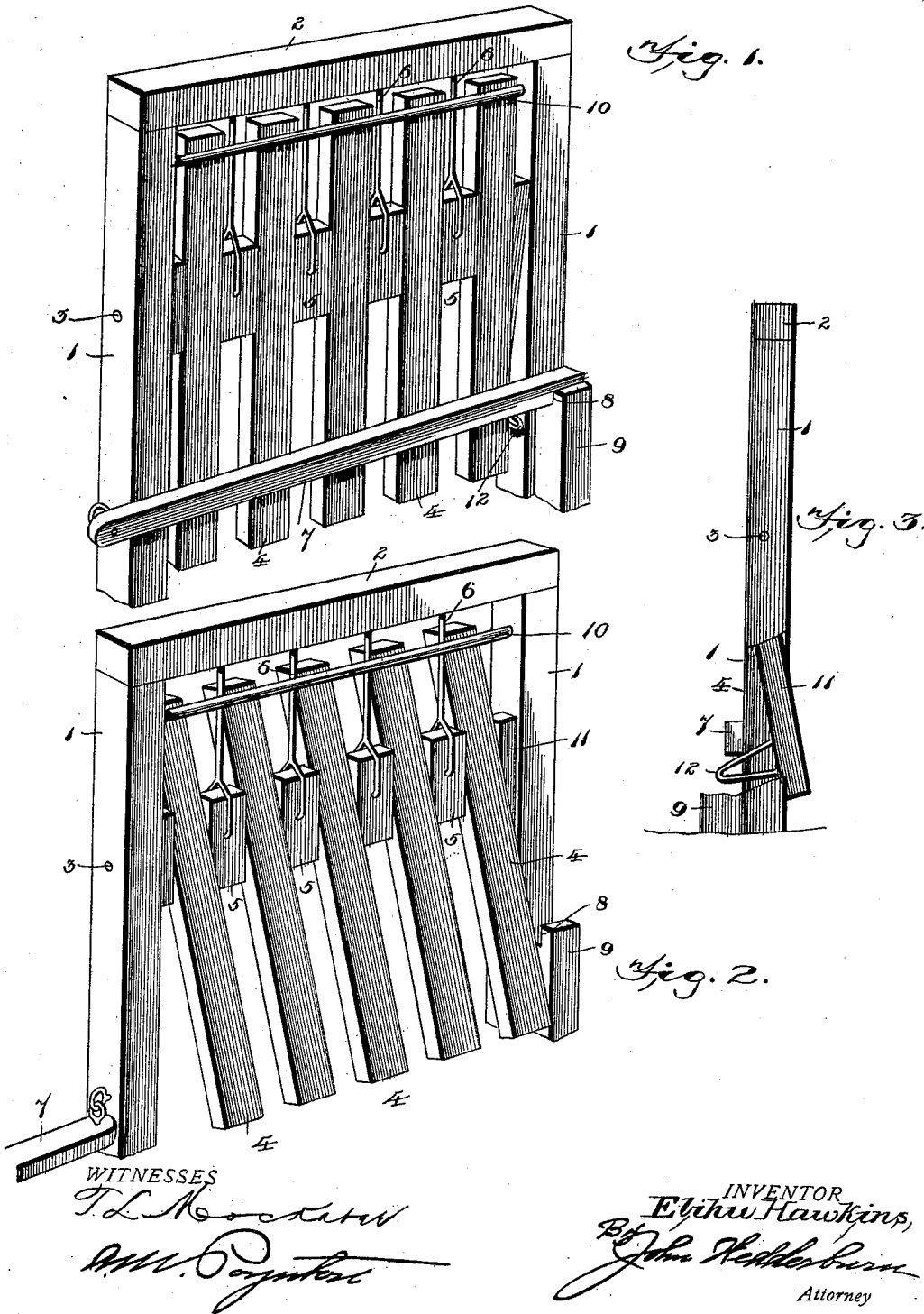


(No Model)

E. HAWKINS.
FLOOD GATE.

No. 583,177.

Patented May 25, 1897.



UNITED STATES PATENT OFFICE.

ELIHU HAWKINS, OF VICKERY, OHIO.

FLOOD-GATE.

SPECIFICATION forming part of Letters Patent No. 583,177, dated May 25, 1897.

Application filed February 24, 1897. Serial No. 624,780. (No model.)

