G. S. HOUGHTON.
Flood-Gates.

No. 197,471. Patented Nov. 27, 1877.

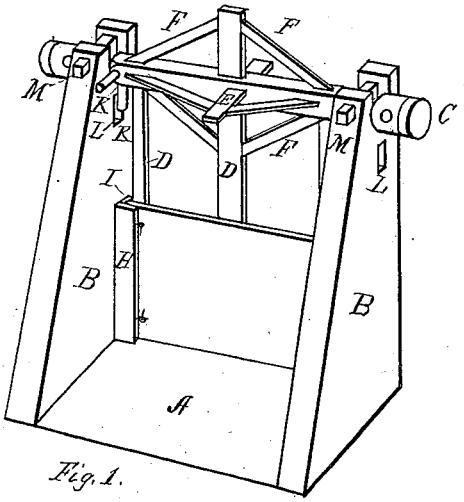

Fig. 1.

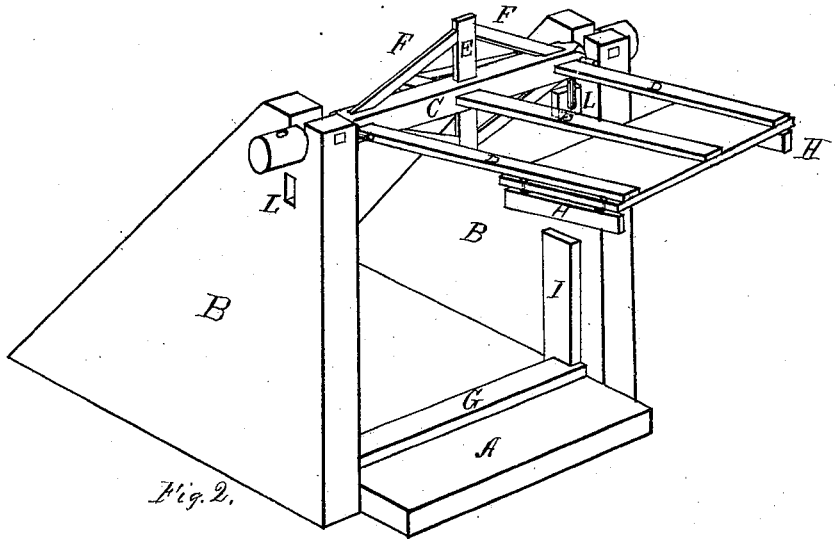

Fig. 2.

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GEORGE S. HOUGHTON, OF COLUMBUS, WISCONSIN.

IMPROVEMENT IN FLOOD-GATES.

Specification forming part of Letters Patent No. **197,471**, dated November 27, 1877; application filed July 26, 1877.

To all whom it may concern:

Be it known that I, GEORGE S. HOUGHTON, of the city of Columbus, county of Columbia, and State of Wisconsin, have invented a new and useful Improvement in Flood-Gates, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a perspective view of front when shut, and Fig. 2 a similar view from rear when open.

The object of my invention is to furnish a flood-gate which will, when slightly raised, be opened by the pressure of the water, which will revolve or swing into place again, and which may be constructed of sufficient length of span to permit the passage of ice.

In the drawing, A A represent the bottom of the race; B B, the sides projecting above the water-line, and having bearings near the top. A beam, C, rounded near the ends, rests in these bearings, and is capable of a rotary motion in the same. Attached to the beam C are studs D D D, to the lower ends of which boards are attached to hold the water. The beam, if of long span, may be strengthened by a cross-tree, E, and braces F F F.

When the gate is shut the studs D D D are supported against the pressure of the water at the top by the beam C, and at the bottom by a rib, G, Fig. 2, attached to the bottom of the race. The ends are closed by blocks H H, hinged to the ends of the gate, and when shut resting against a rib, I.

The beam C has near its end bearings pins K K′, Fig. 1. The sides B B have holes L L beneath the bearings. Keys M M, Fig. 1, are inserted over the bearings to retain the gate in place, except when there is danger from ice, when they may be removed to permit the ice, if it jams, to raise the gate.

It is operated as follows: The keys M M being removed, levers are inserted through the holes L L and under the pins K K′. The gate is then raised until the lower part comes above the rib G, when the blocks H H swing in as the gate is carried outward by the water, the gate turning on the beam C as an axis. It is then carried up until the pin K′ passes the hole L, when the lever is inserted behind it to retain the gate in position. When it is desired to close the gate, it may be swung over on its axis, being carried into place by the water, or it may be raised and swung under.

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

1. A flood-gate having studs supported at the bottom by a rib, G, and at the top attached to a revolving beam, arranged substantially as and for the purposes herein specified.

2. The blocks H H, hinged to the ends of the gate, substantially as and for the purposes herein specified.

3. The combination, with the sides B B, having lever-holes L L, of the beam C, having pins K K′, whereby the gate may be raised by the lever, substantially as and for the purposes herein specified.

GEORGE S. HOUGHTON.

Witnesses:

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