

(No Model.)

A. H. STOKES.

WATER GATE FOR FLUMES, CISTERNS, OR THE LIKE.

No. 575,998.

Patented Jan. 26, 1897.

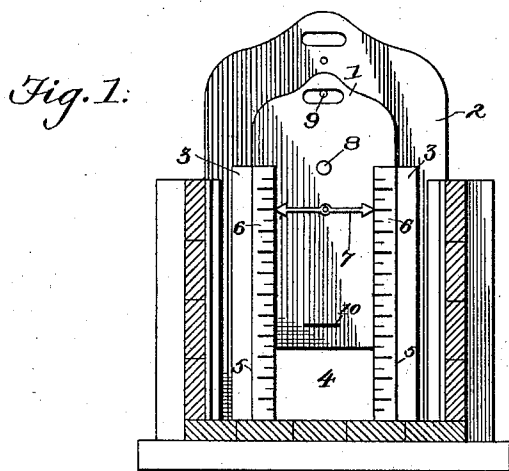


Fig. 2.

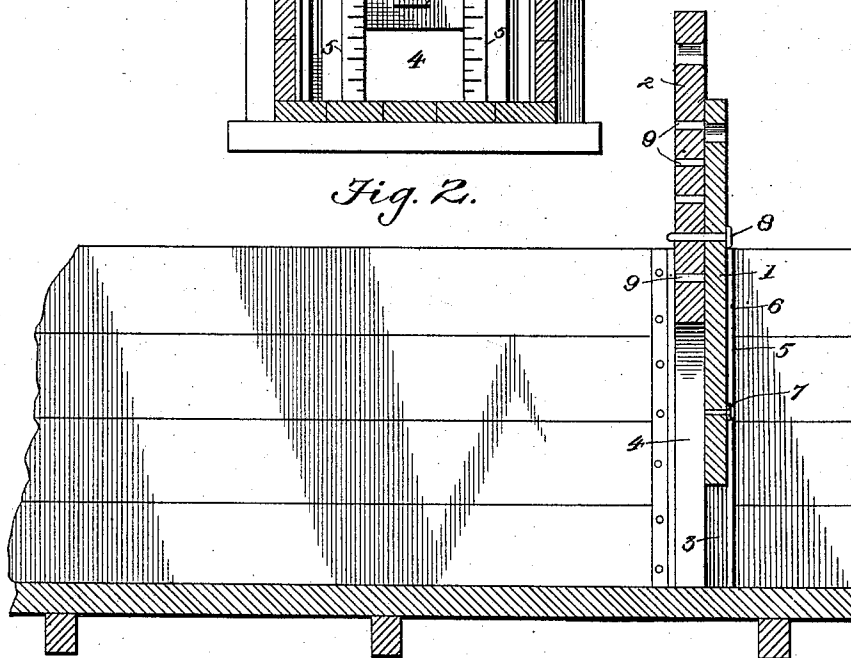
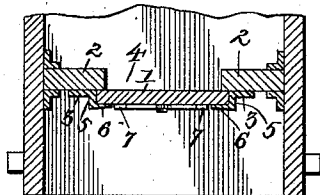


Fig. 3.



Witnesses

P. Lloyd McNamee
J. F. Wiley

Inventor

Arthur H. Stokes.

By *his* Attorneys,

C. Snow & Co.

UNITED STATES PATENT OFFICE.

ARTHUR HILL STOKES, OF BROWN, COLORADO.

WATER-GATE FOR FLUMES, CISTERNS, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 575,998, dated January 26, 1897.

Application filed February 29, 1896. Serial No. 581,363. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR HILL STOKES, (late a subject of the Queen of Great Britain, having declared my intention of becoming a citizen of the United States,) residing at Brown, in the county of Montrose and State of Colorado, have invented a new and useful Water-Gate for Flumes, Cisterns, or the Like, of which the following is a specification.

The invention relates to improvements in waterways for flumes, cisterns, and the like.

The object of the present invention is to provide a water-gate adapted to be employed in flumes, conduits, cisterns, reservoirs, and the like and capable of automatically indicating the quantity of water passing through it.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is an elevation of a waterway constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a vertically-movable slide or gate mounted on a water-gate 2 of a flume or waterway, but adapted to constitute a complete gate in itself, if desired. The vertically-movable slide or gate is mounted in ways 3 and is adapted to cover completely or partially an opening or aperture 4 to permit a flow of water to a greater or less extent, as desired.

The flume or waterway is provided at opposite sides with vertical ways, and the water-gate 2 is vertically movable therein.

The ways are constructed, preferably, of angularly-bent metal secured to the gate or support 2 at opposite sides of the vertically-movable slide or gate 1, and have substantially L-shaped flanges 5, receiving the vertical edges of the slide or gate 1. The inwardly-extending portions of the L-shaped flanges of the ways are arranged on the outer faces of the slide or gate and are graduated at 6, and are designed to be provided with a suitable table computed with relation to the particu-

lar flume or waterway with which the gate is employed and cooperating with pointers or index-fingers 7, mounted on the slide or gate and extending from opposite sides thereof and adapted, when the gate is raised or lowered, to move along the scale or graduations of the water gate or support upon which the slide or gate is mounted. The slide or gate is also provided with an indicating-mark 10, designed, in the manipulation of the slide, to be brought to the surface of the water, and when brought to this position the pointers or index-fingers will indicate on the scale the quantity of water passing through the opening or aperture.

It will of course be readily understood that from the size of the flume or waterway and the depth and flow of the water the exact amount of water passing through the opening or aperture when the gate or slide 1 is at any desired elevation may be readily ascertained and that the scale may be computed in this manner.

The vertically-movable slide or gate is secured at any desired elevation by a removable pin 8, passing through a perforation of the upper portion of the slide or gate 1, and adapted to engage any one of a vertical series of perforations 9 of the water gate or support 2. The slide or gate 1 is provided with a suitable handle or grip to enable it to be readily raised or lowered.

It will be seen that the water-gate is simple and comparatively inexpensive in construction, that it is adapted to be readily applied to flumes, waterways, cisterns, reservoirs, and the like, and that it is capable of automatically indicating the quantity of water passing through the opening or aperture.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention, such as constructing the slide or gate 1 to form a complete water-gate, instead of mounting it on the gate or support 2, or arranging it to slide horizontally instead of vertically.

What I claim is—

1. The combination of a flume or waterway provided at opposite sides with vertical ways, a vertically-movable water-gate 2 mounted in said ways and provided at its bottom with an aperture, vertical ways 3 mounted on the wa-

ter-gate and located at opposite sides of the aperture, a slide mounted on the water-gate, arranged in the ways 3 and provided with a laterally-disposed pointer, and a vertical
5 scale mounted on the water-gate, substantially as described.

2. The combination of a flume or waterway provided at opposite sides with vertical ways, a water-gate 2 arranged in said ways, capable
10 of vertical movement and provided at its bottom with an aperture, vertically-disposed L-shaped flanges mounted on the water-gate 2 at opposite sides of the aperture and having graduations forming scales, a vertically-mov-

able slide mounted in the ways formed by the 15 L-shaped flanges, means for securing the slide in its vertical adjustment, and a pointer mounted on the slide, disposed horizontally and having its terminals arranged adjacent to the graduations of the L-shaped flanges, 20 substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ARTHUR HILL STOKES.

Witnesses:

ARTHUR H. BROWN,
JOHN A. CURTIS.