To all whom it may concern:

Be it known that I, ELIHU HAWKINS, of Vickery, in the county of Sandusky and State of Ohio, have invented certain new and useful

Improvements in Flood-Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in flood-gates; and the object of the same is to provide an improved construction which will be easily and readily operated by reason of the water, the same being so constructed as to permit driftwood, &c., passing therethrough without catching upon the same.

The invention also consists of certain other novel features of construction hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of my improvement before the same is tripped. Fig. 2 is a similar view of the same after it is tripped by a flood, and Fig. 3 is an end elevation with the uprights broken away to show the tripping device in position for tripping the gate.

Referring to the said drawings, 1 indicates uprights, being connected at their upper ends by the cross-piece 2. Connecting the uprights intermediate of their ends is the rod 3, upon which the fingers or vertical slats for the gate are pivoted. These slats are retained a proper distance apart by the blocks 5, which are connected to the cross-piece 2 by the rods or cables 6. These rods or cables serve to prevent any sagging of the rod 3, upon which the slats of the gate are pivoted, as will be understood.

Pivoted to one of the uprights of the gate and adapted to extend across the stream to the other upright is the lever or bar 7. This bar 7 extends across the faces of the slats at their lower ends and is supported at its free end in the recess 8, formed in the end of the short standard 9. This lever serves to prevent the movement at the lower ends of the slats, and the bar or rod 10, extending across between the two standards, prevents the movement of the slats at their upper ends.

is pivoted at its upper end to the rod 3 and at its lower end is provided with the forwardly-extending wedge-shape projection 12. The projection in this instance is formed of a piece of wire having its ends fastened in the lever 11 and having its upper side inclined.

In operation my gate is placed with the lever 7 facing down the stream and the rear face of the tripping-lever facing upstream. The gate is positioned so that the lower ends of the slats of the same are just above the high-water mark, so that the gate forms a fence across the stream of water. In event of a flood the rushing waters will strike the lower end of the tripping-lever and by the impact of the same will force the lever forward, its inclined projection lifting the locking-lever from its seat and releasing the slats of the gate, as will be understood. The slats thus released swing upwardly and float upon the surface of the water, so that the fence will not be carried away by the flood, and the obstructions may be freely passed through the same. The locking-lever will float to one side of the stream, and when the flood has passed the gate may be locked in proper position to serve as an effectual fence across the stream.

From the above description it will be seen that I have produced a gate which serves as a fence when the water is in its normal condition, and when a flood occurs the gate will be automatically operated to swing upwardly and permit the water to pass therethrough, carrying with it any obstructions which may be contained therein.

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

1. A flood-gate comprising uprights, slats pivoted between the uprights, a locking-lever for retaining the slats in a vertical position, and a trip for operating the locking-lever for releasing the slats, substantially as described.

2. A flood-gate comprising uprights adapted to be positioned on opposite sides of the stream, a series of slats pivoted between the uprights and adapted to swing therebetween, a locking-lever pivoted to one side of the uprights and extending across the lower faces of the slats, a guide upon the opposite upright for receiving and securing the free end

of the lever, a tripping-lever pivoted at its upper end and carrying an inclined surface at its lower end for engaging and releasing the locking-lever, and means for engaging the upper ends of the slats and preventing the same from swinging downwardly, substantially as described.

3. A flood-gate comprising uprights positioned upon opposite sides of a stream, a cross-piece connecting the uprights, a supporting-rod connecting the uprights intermediate of their ends, slats pivoted upon the supporting-rod, blocks secured upon the supporting-rod and between the slats for holding them the required distance apart, connections between the blocks and the cross-piece for preventing the sagging of the supporting-rod, a locking-lever pivoted to one of the uprights and adapted to extend across the faces of the slats at their lower ends, a recessed block secured to the opposite upright for receiving and securing the free end of the locking-lever, a rod extended across the faces of

the slats at their opposite ends, and a tripping device for operating the locking-lever and permitting the slats to swing upwardly, substantially as described.

4. The combination of uprights positioned on opposite sides of the stream, slats pivoted therebetween, a retaining device which the slats are adapted to engage adjacent to their upper ends, a locking-lever adapted to engage the slats adjacent to their lower ends and hold them in engagement with the retaining device, and a trip for operating the lever to permit the slats to disengage from the retaining device, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELIHU HAWKINS.

Witnesses:

R. R. PARKHURST,
CHRISTOPHER KREBS.