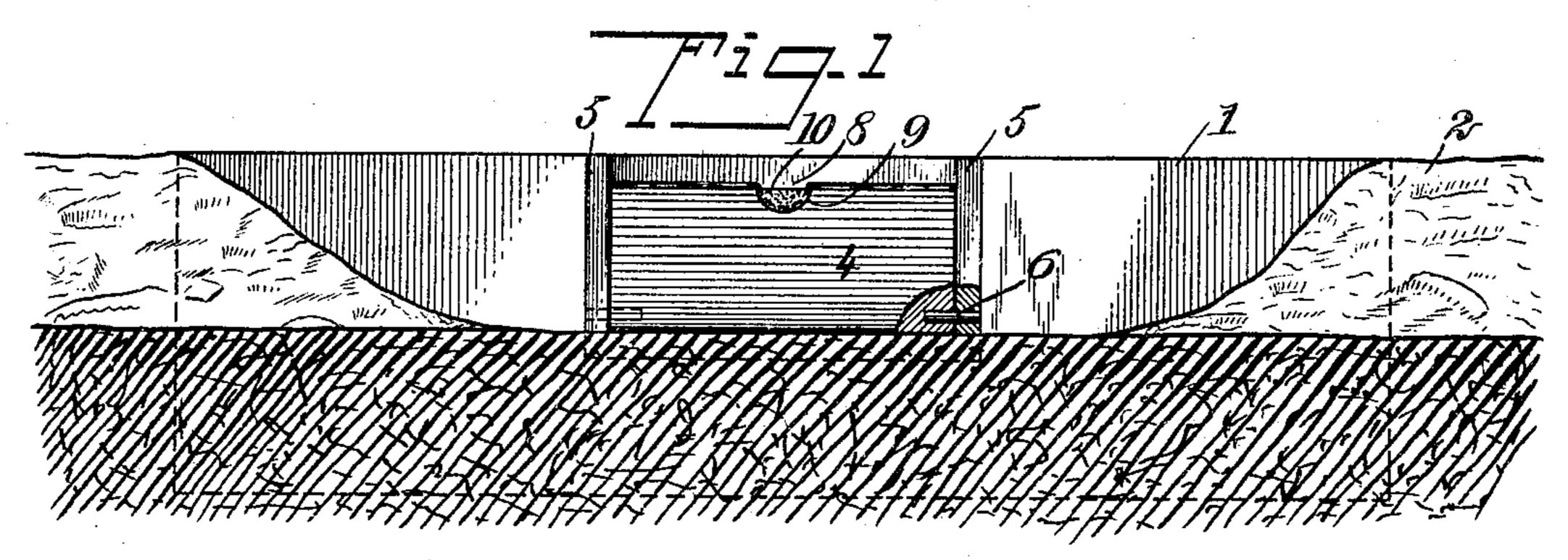
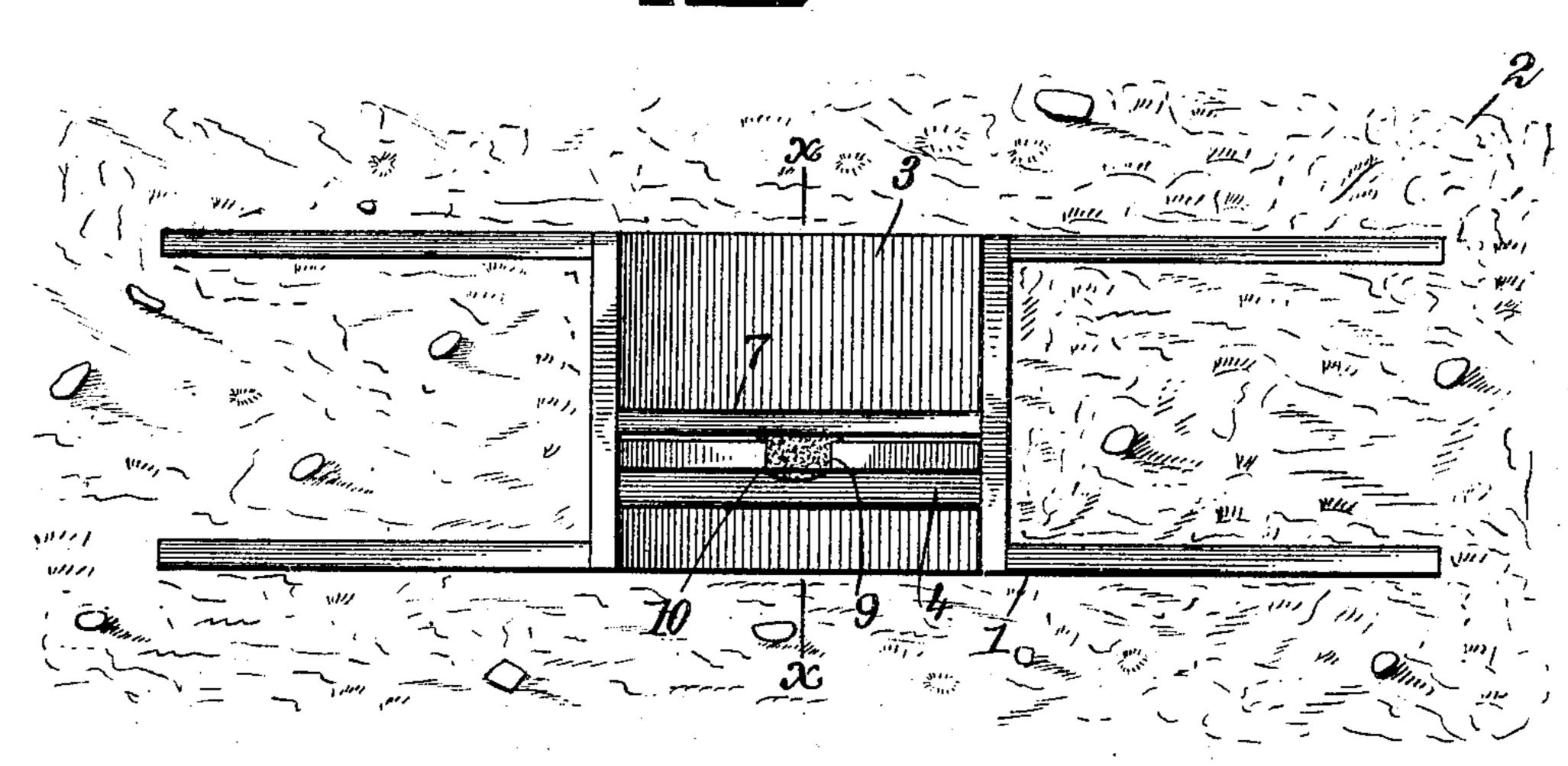
