J. M. BURKETT.

FLOOD GATE.

APPLICATION FILED JULY 22, 1908.

911,290.

Patented Feb. 2, 1909.

2 SHEETS—SHEET 1.

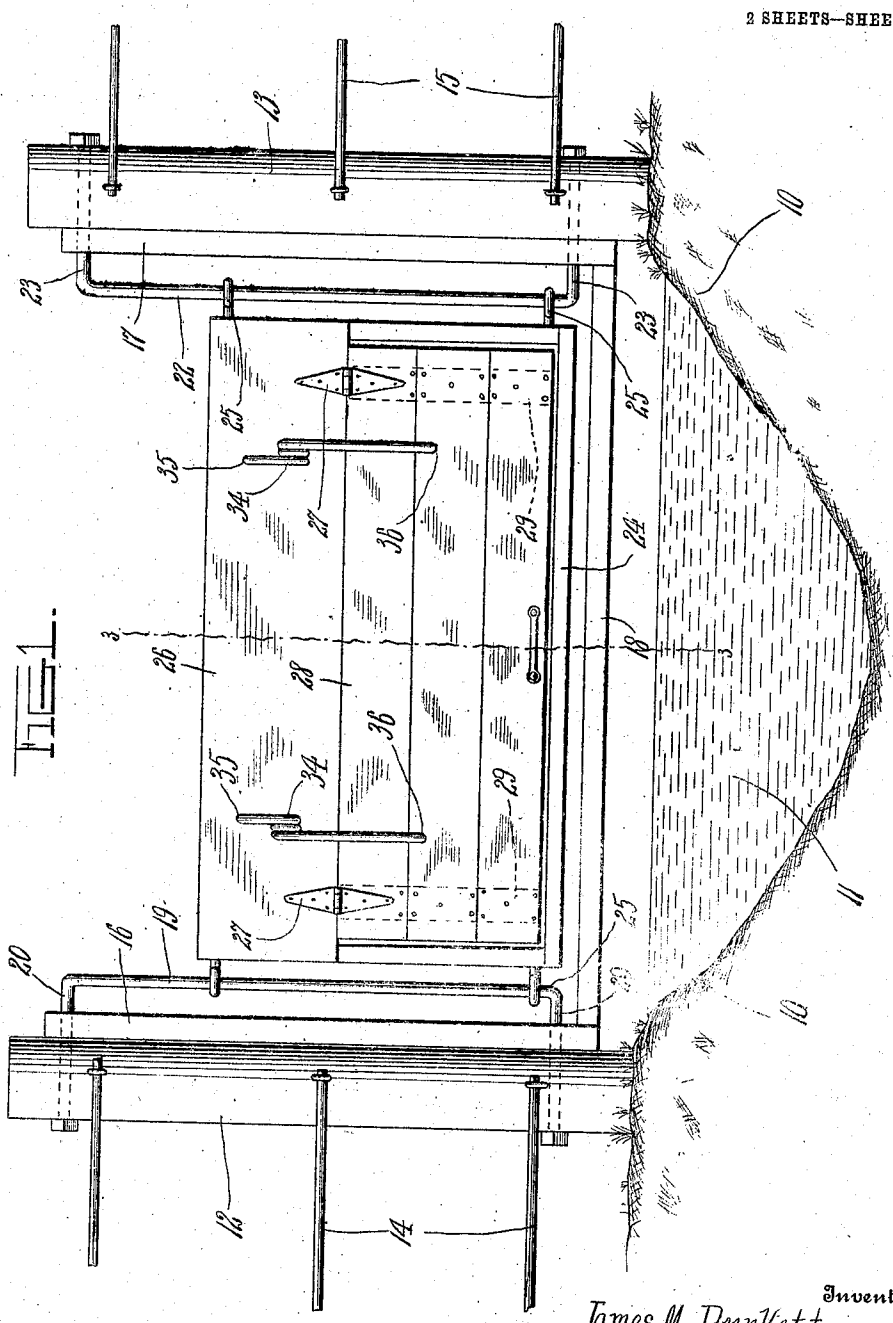


FIG. 1.

Witnesses

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2 SHEETS—SHEET 2.

