C. W. DAYLEY.

WATER GATE.

APPLICATION FILED MAR. 23, 1918.

1,287,574. Patented Dec. 10, 1918.

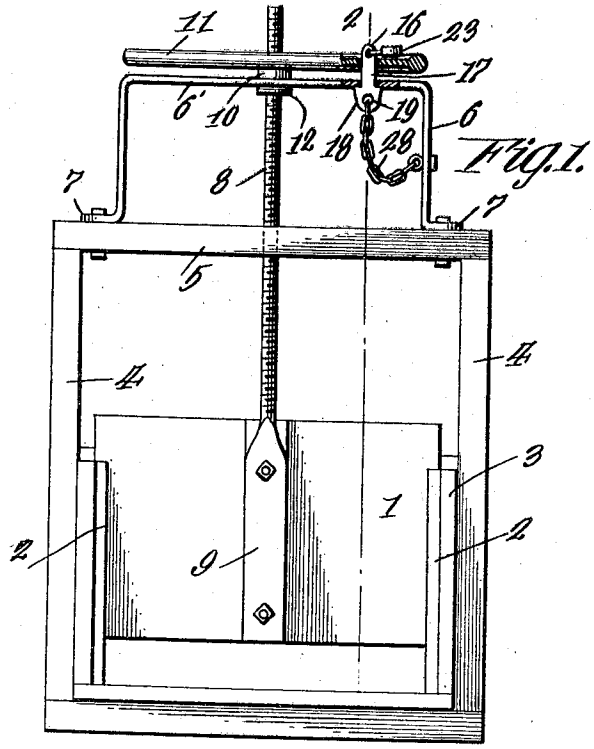


Fig. 1.

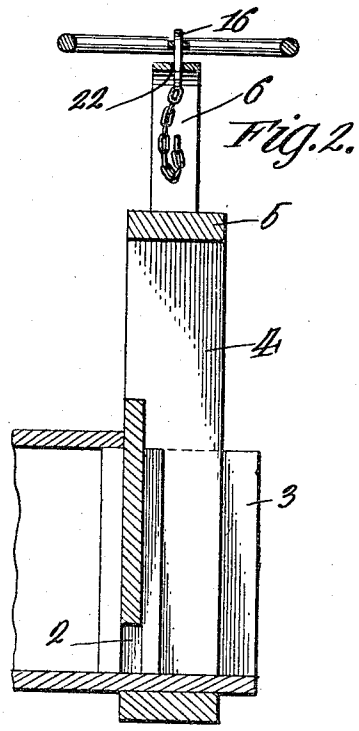


Fig. 2.

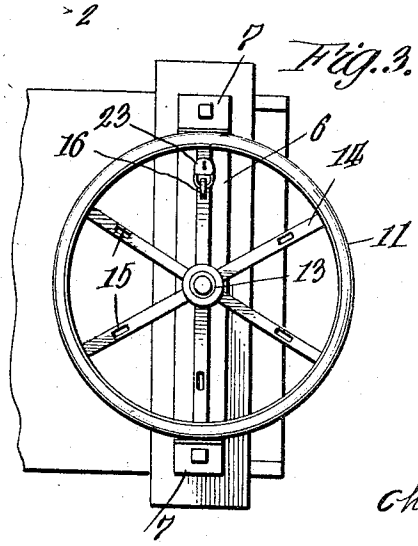


Fig. 3.

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UNITED STATES PATENT OFFICE.

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WATER-GATE.

1,287,574. Specification of Letters Patent. Patented Dec. 10, 1918.

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To all whom it may concern:

Be it known that I, CHARLES W. DAYLEY, a citizen of the United States, residing at Burley, in the county of Cassia and State of Idaho, have invented certain new and useful Improvements in Water-Gates, of which the following is a specification.

This invention relates to water gates, for irrigating ditches, and more particularly to farm water gates.

The object of the invention is to provide simple and efficient means for raising, lowering and locking in adjusted position a gate of this character, so that after it is once adjusted and locked, the position thereof cannot be changed except by an authorized person having the key.

