

(No Model.)

3 Sheets—Sheet 1.

J. H. CARAWAY.
FLOOD GATE.

No. 417,984.

Patented Dec. 24, 1889.

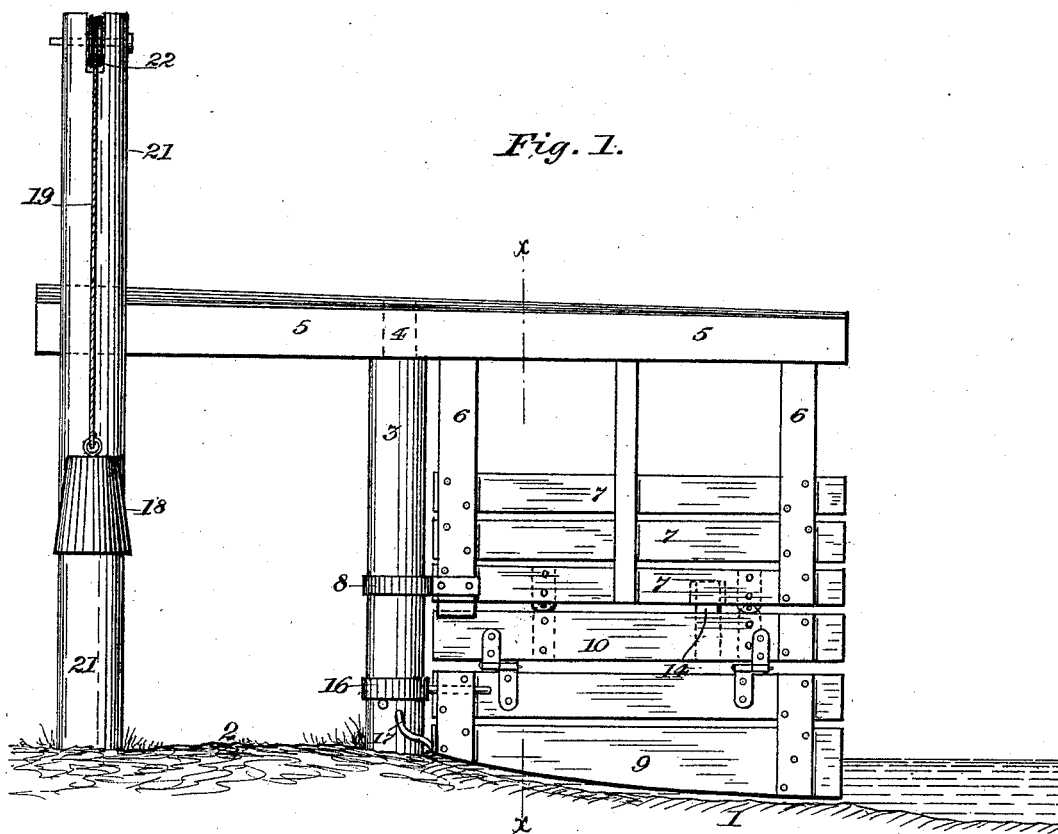


Fig. 2.

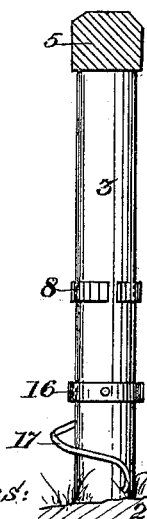


Fig. 3.

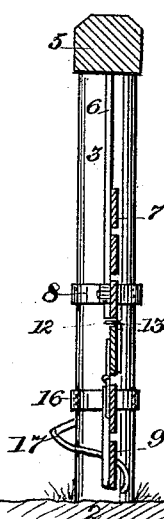
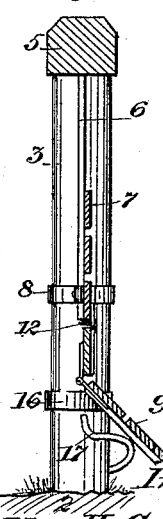


Fig. 4.



Witnesses:

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Inventor:

