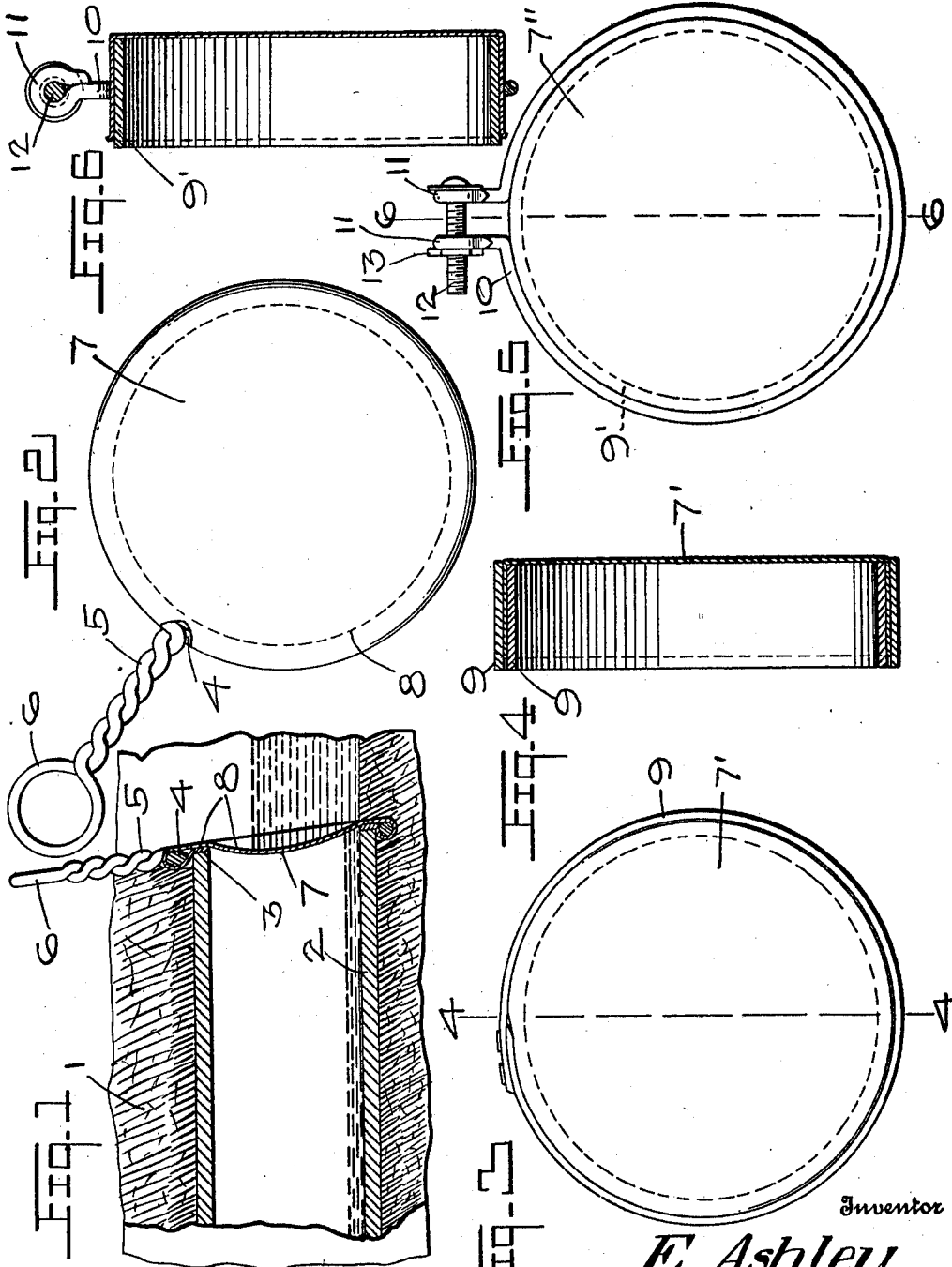


E. ASHLEY.
HEAD GATE.

APPLICATION FILED FEB. 7, 1911.

Patented Sept. 26, 1911.

1,004,133.



Witnesses

Ed. R. Lusby
T. M. Briggs

Inventor

E. Ashley

By *Harry Ellis Chandler*

Attorney

UNITED STATES PATENT OFFICE.

EDWARD ASHLEY, OF BOISE, IDAHO.