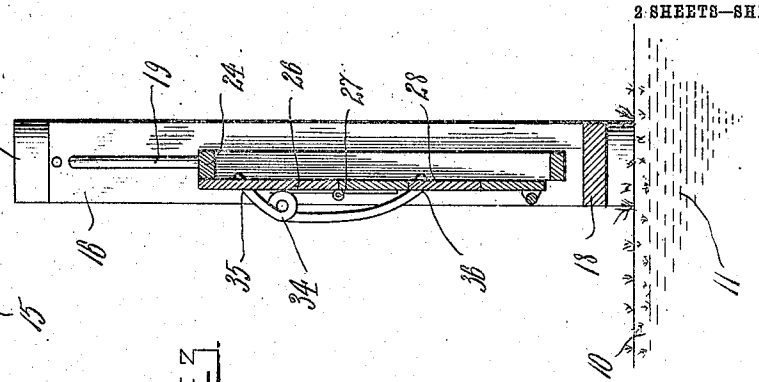


FIG. 3.

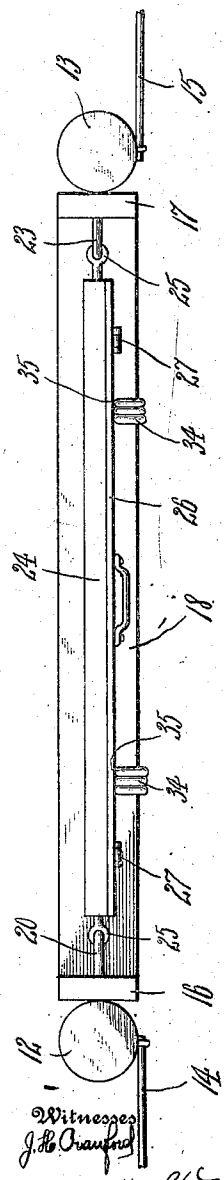


FIG. 2.

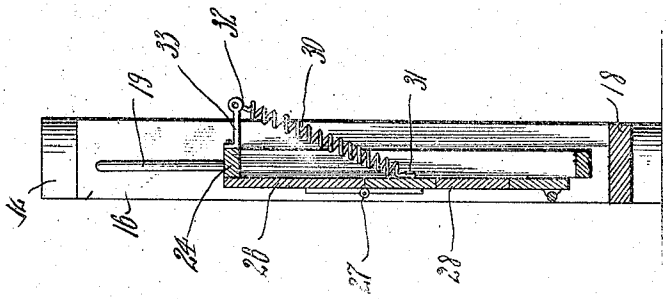


FIG. 4.

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UNITED STATES PATENT OFFICE.

JAMES M. BURKETT, OF NOBLE, OKLAHOMA.

FLOOD-GATE.

No. 911,290. Specification of Letters Patent. Patented Feb. 2, 1909.

Application filed July 22, 1908. Serial No. 444,802.

To all whom it may concern:

Be it known that I, JAMES M. BURKETT, a citizen of the United States, residing at Noble, in the county of Cleveland, State of Oklahoma, 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 flood gates employed where fences cross streams in which the water is liable to rise and fall, and likewise in fences which cross low land in which water is liable to rise during rainy seasons or in the spring of the year when the frost and snow are melting, and has for one of its objects to simplify and improve the construction of devices of this character and increase their efficiency and utility.

Another object of the invention is to provide a simply constructed device of this character which will prevent horses, cattle and other stock from passing therethrough, but which will yield to the pressure of running water when it rises abnormally, and which will then automatically return to its former position.

With these and other objects in view the invention consists in two posts spaced apart at opposite sides of the stream or low land where the gate is to be erected, the posts forming portions of the fence which extends to the stream or low land at its opposite sides, the posts having vertical guide rods upon which an open frame is mounted for vertical movement, and with a closure swinging within the frame and held yieldably therein, the springs being of sufficient strength to maintain the gates against pressure exerted thereon by horses, cattle, or other animals which it is desired to hold back, but which will yield to pressure exerted by running water when rising to an abnormal height.

The invention further consists in certain novel features of construction as hereafter shown and described and specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention, Figure 1 is a side elevation of the improved device applied. Fig. 2 is a plan view of the same. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a sectional detail illustrating a slight modification in the construction.

