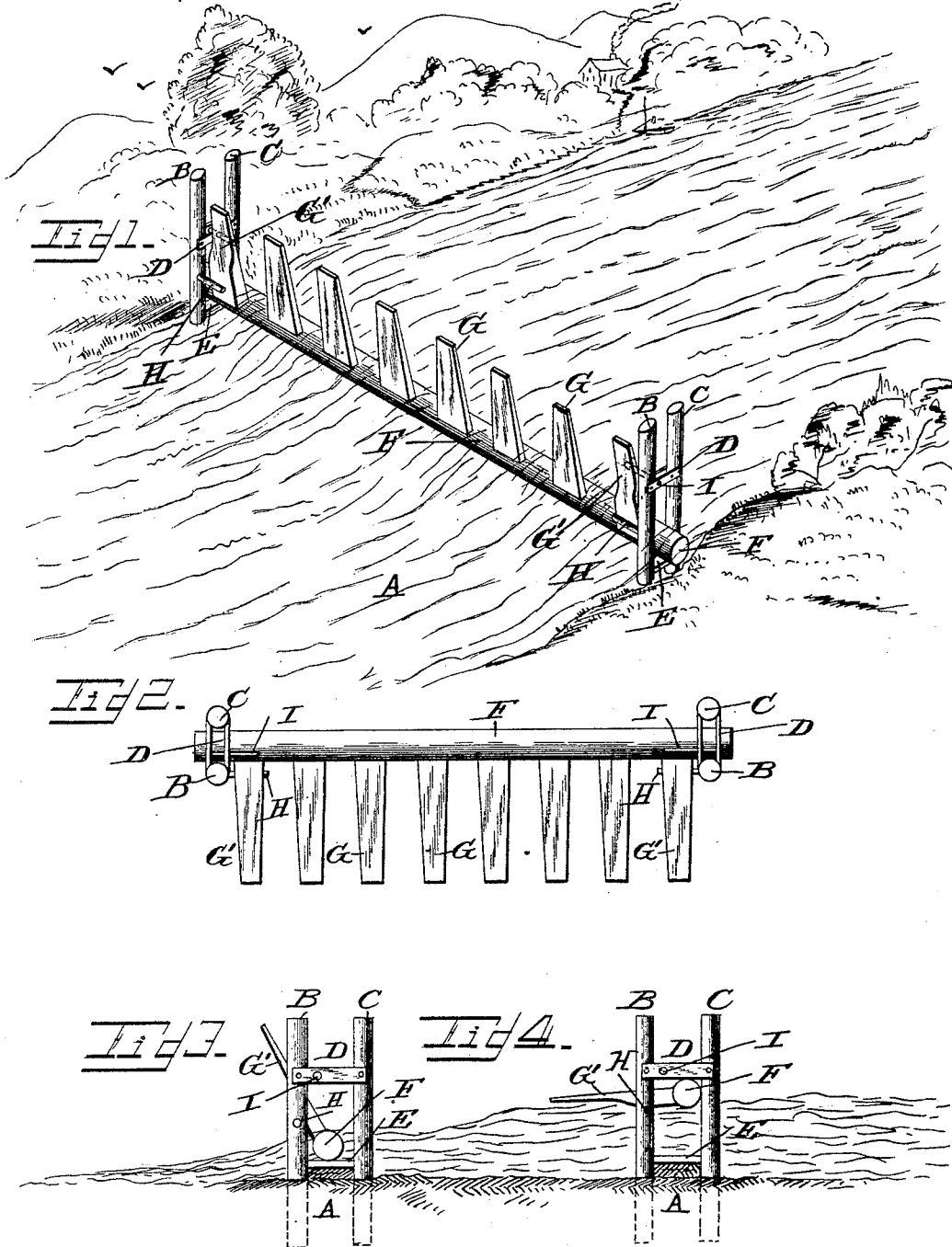


(No Model.)

T. F. EMANS.
FLOOD GATE.

No. 460,854.

Patented Oct. 6, 1891.



