(No Model.)

J. FRIEND.

FLOOD GATE.

No. 457,434. Patented Aug. 11, 1891.

Fig. 1.

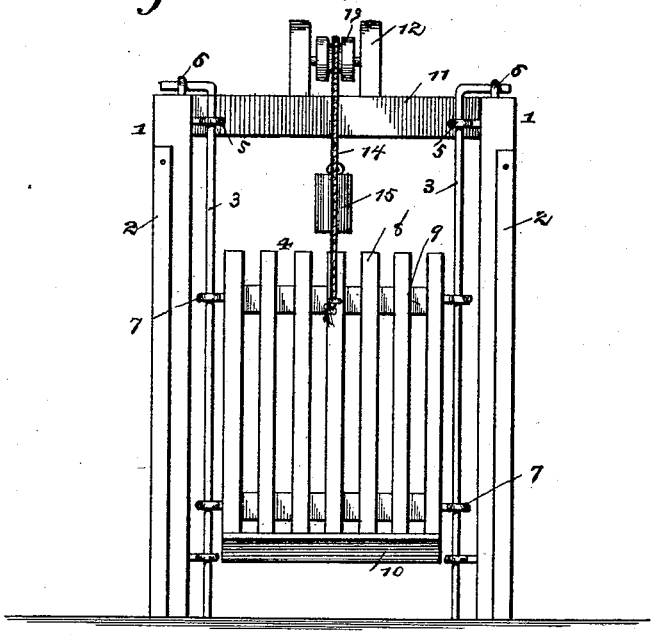
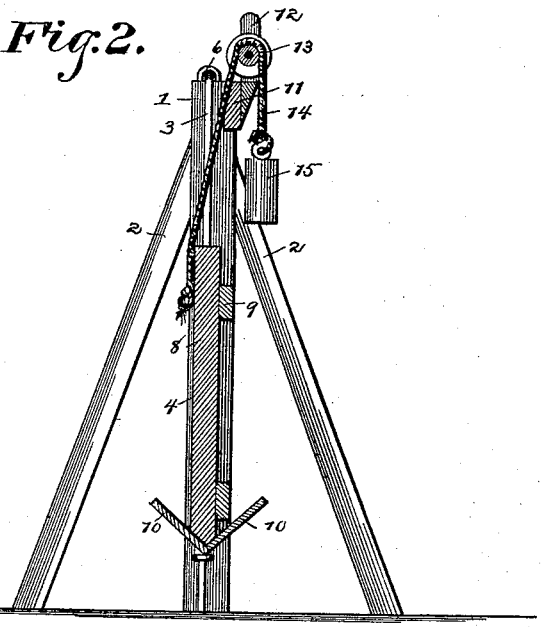


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN FRIEND, OF NORTH STAR, OHIO.

FLOOD-GATE.

SPECIFICATION forming part of Letters Patent No. 457,434, dated August 11, 1891.

Application filed January 27, 1891. Serial No. 379,288. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRIEND, a citizen of the United States, residing at North Star, in the county of Darke and State of Ohio, have invented a new and useful Flood-Gate, of which the following is a specification.

The invention relates to improvements in flood-gates.

The object of the present invention is to simplify and improve the construction of flood-gates and to provide one which will readily rise and fall with the water and which will permit the passage of drift-wood and the like.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a front elevation of a flood-gate embodying the invention. Fig. 2 is a vertical sectional view.

Referring to the accompanying drawings, 1 designates uprights, which are arranged on opposite sides of a stream and are supported by inclined braces 2, and are provided on their inner opposed faces with vertical guide-rods 3, on which is arranged a vertically-sliding gate 4. The guide-rods are secured to the uprights by eyebolts 5 or the like, and the upper ends of the guide-rods are bent at an angle and secured to the tops of the uprights by staples 6.

The gate is provided at opposite sides with guide-eyes 7 to receive the guide-rods, and is composed of vertical pickets 8 and horizontal bars 9, but may be of any desirable construction, and is provided at its lower end with inclined wings 10, arranged upon opposite sides of the gate and adapted to enable the gate to be elevated from either side by drift-wood or the like, thereby greatly facilitating the operation of the gate and enabling it to rise and fall more readily, and also presenting a large surface to the water. The upper ends of the uprights are connected by a cross-bar 11, upon which is mounted at a point intermediate of the ends of the bar a hanger 12, having journaled in it a pulley 13. Passing over the pulley is a cord 14, having one end attached to the gate and the other end provided with a weight 15, which counterbalances the gate and enables it to be readily moved by the water, drift-wood, and the like. When it is desirable, more than one weight can be employed to counterbalance the gate.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

Having described my invention, what I claim is—

1. The combination, in a flood-gate, of the uprights provided with eyes, the inclined braces supporting the uprights, the cross-bar connecting the upper ends of the uprights, the guide-rods arranged in the eyes of the uprights and having their upper ends bent at an angle and secured to the uprights, the gate provided at its sides with guide-eyes arranged upon the rod and having its lower end provided with inclined wings 10, arranged upon both sides of the gate and receiving between them the lower end of the same, the hanger having a pulley and secured to the cross-bar, and the cord passing over the pulley and having one end attached to the gate and the other end provided with a weight, substantially as described.

2. In a flood-gate, the combination of the uprights provided with guide-rods, the gate sliding vertically on the guide-rod, and the inclined wings which are secured to the bottom of the gate and arranged upon both sides of the same and receiving between them the lower end of the gate, substantially as described.

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

JOHN FRIEND.

Witnesses:
W. H. AULT,
FRANK GEORGE.