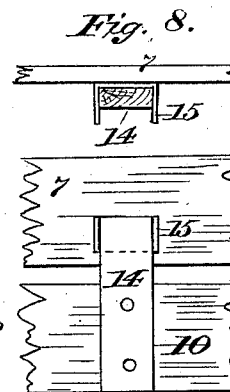
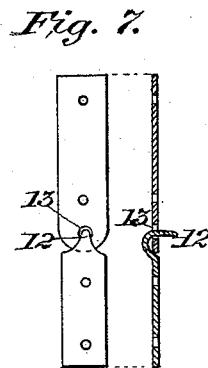
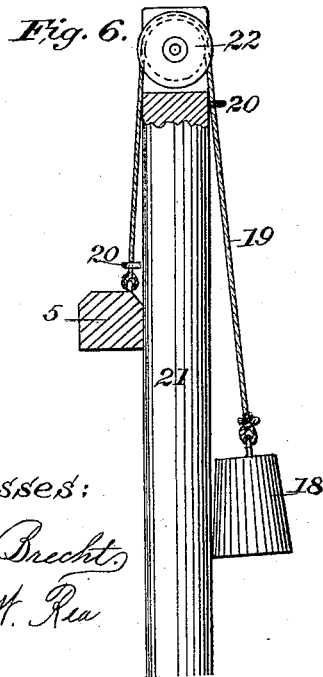
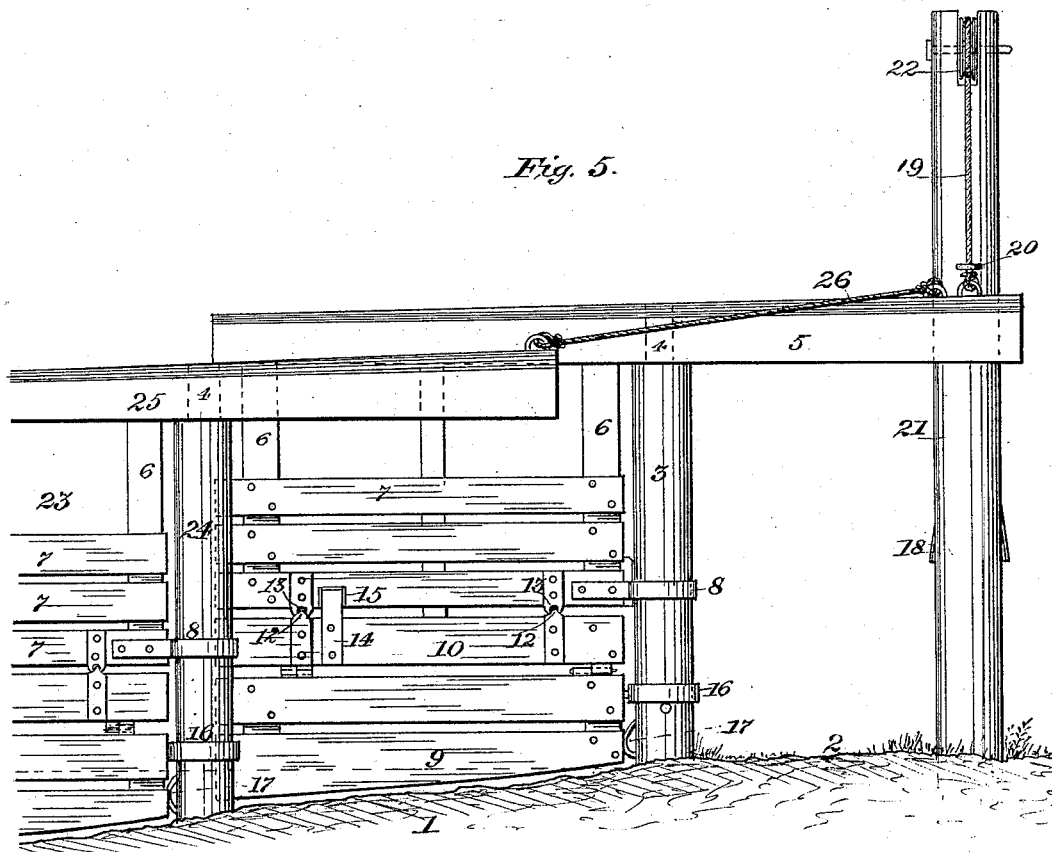
John H. Caraway,