Gates of this character in common use, after being locked may be moved an inch or two without the lock being unfastened, and it is to overcome this objection, that this invention is specially designed.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 represents a front elevation with parts broken out, of a gate constructed in accordance with this invention and shown in locked position,

Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1, and

Fig. 3 is a plan view thereof.

In the embodiment illustrated, a gate 1 is shown mounted to slide vertically in suitable guides 2 on the inner faces of the opposed side walls 3 of the ditch or flume in which the gate is mounted.

Standards 4 rise from this flume and are connected at their upper ends by a cross bar 5, said standards being extended to any desired height sufficient to permit the gate 1 to be raised its full extent without interference by the cross bar 5. Mounted on the cross bar 5 is an inverted U-shaped member 6 having out-turned, laterally extending, apertured feet 7 which are bolted to said cross bar and which is designed to form in connection with the cross bar a support and guide for a threaded post or rod 8 which is fixed to the gate 1 and extends upwardly therefrom, the lower end of said rod being flattened as shown at 9 to facilitate its connection with the gate.

A wheel 11 is similar to the ordinary steering wheel of an automobile, it has the hub 13 thereof movable on rod 8, having threaded engagement therewith. The lower end of hub 13 of the wheel which extends through the cross bar has the portion thereof indicated at 10 disposed above the cross bar forming a support and spacer for the wheel and a portion below it to prevent the wheel from screwing off the rod and adapt the turning of the wheel to lock the gate as well as to raise it. A plurality of spokes 14 radiate from the hub 13 and is provided, each with a longitudinal slot 15 designed to receive a locking element 16. This element 16 is here shown in the form of a metal plate or bar 17 having an enlarged head 18 at one end apertured at 19 to receive a connecting chain 20 and provided at its inner end with laterally extending shoulders which are designed to abut against the lower face of the cross bar 6′ when said bar 17 is passed through an aperture 22 in the cross bar as is shown clearly in Fig. 1. This plate 17 is made of a length sufficient to span the space between the wheel 11 and the cross bar 6′ and to project above said wheel, the projecting end thereof being apertured to receive a padlock as 23, so that when said bar is thus positioned, the wheel will be locked against turning and can only be moved after a person carrying a key to the lock 23 has released bar 17 and disengaged it from the spoke 14 through which it had been extended.

The chain 20 connects the locking element 16 to the member 6 so that all danger of its becoming lost when not in use is avoided.

In the use of this invention it will be obvious that to raise or lower the water gate 1, all that is necessary is to turn the wheel 11 in the proper direction according to the direction it is desired the gate shall be moved, and when the gate has been properly positioned, the locking element 16 is inserted through the aperture 22 in cross bar 6′ and through the opening 15 in the nearest spoke of the wheel 11. After it has been so positioned the padlock 23 is inserted through the aperture in the free end of said element and the wheel and the gate connected there-

with are thus locked against all possible movement and this position cannot be changed until released in the manner above described.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains and while I have described the principle of operation of the invention together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made as are within the scope of the claimed invention.

I claim:—

1. The combination with a vertically movable water gate, a threaded rod rising therefrom, a cross bar disposed over said gate and apertured for the passage of said rod therethrough, an inverted U-shaped member having its free ends secured to said cross bar and its cross bar apertured for the passage of the rod therethrough, a wheel having threaded engagement with said rod above the cross bar of said U-shaped member, said wheel having a plurality of spokes, each provided with an aperture, the cross bar of said U-shaped member having an aperture positioned to register with the apertures in said spokes, and a locking element adapted to pass through said registering apertures.

2. A water gate having a threaded rod, a guiding and supporting structure through which said rod passes, a wheel having a hub threaded on said rod, spokes radiating from said hub and provided each with an aperture, said structure having an aperture disposed to register with the apertures in said spokes, a locking element in the form of a bar having shoulders at one end and adapted to pass through the registering apertures in said structure and wheel spokes, the shoulders being designed to engage said structure to limit the passage of the bar, the opposed end of said bar being apertured and adapted to project beyond the spoke through which it passes, and a padlock for engagement with said apertured end to lock the wheel against turning.

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

CHARLES W. DAYLEY.

Witnesses:
L. C. ANDERSON,
GEO. R. WOODROTH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."