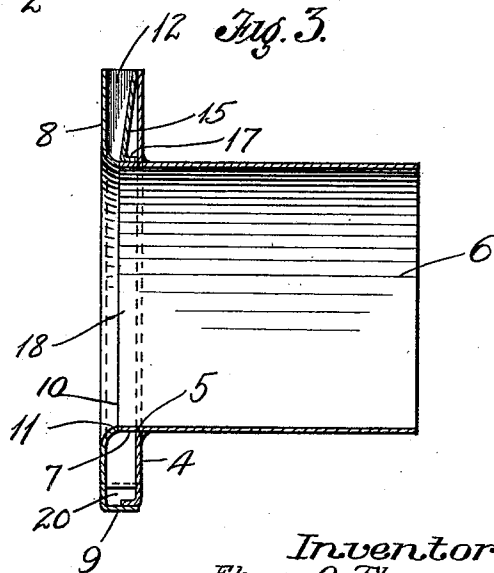
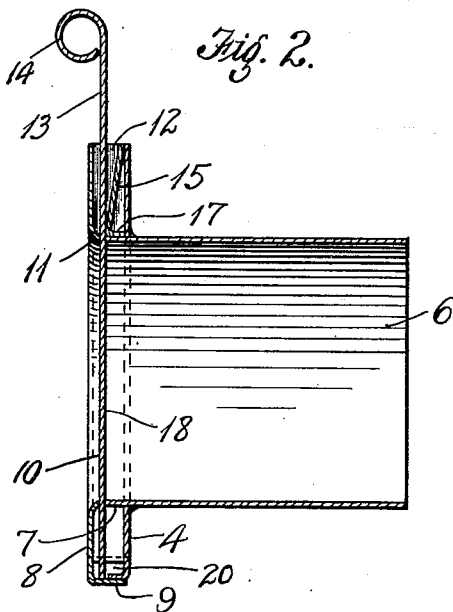
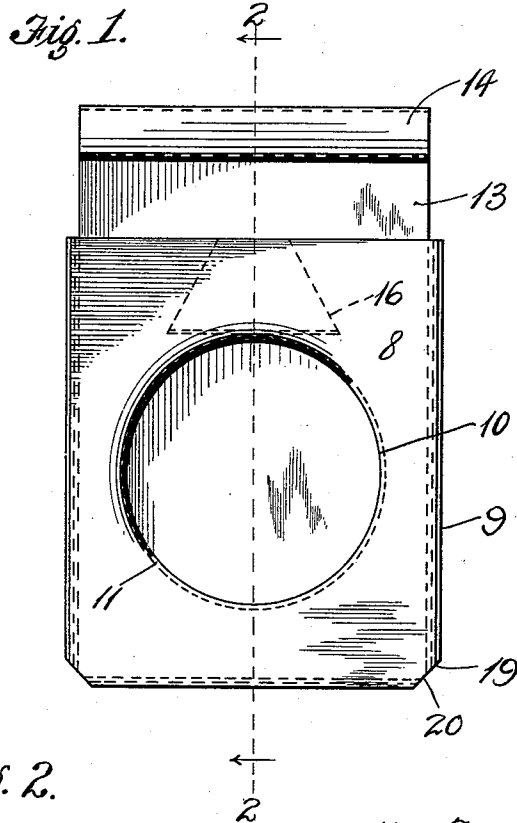


E. O. THOMASON.
FLUME GATE.
APPLICATION FILED SEPT. 29, 1910.

992,293.

Patented May 16, 1911.



Witnesses:
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UNITED STATES PATENT OFFICE.

ELMER O. THOMASON, OF COVINA, CALIFORNIA, ASSIGNOR TO KELLAR-THOMASON MANUFACTURING COMPANY, OF COVINA, CALIFORNIA, A CORPORATION OF CALIFORNIA.

FLUME-GATE.

992,293.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed September 29, 1910. Serial No. 584,490.

To all whom it may concern:

Be it known that I, ELMER O. THOMASON, a citizen of the United States, residing at Covina, in the county of Los Angeles and State of California, have invented new and useful Improvements in Flume-Gates, of which the following is a specification.

This invention relates to flume gates or valves for controlling the flow of water.

The invention is particularly applicable to gates which embody a tube which is secured in the flume, and the end of which projects so as to form a seat to receive the slide which closes off the flow of the water.