The improved device may be constructed across streams of any size, or across low land of any depth, and for the purpose of illustration is shown arranged across a stream, the banks at the side of the stream indicated at 10 and the water in the stream at 11. Rising from the banks relatively near the normal shore line of the water are two posts 12—13, the posts forming a part of the fence which crosses the stream, the fence wires represented respectively at 14—15. Attached to the confronting faces of the posts are boards or planks 16 and 17. The bottom ends of the boards 16 and 17 are united by a longitudinal board or plank 18, the latter extending across the stream above the water, and spaced therefrom, the cross member 18 being low enough to prevent animals passing beneath it.

Extending longitudinally of the member 16 and spaced therefrom is a rod 19, the ends 20 of the rod turned laterally and secured through the member 16 and the post 12, as shown. Extending longitudinally of the member 17 is a rod 22, the latter having laterally extending ends 23 projecting through the bar 17 and the post 13, as shown. The two rods 19 and 22 thus forming vertical guide members disposed in parallel relation. Disposed between the rods 19—22 is an open rectangular frame represented as a whole at 24. Connected to the frame 24 at the ends are eye bolts 25 slidably engaging the rods 19—22, so that the frame 22 may be moved vertically upon the rods, the object to be hereafter explained.

Attached upon one face of the frame 24 at its upper part is a plank 26, and hinged as at 27 to this member 26 is a closing member 28, the latter preferably formed of a plurality of planks connected by cleats 29, the member 28 thus swinging from the member 26 and within the frame 24 and closing the otherwise open portion of the frame. The member 28 is yieldably held in its vertical position, or within the frame 24, by means of a pair of springs, each spring consisting, as shown in Figs. 1 and 3, of a single strip of relatively heavy steel wire bent into an intermediate coil 34, one end of each spring being extended and fastened through the member 26 at 35, and

the other end fastened through the member 28, at 36. The spring shown in Fig. 4 operates in precisely the same manner and produces the same result as the spring shown in Figs. 1, 2 and 3. The spring is arranged on the down stream side so as to pull the gate back into closed position after it has been moved by the force of the water.

The spring will be of sufficient strength to hold the member 28 in its vertical position against the action of the water when at its normal stage, but which will yield when the water rises above the normal and will permit the water to flow through the gate, and which will then automatically close the gate when the water falls to the normal stage. If the water rises to a sufficient height to entirely or nearly submerge the frame 24, together with its member 26, the whole gate structure will rise upon the rods 19—22 and thus permit the water to flow beneath and through the frame. The rising of the gate, it will be obvious, will provide a relatively large space for the flowing water, and thereby prevent injury to the gate under these conditions. The improved gate thus automatically adapts itself to the condition of the stream or the water flowing beneath it, and is prevented from being displaced by any abnormal rise of water. The members 16—17—18—24—26—28—29 will preferably be of hard wood, while the rods, eyes, hinges and springs will be of metal, and preferably of steel, and may be galvanized or otherwise treated to prevent corrosion.

In Fig. 4 a slight modification in the manner of forming the spring by which the gate is automatically controlled is shown, each spring, which is designated by the numeral 30 having one end 31 thereof fastened to the member 28 and the other end 32 fastened to a bracket 33 which is secured to the upper member of the frame 24.

The improved device is simple in construction, can be inexpensively manufactured and adapted to streams or low places of any required width, and may be constructed of any required height by simply extending the posts 12—13, the planks 16—17, and the rods 19—22, as will be obvious, so that the gate may rise to a corresponding height when the water rises.

What is claimed, is:

1. In a flood-gate, the combination of spaced supporting members, vertical guide devices carried by said supporting members and spaced from their confronting faces, an oblong open frame, means for slidably coupling said frame to said guide devices, a closure device bearing over the upper portion of said frame, a closure device arranged within the lower portion of said frame and swinging from the lower edge of said upper closure device, and a spring operating to maintain said swinging closure device yieldably in position.

2. In a flood-gate, the combination of spaced supporting members, vertical guide devices carried by said supporting members and spaced from their confronting faces, an oblong open frame, means for slidably coupling said frame to said guide devices, a closure device bearing over the upper portion of said frame, a closure device arranged within the lower portion of said frame and swinging from the lower edge of said upper closure device, an arm extending laterally from the upper member of the frame, and a spring connected at one end to the free end of said arm and at its other end to said movable closure device.

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

JAMES M. BURKETT.

Witnesses:
C. M. HOBAUGH,
R. McCAUKEY.