HEAD-GATE.

1,004,133.

Specification of Letters Patent. Patented Sept. 26, 1911.

Application filed February 7, 1911. Serial No. 607,026.

To all whom it may concern:

Be it known that I, EDWARD ASHLEY, a citizen of the United States, residing at Boise, in the county of Ada and State of Idaho, have invented certain new and useful Improvements in Head-Gates, of which the following is a specification.

This invention relates to improvements in head gates for irrigation ditches.

One object of the present invention is to provide a device of this character which is simple, cheap to manufacture, and effective in operation.

Another object of the present invention is to provide a flume head gate which will make a perfectly watertight connection with the end of the ditch tile.

Another object is to provide a head gate which may easily and quickly be moved to one side to permit the passage of water into the tile, and which will be held in such position by the pressure of the water in the ditch.

Other objects and advantages will be apparent as the following description proceeds, but it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the accompanying drawings, in which I have shown several forms of my invention, Figure 1 is a vertical sectional view showing a ditch, a tile, and my device applied in closed position, Fig. 2 is a front elevation of the gate removed, Fig. 3 is a rear elevation of a modification of fastening means for the canvas of the gate. Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 3, Fig. 5 is a front elevation of a further modification of fastening means. Fig. 6 is a vertical sectional view on the line 6—6 of Fig. 5.

Referring to the drawings, and particularly to Fig. 1, 1 represents a ditch in which is disposed a drain tile 2, having one end cut off obliquely as at 3, to which my improved head gates are adapted to be applied to regulate the flow of water from the ditch into the tile.

In the form of gate shown in Figs. 1 and 2, said gate comprises a frame 4 made of a single piece of heavy stiff wire, bent into circular form, and having its ends brought together and twisted as at 5, to serve the purpose of a handle, by means of which the

gate may be manipulated to govern the flow of water from the ditch. At the upper end of the handle portion 5, the same is formed with a loop 6. The circular portion of the frame is covered with a piece of canvas 7, the marginal edges of which are folded around said portion and secured thereto by any means, as the stitches 8. The gate thus formed is placed over the oblique mouth 3 of the tile so that the canvas engages the edges thereof, and the circular portion of the frame is disposed beyond the same. The circular portion of the frame of the gate is made of a diameter somewhat larger than the mouth of the tile so that the pressure of the water against the canvas will cause said canvas to form a water tight connection therewith.

The modification shown in Figs. 3 and 4 consists of a pair of nesting rings or hoops 9, between which is adapted to be clamped the canvas 7'. With this form it will readily be seen that when the canvas has become worn, or tears, the same, may be quickly and easily removed to be replaced by a new piece. In this form the hoops or rings are also of a diameter greater than that of the mouth of the tile, so that the canvas covering may be forced up against the edges of the said mouth.

The form illustrated in Figs. 5 and 6 comprises a single hoop 9' over which is placed a canvas cover 7'', the marginal edges of which are secured therearound by means of an encircling band of wire or other suitable means 10. In the ends of the band 10 are formed the loops 11, which project perpendicularly from the hoop 9', so that a securing bolt 12 may be passed through their openings, the head of said bolt engaging one of the loops and a tightening nut 13 engaging the other loop. By means of this bolt and nut the ends of the band 10 may be drawn tightly around the hoop 9' and securely retain the canvas covering 7'' thereon.

From the foregoing it will be readily seen that I have provided a simple and efficient gate of this character, wherein the canvas covering is effectively held to the frame, but may be quickly and easily removed, when necessary. It will also be noted that the gate is easily and quickly removed from the mouth of the tile, and may be readily adjusted vertically across the mouth of the tile to regulate the supply of water, the weight and pressure of the water against

the canvas retaining the gate in adjusted position against the tile.

What is claimed is:

1. The combination with a drain tile having an obliquely formed mouth, of a head gate comprising a circular frame, a canvas covering secured to said frame, said frame being of a diameter greater than the mouth of the tile whereby the pressure of water against said gate will force said canvas covering against the said mouth and the frame to engage around the mouth.

2. A head gate for closing the mouth of a

drain tile comprising a frame in the form of a ring, a canvas covering disposed across said ring, an encircling band embracing said covering and ring, loops on the ends of said band, and a tightening means engaged in said loops.

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

EDWARD ASHLEY.

Witnesses:

J. C. JOHNSTON,
M. L. HART.

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