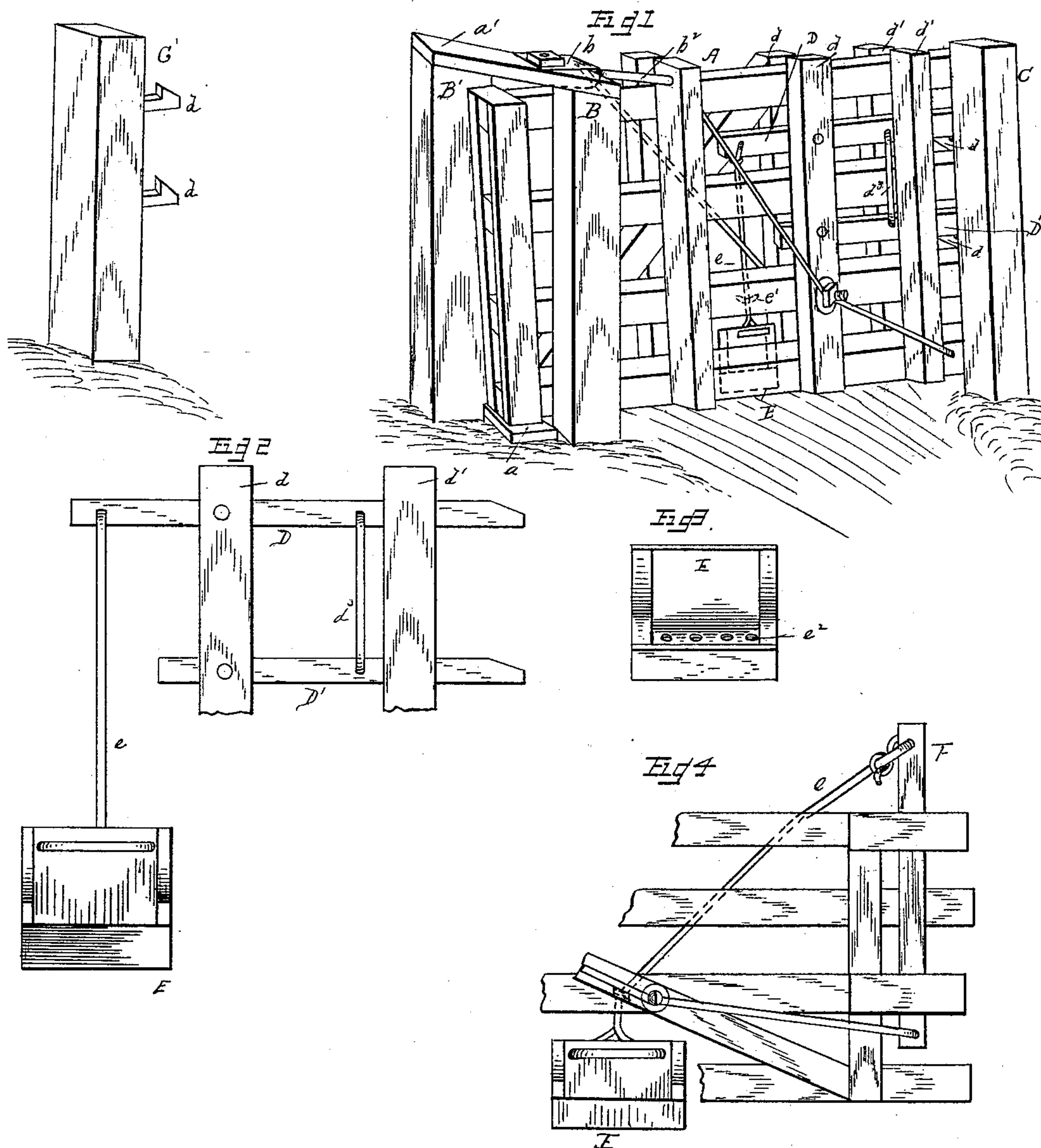


(No Model.)

J. MURPHY.
FLOOD GATE.

No. 386,436.

Patented July 17, 1888.



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UNITED STATES PATENT OFFICE.

JOSEPH MURPHY, OF ALBANY, MISSOURI.

FLOOD-GATE.

SPECIFICATION forming part of Letters Patent No. 386,436, dated July 17, 1888.