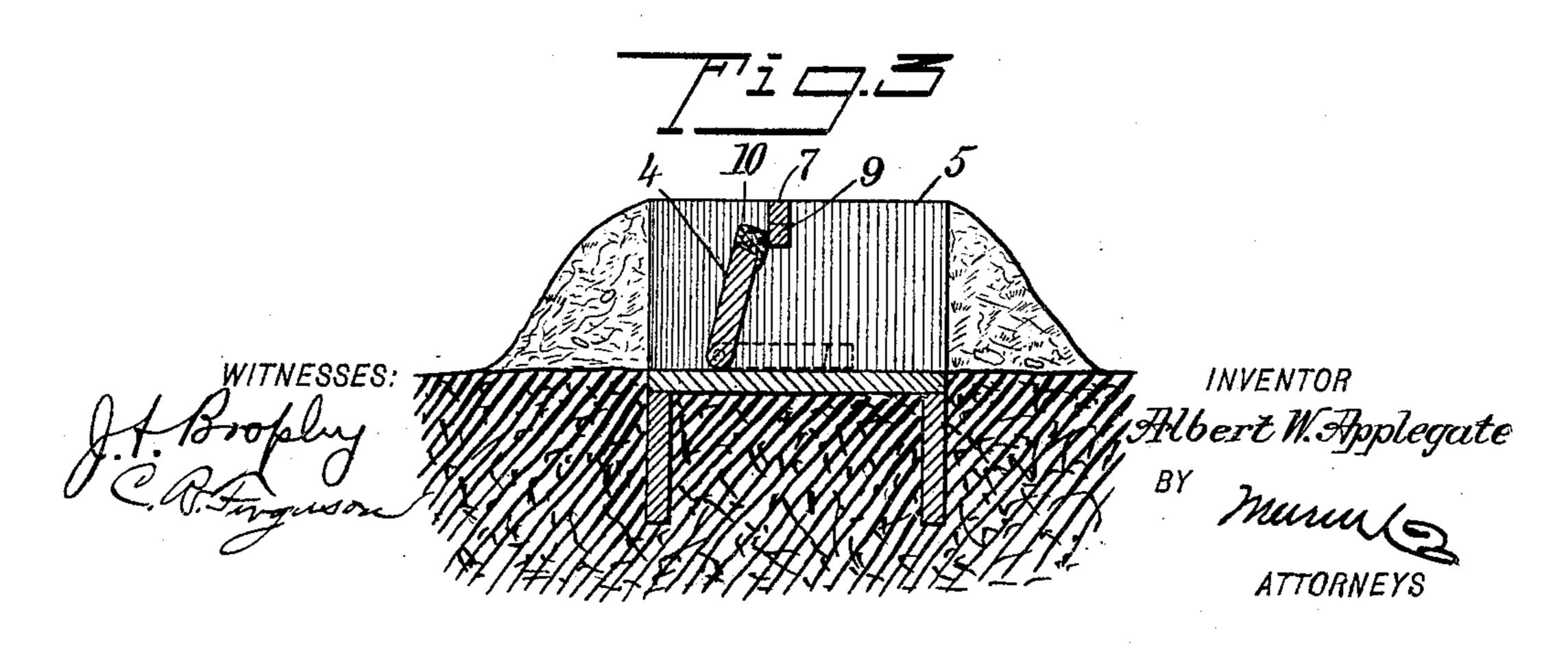
## A. W. APPLEGATE. IRRIGATION DAM. APPLICATION FILED AUG. 3, 1905



