

T. A. POWERS.
 SCREEN FOR IRRIGATING DITCHES.
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944,907.

Patented Dec. 28, 1909.

Fig. 1.

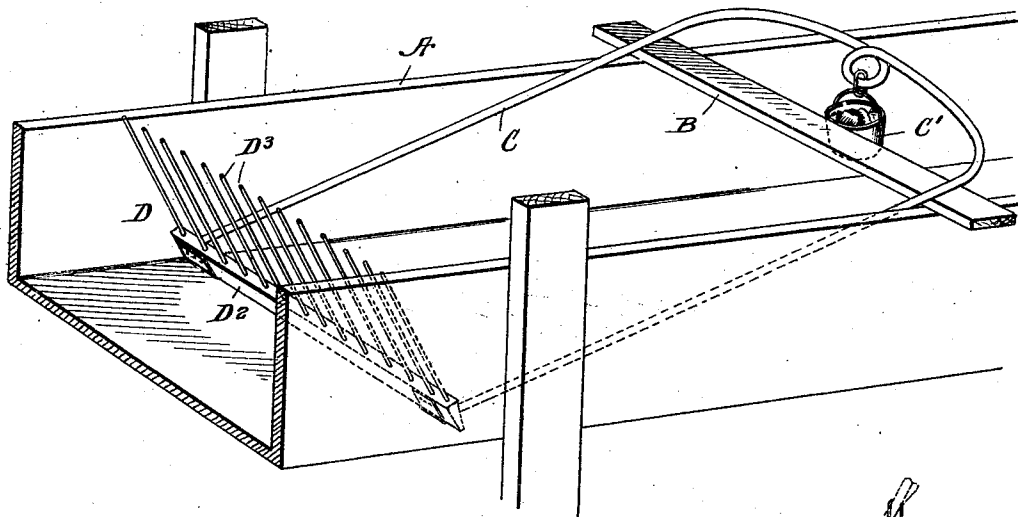
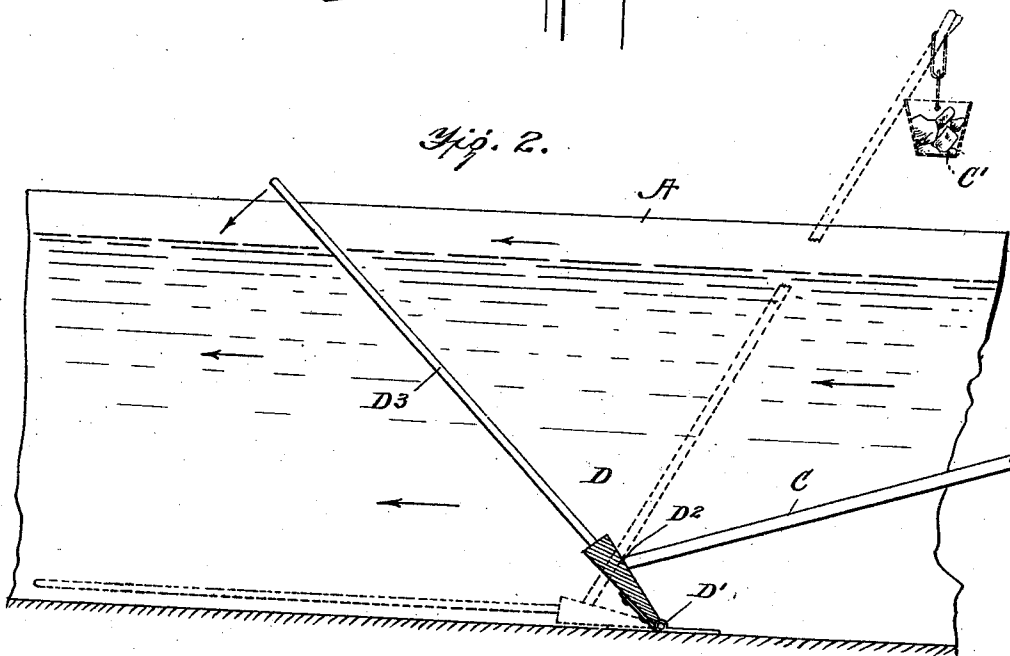


Fig. 2.



WITNESSES

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SCREEN FOR IRRIGATING-DITCHES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS A. POWERS, a citizen of the United States, and a resident of Slack, in the county of Sheridan and State of Wyoming, have made certain new and useful Improvements in Screens for Irrigating-Ditches, of which the following is a specification.

This invention is an improvement in screens for ditches especially for irrigating ditches to be placed at or near head gates; and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described and claimed.

In the drawing Figure 1 is a perspective view of the screen when closed, and Fig. 2 is a vertical longitudinal section showing the screen raised or closed in full lines, and down or opened in dotted lines.

In the construction shown, I have illustrated the invention embodied in irrigating flumes or head gates for preventing fish from passing from streams into ditches.

As shown, the flume A has a cross bar B, forming a rest for a lever C extending from the screen D, which latter is hinged at its lower end at D' so it may be tilted from the full line position shown in Fig. 2, to the dotted line position indicated in the same figure, when the weight of the debris and back water overcomes the weight C' of the lever C. At this time it will be noticed the screen or gate D will assume a horizontal position at the bottom of the flume A, the debris will be released and pass down the ditch and the weight C will readjust the screen to its original position shown in Figs. 1 and 2 of the drawing.

Manifestly, the screen may be made of wood, iron or other material instead of that shown, wherein it includes a base bar D², and rods or slats D³, extending upwardly therefrom and standing normally when the gate is in position for use at an angle of about forty-five degrees.

The weight C may preferably be in the form of a bucket as shown, in which rocks or other weights may be placed so that the gravity of the weight may be increased or decreased to conform to the flow of the water.

In operation, the screen will normally stand as shown in Fig. 1, hinged at its lower

end and adapted at its upper end to be depressed down stream by the action of pressure from above and to permit the debris to pass after which the screen may be readjusted to the position for use shown in Fig. 1, and in full lines in Fig. 2.

I claim—

1. The combination of a ditch or flume, a screen comprising a base bar extending from side to side of the ditch or flume and hinged thereto and provided with projecting slats or bars inclining toward their upper ends normally in a direction down stream and adapted to be pressed down to approximately a horizontal position to permit the passage of debris and the like, a lever extending upwardly and rearwardly from the screen, and a bar extending across the flume and forming a rest for the lever when the parts are in normal position, and a weight for the lever, substantially as set forth.

2. The combination of a ditch, a screen having a base bar extending across and hinged to the ditch and provided with bars or slats extending outwardly from the base bar and having a general inclination toward their upper ends, a lever extending from the base bar, and a weight operating upon the lever, substantially as set forth.

3. The combination of a ditch, a bar extending across the ditch, a screen hinged at its lower end and inclining toward its upper end down stream, and a lever arm fixed to the screen and resting normally upon the cross bar, substantially as set forth.

4. The combination of a screen proper provided with a base bar hinged at its lower edge, and a counterbalancing arm projecting from the screen proper and adapted to readjust the same after the passage of debris and the like.

5. A screen for ditches comprising a base bar having projecting rods or slats, and a counterbalance having arms secured to the base bar near the ends of the latter and extending thence and adapted to counterbalance the screen whereby to readjust the same to normal position, substantially as set forth.

THOMAS A. POWERS.

Witnesses:

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