The object of this invention is to provide an improved construction for a gate which will operate to press the slide against its seat, the pressing force being applied directly opposite the end of the tube so as to prevent any tendency of the slide to bulge outwardly as sometimes occurs where the pressure is not applied as suggested.

In the drawing forming a part of the annexed specification, Figure 1 is a front elevation of a flume gate constructed according to my invention, and showing the slide in place. Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1, and showing the slide in position. Fig. 3 is a view similar to Fig. 2 but showing the gate with the slide removed.

Referring more particularly to the parts, 4 represents the back plate of the gate which is in the form of a rectangular plate, and this back plate is formed with an opening 5 through which a tube 6 passes, so as to present a projecting end 7. This tube is secured by solder or similar means to the back plate. I also provide a face plate 8, which is also of rectangular form and secured to the back plate, the two plates being provided with overlapping flanges 9 at their edges attached together for this purpose. The plate 8 is formed with a large opening 10, which is of the same diameter as the tube 6, and the edge of this opening 10 is bent inwardly so as to form an inwardly disposed flange or lip 11, following the outline of the end of the tube.

On account of the fact that the face plate and the back plate are disposed slightly apart, as indicated in Figs. 2 and 3 a guide space 12 is formed through which the slide 13 may be passed downwardly. The slide

is in the form of a rectangular plate, the upper edge of which may be provided with a roll 14, which serves as a handle to facilitate the insertion or withdrawal of the slide.

In the upper portion of this guide space 12 and just above the projecting end of the tube I provide a guide 15, which is formed of a plate having the form of a key-stone in an inverted position as viewed in Fig. 1; that is its side edges 16 diverge in a downward direction, and the lower edge of this plate is bent laterally so as to form a foot 17, which seats against the upper side of the tube so that when the guide 15 is in position it presents an inclined face, the lower edge of which is exposed near the end or edge of the tube 6.

The face plate 8 is formed of more or less resilient material so that when the slide is not in position the edge of the flange or lip 11 seats against the end 18 of the tube so that the lip virtually becomes an extension of the tube and prevents water from flowing into the guide space between the two plates. In other words the lip 11 seals the end of the tube from the guide space 12 when the slide is not in place. If the slide is forced down through the space 12 its lower edge strikes the guide plate 15 and forces the flange or lip 11 forwardly so that the lower edge of the slide becomes inserted between the lip and the end of the tube. The slide can then be forced down into the position, shown in Fig. 2, so that it is located between the flange and the end 18 of the tube.

Special attention is called to the fact that when the slide has been inserted the flange presses the slide on its forward side directly opposite to the edge or end 18 of the tube. On this account there is no tendency to bend the slide or bulge it in any way which might cause the gate to leak. Special attention is also called to the form of the flange or lip 11, which assists in giving a resilient pressure of the face plate against the slide.

The corners of the face plate and back plate are clipped or cut away as indicated at 19 so that openings 20 are formed at this point enabling the guide space 12 to drain off water in case any water should fall therein.

What I claim is:

1. A gate having a seat, a slide coming upon said seat and a member having a pro-

jecting lip pressing said slide and holding the same upon said seat, said lip following the outline of said seat.

2. A gate having a projecting seat, a face plate having an opening therein, said opening having a lip opposite to said seat and adapted to come upon the same, and a slide adapted to thrust said lip away from said seat so as to be clamped between said lip and
10 said seat.

3. A gate having an opening with a projecting seat thereabout, a member pressed resiliently against said seat when said gate is open, and a slide adapted to force said
15 member away from said seat and clamped between said member and said seat.

4. A gate comprising a tube having a projecting end, a face plate having an opening coinciding with the opening of said tube,
20 said opening having a lip at the edge thereof adapted to come against said seat when

the gate is open, and a slide adapted to be forced between said lip and the tube and clamped therebetween.

5. A gate comprising a tube having a projecting end, a face plate having an opening coinciding with the opening of said tube, said opening having a lip at the edge thereof adapted to come against said seat when the gate is open, a slide adapted to be forced
30 between said lip and the tube and clamped therebetween, and means for guiding the lower edge of said slide into alinement with the plane of the end of said tube.

In witness that I claim the foregoing I
35 have hereunto subscribed my name this 21st day of September, 1910.

ELMER O. THOMASON.

Witnesses:

F. D. AMMEN,
EDMUND A. STRAUSE.

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