WITNESSES:

L. Ourand
James

INVENTOR:

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UNITED STATES PATENT OFFICE.

THEODORE F. EMANS, OF MENDON, OHIO, ASSIGNOR OF ONE-HALF TO EBEN S. PARROTT, OF SAME PLACE.

FLOOD-GATE.

SPECIFICATION forming part of Letters Patent No. 460,854, dated October 6, 1891.

Application filed May 8, 1891. Serial No. 392,066. (No model.)

To all whom it may concern:

Be it known that I, THEODORE F. EMANS, a citizen of the United States, and a resident of Mendon, in the county of Mercer and State of Ohio, have invented certain new and useful Improvements in Flood-Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved flood-gate. Fig. 2 is a top view of the gate as it appears when open. Fig. 3 is a side view showing the gate in its normal or closed position; and Fig. 4 is a similar view, but showing the gate open.

Like letters of reference denote corresponding parts in all the figures.

The object of my invention is to construct an inexpensive but strong and durable flood-gate without the employment of chains, hinges, or metal in any form, which are liable to rust and interfere more or less with the automatic working of the gate.

To this end my invention consists in the improved construction and combination of parts of the gate, which will be hereinafter more fully described and claimed.

Referring to the drawings, the letter A designates the bed or bottom of the stream in which the gate is placed. Firmly planted in this bed, near both banks and opposite to each other, are the posts or uprights B C B C, the posts of each pair being connected near their upper ends by cross-pieces D, and at their lower ends, where they are inserted into the bed of the stream by the sills or bearing-blocks E. In this manner I form on each side of the stream, near its banks, a rectangular keeper formed by the side posts B and C, bottom sill E, and upper cross-piece D. Into these keepers project the ends of the transverse gate log or beam F, upon which a row of pickets G is secured, as usual, these pickets, in conjunction with the log F, forming the gate proper. Into the post B on each

side is inserted a pin H, which projects outwardly parallel to the log and about half-way between the bottom sill E and upper cross-piece D. Through the latter is also inserted a pin I near the front post B and parallel to the pin or arm H which is fastened in the latter. The two end pickets of the gate, (marked G') which are preferably somewhat stouter and stronger than the rest, project up between these pins H and I on each side when the gate is in its normal or closed position, as illustrated in Figs. 1 and 3; but when the flood rises the water will lift the log or bottom beam F off the bed of the stream, causing it to float in the water between the end posts B C, with its ends bearing against the cross-pieces D D, which prevent it from becoming dislodged. As the log floats or rises into this elevated position the end pickets G' G' will slide up between the guide-pins H and I on each side, thus causing the log to tilt around its axis until the pickets assume the horizontal position shown in Figs. 2 and 4, in which position they will offer no obstacles or hinderance to the passage of drift or rubbish floating down with the stream. In this open position the end pickets G' rest horizontally upon the pins or supports H, the buoyancy of the log F keeping it up against the cross-pieces D; but when the flood recedes and the water falls below a certain level the log will drop back into its normal or closed position, with its ends resting on the bottom sills E E, which, instead of being made of wood, may be simply stones placed in the bed of the stream between the posts B and C.

From the foregoing description, taken in connection with the drawings, it will be seen that I entirely dispense with the use of ropes, chains, or hinges for connecting the gate movably to the end posts or holding-posts and prevent it from floating away. All the parts are made of wood, and the gate when open presents a minimum of resistance to the current. At the same time there is sufficient space between the upright posts B C and horizontal guide-arms H and I to give the gate free play, so that it will work easily and certainly in both directions without liability to bind or

become fastened in either its open or closed position.

Having thus described my invention, I claim and desire to secure by Letters Patent
5 of the United States—

The combination, in a flood-gate, with the stationary end posts B C, having cross-pieces D and provided with the guide-pins H and I, of the gate F G, having end pickets G' projecting between the guide-pins on opposite

sides, substantially as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

THEODORE F. EMANS.

Witnesses:

R. M. HARTER,
HENRY COLLINS.