## 772 <u>7</u>2





## UNITED STATES PATENT OFFICE.

ALBERT WILLIAM APPLEGATE, OF BRAWLEY, CALIFORNIA, ASSIGNOR OF ONE-HALF TO CHARLES F. ECKERT, ADOLPH F. ECKERT, AND HENRY ECKERT, OF BRAWLEY, CALIFORNIA.

## IRRIGATION-DAM.

No. 820,332.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed August 3, 1905. Serial No. 272,518.

To all whom it may concern:

Be it known that I, Albert William AppleGate, a citizen of the United States, and a resident of Brawley, in the county of San Diego and State of California, have invented a new and Improved Irrigation-Dam, of which the following is a full, clear, and exact description.

This invention relates to improvements in

10 dams for land irrigation.

It is well known that in preparing land for irrigation it is made as level as can conveniently be done, and it is then divided into sections of desired size, which are separated and 15 quartered by earth embankments, and in the bank separating the sections dams or gates are placed. After planting the crops the water is turned into the highest section and allowed to run until the entire section is sub-20 merged or flooded, then the gate is opened to allow the water to flow into the next section, and so on to the end. The gates in general use are operated manually and require the constant attention of an irrigator to prevent 25 the water from overflowing and washing away the borders.

It is the object of my invention to provide a weir board or gate that will be open by water-pressure when the water reaches a predetermined level, thus dispensing with an assistant and lessening the danger of wash-

outs.

I will describe an irrigation-dam embodying my invention and then point out the 35 novel features in the appended claims.

Figure 1 is an elevation of an irrigation-dam embodying my invention. Fig. 2 is a plan thereof, and Fig. 3 is a section on the

line x x of Fig. 2.

The dam comprises a frame 1, of wood, designed to be placed in the bank or border 2, separating one section of land from another, and in this frame is a sluice 3, through which the water passes when the gate is opened.

The weir board or gate is pivotally connected at its lower edge with the side boards 5 of the sluice, as indicated at 6, and extending between the side boards 5 at the top is a bar 7, having at its center or other suitable point a

downward extension 8, designed to register 50 with a notch 9, formed in the top edge of the weir board or gate when the said board or gate is in closed position. The bottom of this notch 9 is designed to be placed on a plane with the desired level of the water.

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In operation when the weir board is closed a sealing material—such, for instance, as a clod of earth 10—is placed against the board and also against the downward projection 8. When the water reaches its proper level, it 60 will wash away this sealing material, so that the board will fall downward, as indicated by dotted lines in Fig. 3. Then the water of course may pass from the first section of land into the next.

Having thus described the invention, I claim as new and desire to secure by Letters

Patent—

1. An irrigation-dam comprising a sluice-way, a weir board or gate mounted to swing 7° in said sluiceway, and means for holding the gate in closed position, the said means being of a material adapted to be washed away by the water whereby the water-pressure may open the weir-board.

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2. An irrigation-dam comprising a frame having a sluiceway, a bar extending across the upper portion of the sluiceway and having a downward projection, a weir-board pivoted at its lower edge in said sluiceway and having at its top edge a notch for receiving said projection and means engaging with said projection and board for temporarily holding

the board in closed position.

3. An irrigation-dam comprising a casing 85 having a sluiceway, a bar extending across the upper portion of the sluiceway, a weirboard pivoted at its lower edge in the sluiceway, and means for temporarily sealing the weir-board to said bar.

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In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

ALBERT WILLIAM APPLEGATE.

Witnesses:

HENRY ECKERT,
OSCAR ECKERT.