIN CROSS.

Witnesses:

DAVID MOORE,
C. GRAFIUS.