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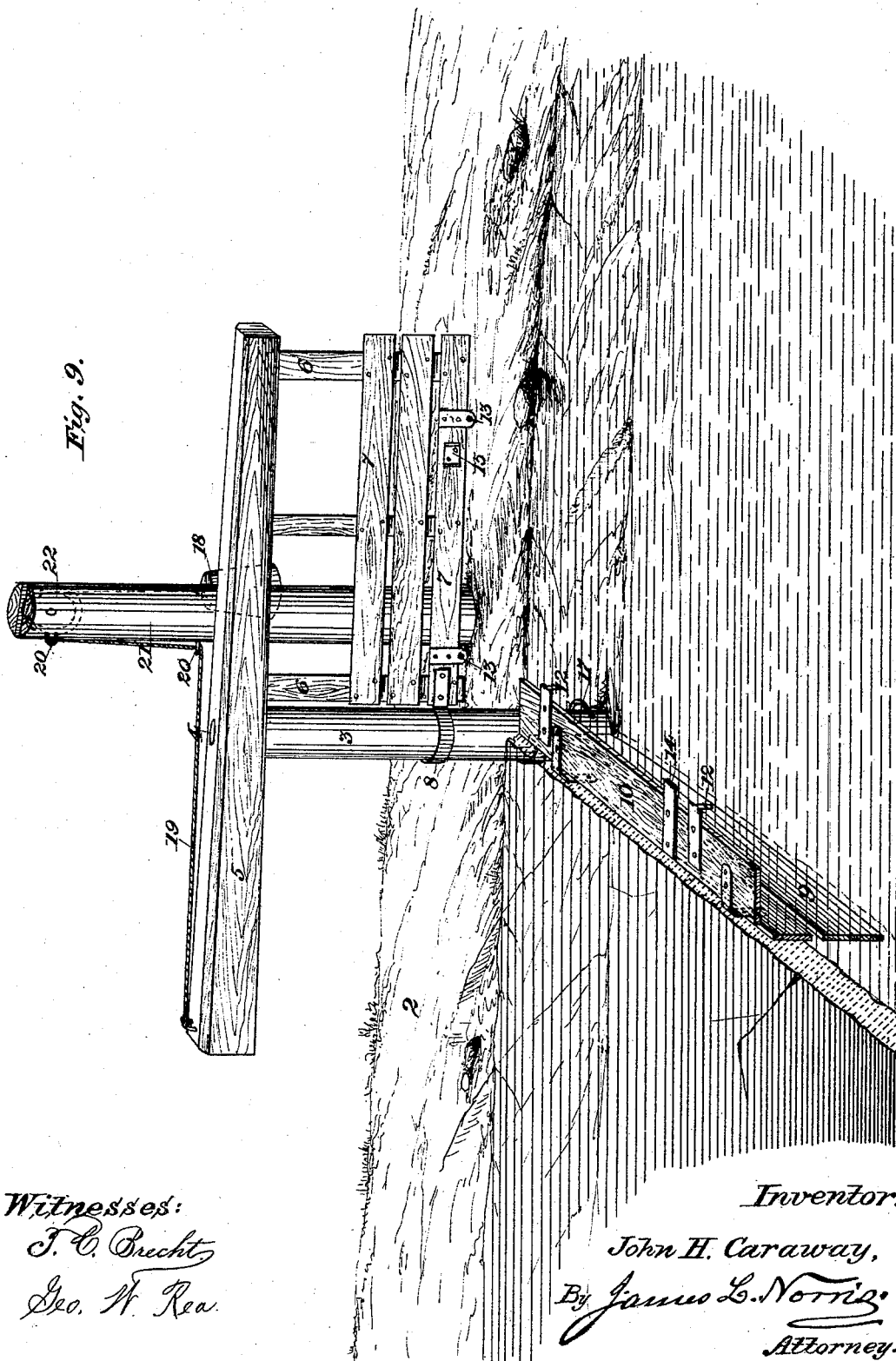
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3 Sheets—Sheet 3.

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Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN H. CARAWAY, OF CHRISMAN, ILLINOIS.

FLOOD-GATE.

SPECIFICATION forming part of Letters Patent No. 417,984, dated December 24, 1889.

Application filed September 3, 1889. Serial No. 322,822. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. CARAWAY, a citizen of the United States, residing at Chrisman, in the county of Edgar and State of Illinois, have invented new and useful Improvements in Flood-Gates, of which the following is a specification.

My invention relates to that class of devices commonly known as "flood-gates" for preventing the escape of live stock from one pasture or inclosure to another by following a water-course.

It is the purpose of my invention to provide a simple construction and combination of parts whereby the gate may be turned without being impeded by stones or other obstructions on the bottom, and whereby, also, the bottom of the gate shall lie close to the bottom.

It is my purpose, also, to provide a construction whereby the upper portion of the gate may yield to the current when the lower portion is immovably held by ice or other obstructions, and whereby the said parts may afterward be readily united.

It is also an object of my invention to provide simple means whereby an auxiliary gate may be combined with a main gate upon streams of more than ordinary width, or where it is desired to span the stream entirely, both gates being arranged to yield automatically to the current and to be closed by the same device.

The invention consists in the several novel features of construction and new combinations of parts hereinafter fully set forth, and definitely pointed out in the claims following this specification.

In order to enable those skilled in the art to make and use my invention, I will describe the same in detail, reference being made to the accompanying drawings, in which—

Figure 1 is a view in elevation showing said invention. Fig. 2 is a detail section showing the construction of the lower portion of the post. Fig. 3 is a sectional view on the line *xx*, Fig. 1. Fig. 4 is a similar view showing the lower section elevated by the cam. Fig. 5 is an elevation showing a modification of Fig. 1. Fig. 6 is a detail view of the weight-post. Fig. 7 is a detail view of the hook and eye uniting the upper and lower

sections of the gate, on an enlarged scale. Fig. 8 is a detail view of the cleat and keeper, on an enlarged scale. Fig. 9 is a sectional perspective showing the operation of the gate in a spring flood or thaw when ice remains in the stream confining the lower part or section of the gate.