Application filed March 14, 1888. Serial No. 267,145. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH MURPHY, a citizen of the United States of America, residing at Albany, in the county of Gentry and State of Missouri, have invented certain new and useful Improvements in Flood-Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in flood-gates, having for its object the provision of simple and highly efficient means for automatically effecting the unlatching of the gate across the creek or stream when a desired amount of water is secured therein, so that said gate will swing around and come in contact with a latching-post secured on the bank of said creek or stream; and also to provide means whereby when the gate is released from contact with said latter post said gate will immediately swing around to its normal position across the creek or stream.

To these ends the invention comprises the details of construction, combination, and arrangements of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of my invention. Figs. 2 and 3 are enlarged detail views thereof, and Fig. 4 is a view of a modification.

Referring to the drawings, A indicates a gate of any ordinary construction, the same being pivotally secured at its lower end—preferably upon a base-board, *a*—between two posts or uprights, B B', said gate having room to swing between said posts or uprights, so as to describe an arc of a circle. The upper ends of the posts or uprights B B' are connected by an inclined bar, *a'*, the inclination of which is caused by the post or upright B' being longer than the other adjacent post. To the center of this inclined bar *a'* is pivotally secured an approximately U-shaped plate, *b*, through which is passed a rope or wire, *b'*, extending on either side of the gate A and passed through an aperture in the outer forward end of the lower bar thereof, so as to provide a support for the outer end of the gate, which, as shown, is normally held in an inclined position.

C C' are two latching-posts provided each with shouldered hooks *d d'*, one of said posts

being disposed on either side of the creek or stream, the post C being directly opposite the posts or uprights B B', while the post C' is a short distance down the creek below said posts or uprights.

D D' are two latch-levers pivotally secured between oppositely-disposed parallel bars *d' d'*, the upper latch-lever, D, being connected to the other lower latch-lever, D', by means of a wire loop or link, *d''*, whereby said levers will move together.

E is a pocket or receptacle closed on its outer side and open from about its center to its upper end on its inner side, and to this pocket or receptacle is connected one end of a wire or rope, *e*, passed through a staple, *e'*, and connected at its upper end to the inner extended end of the upper latch-lever, D, whereby upon depression of said pocket or receptacle the same will, through the agency of the wire or rope *e*, effect the elevation of the outer ends of the latch-levers, consequently disengaging them from contact with the shouldered hooks of the latching-post C.

In practice the gate A is normally extended transversely across the creek or stream, and the latch-levers are in engagement with the latching-post C. When the water in the creek rises sufficiently to come in contact with the pocket or receptacle E, the force thereof will cause said pocket or receptacle to move outward from the gate, and thus by pulling on the rope *e* the said latch-levers will be disengaged from contact with the post C, and by the force of the stream against the gate A the same will be swung around at right angles to its former position and its latch-levers will engage the latching-post C'. During this movement the water that entered the pocket or receptacle E is permitted to escape through small apertures *e''* formed in the bottom thereof, so that the latch-levers will be lowered and readily engage the hooks of the post C'. When it is desired to release the gate from contact with the post C' and to return the same to its normal position, upon loosening or disengaging the latch-levers the gate will immediately swing back to its former position, by reason of its pivotal connection with the upper inclined bar connecting the two uprights B B', and upon reaching the post C the latch-levers will engage with the shouldered hooks thereof.

By means of my invention the gate will automatically open and swing out of the way, where it will be held until released; and it will be seen that my invention comprises but few parts, and that the same embodies advantages in points of simplicity, durability, and general efficiency.

It is obvious that some changes can be made in the form of latch-levers used in connection with my invention, and hence, if desired, in lieu of the two horizontally-disposed latch-levers, I can employ a vertically-disposed latch-lever, F, as shown in Fig. 4, said latch-lever having connected to its upper end the end of the wire or rope *e* secured to the pocket or receptacle, said lever being designed to engage a single shouldered hook of the latching posts.

I claim as my invention—

1. As an improvement in flood-gates, the latch-levers and the pocket or water-receptacle connected to said latch-levers, substantially as shown and described.

2. As an improvement in flood-gates, the

latch-levers connected together, the pocket or water-receptacle, and the wire or rope connected to one of said latch-levers and to said pocket or receptacle, substantially as shown and described. 25

3. The combination, with the two posts or uprights and the gate pivotally secured between the same, of the two latching-posts disposed equal distances from said posts or uprights, the latch-levers designed to engage said latching-posts, and the pocket or receptacle connected to said latch levers, substantially as shown and described. 30 35

4. The combination, with the gate and the latch-levers, of the pocket or receptacle open on one side and having a perforated bottom, substantially as shown and described. 40

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH MURPHY.

Witnesses:

T. M. HUMPHRY,
O. P. STOCKWELL.