In the said drawings, the reference-numeral 1 designates the bottom or bed of a stream of water of any size, and the numeral 2 denotes the bank. Upon the latter, at or near the edge of the stream, is planted a strong post 3, having a pivot pin or bearing 4 at its top. Upon this pin is mounted a strong beam 5, having its ends projecting upon both sides of the pivotal point. Depending from this beam is a gate, formed in part by vertical strips 6, attached at one end to the beam and having slats or strip 7 fastened thereto and arranged parallel with the beam 5, or substantially so. One or more metallic loops 8 are placed upon the post and their ends lapped upon the strips 6 and 7 and fastened.

The lower portion of the gate is composed of one, two, or more slats or strips 9, connected rigidly together and hinged to a strip or section 10, which is detachably connected to the lower strip of the upper portion of the gate by means of hooks 12 on one of the parts and detachably engaging eyes 13 on the other. A bar or cleat 14 is rigidly mounted on the slat 10, above the edge of which it projects, its end being received by a keeper 15 on the lower strip of the upper gate-section. This keeper is composed of a metallic plate having parallel ends, between which the end of the bar 14 is forced. An eye or loop may be slipped on the post 3 and connected to the end of the hinged section 9.

Attached to the post 3, at or near its bottom, is a cam 17, so arranged that it lies in the path of the end of the hinged section 9 as the gate turns. This cam may be formed of a piece of wire simply driven at its ends into the post, one end being higher than the other. The lower end of this cam or cam-lift engages the hinged section of the gate as the latter opens or swings under the impulse of the current, and gradually raises the same, thereby preventing it from striking as the end of the gate approaches the shore where the

water is shallow. It is again lowered to its normal position as the gate returns to position, which movement is effected automatically by a weight 18, attached to a cord 19, which runs in eyes or guides 20 on a post 21 and over a pulley 22 on said post.

When the stream is frozen, the lower portion of the gate is usually confined by the ice, and when floods occur during sudden thaws the water, rushing over the surface of the ice, acts upon that portion of the gate above the strip 10. The power of the current detaches the bar or cleat 14 from the keeper 15, whereupon the hooks 12 easily draw out of the eyes 13 and the gate is allowed to swing with the flood, leaving the lower part fixed in the ice. When the latter breaks up, this portion is released, and being anchored to the post by the loop 16 it is recovered and attached to the gate.

When the stream is broad, or where it is desired to span the same and a single gate is not sufficient for such purpose, a second gate 23 of substantially similar construction may be mounted on an independent post 24, set at the end of the first gate. The beam 25 of the second gate overlaps upon the first, and its end is connected thereto by a cord 26, whereby both gates are operated by the same weight. The cord 26 may pass through and be connected to an eye on the beam of the first gate and then carried to the end of the beam of the second gate. The ends of these beams may be enlarged to balance the gates, or ordinary weights may be used for this purpose.

What I claim is—

1. In a flood-gate, the combination, with a lower gate-section, of a swinging upper gate-section having a detachable connection with the lower gate-section, which is automatically released by the flood-pressure when the lower gate-section is held stationary, substantially as described.

2. In a flood-gate, the combination, with a lower gate-section having a hinged strip at its top, of a swinging upper gate-section having a detachable connection with the said hinged strip and automatically released by the flood-pressure when the lower gate-section is held stationary, substantially as described.

3. In a flood-gate, the combination, with a suitable support, of a gate swinging with the current, a hinged lower section forming part of said gate, and a cam-lift mounted on the support and engaging the inner end of said hinged section to raise the same as the gate swings, substantially as described.

4. In a flood-gate, the combination, with a swinging gate mounted on a beam which is pivoted between its ends to a post, of a second auxiliary gate similarly mounted on a post set at or near the end of the first gate, and a cord or chain connected to the ends of both beams and having a weight closing both gates against the current, substantially as described.

5. In a flood-gate, the combination, with a post or other similar support, of a beam pivotally mounted thereon, a gate depending from one portion of said beam, a strip connected to the lower edge or portion of said gate by hooks and eyes, a cleat or bar on one part entering a keeper on the other part to maintain the connection, and a section forming part of said gate and hinged to said strip and connected to the post by a loop, substantially as described.

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

JOHN H. CARAWAY.

Witnesses:

CHARLES W. MITCHELL,
J. L. STUBBS.