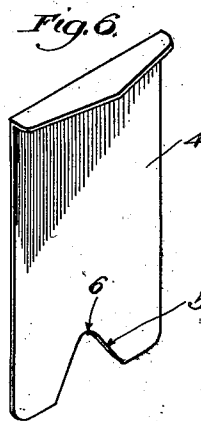
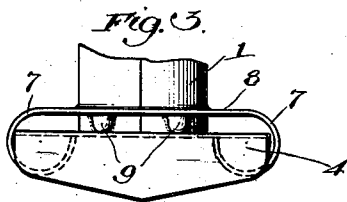
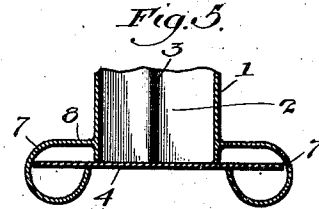
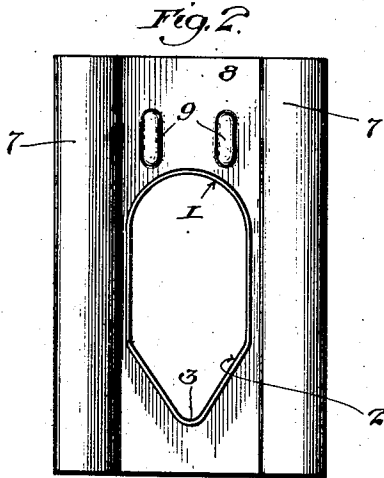
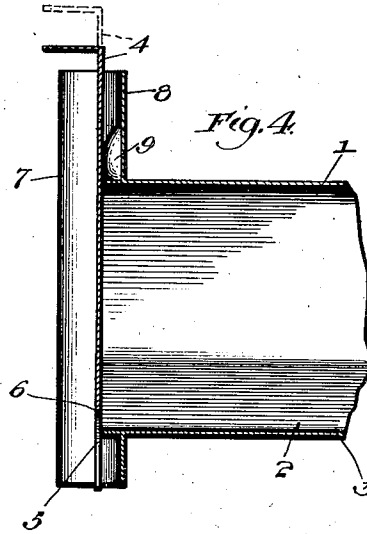
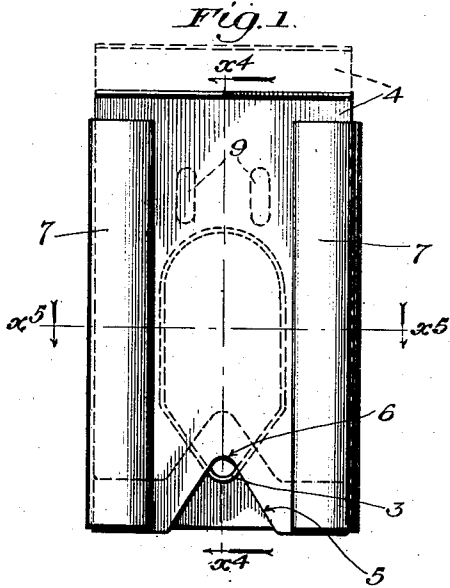


M. B. & M. ANDERSEN.  
 FLUME GATE.  
 APPLICATION FILED JAN. 22, 1913.

1,065,494.

Patented June 24, 1913



Witnesses:

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 By *Syon & Bacley atty.*

# UNITED STATES PATENT OFFICE.

MINNIE BEDORIE ANDERSEN AND MARTIN ANDERSEN, OF REDLANDS, CALIFORNIA.

## FLUME-GATE.

1,065,494.

Specification of Letters Patent.

Patented June 24, 1913.

Application filed January 22, 1913. Serial No. 743,679.

To all whom it may concern:

Be it known that we, MINNIE B. ANDERSEN and MARTIN ANDERSEN, citizens of the United States, residing at Redlands, in the county of San Bernardino 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 and particularly to an improvement in the patent to Ephraim Campbell, No. 704,971, July 15th, 1902. In the said Campbell patent when the slide is adjusted to allow a small stream of water to run through, the shape of the opening is that of an elongated transverse slit, very narrow and with extremely acute angles at the ends of the slits, which results in catching small particles of sand and gravel and they accumulate and dam the opening. This does not occur when the slide is opened wide, but only occurs when the slide is adjusted for a small stream, and it is very important that the device be capable of adjustment for delivering a small stream without clogging, and the object of the present invention is to provide a construction which will permit of adjusting the slide for the required small stream without causing any clogging thereof.

Referring to the drawings: Figure 1 is a front elevation of the device, showing the slide adjusted for delivering the small stream. Fig. 2 is a front elevation of the device with the slide removed. Fig. 3 is a plan view with part of the conduit broken away. Fig. 4 is a section on line  $x^4-x^4$ , Fig. 1. Fig. 5 is a section on line  $x^5-x^5$ , Fig. 1. Fig. 6 is a perspective of the slide.

The conduit 1 is formed with a V-shaped lower portion 2, the extreme bottom wall of which is rounded as at 3, and the slide 4 is formed with a V-shaped notch 5, the apex being rounded as at 6, so that the rounded portions 6 and 3 form virtually a circular opening when the slide is adjusted for the minimum stream, as indicated in Fig. 1. The shape of this opening is such that although it restricts the stream to the smallest required size, there is no narrow slit or acute angles formed to catch the sand or gravel and the sand or gravel which comes with the water, readily flows through the

opening. Moreover, the shape of the opening is such that it gives the minimum impedance to the flow and thus the stream is a solid stream which sweeps the gravel and sand through more readily without so much tendency to clog, as if the stream were a thin ribbon.

The slide 4 may be adjusted for larger streams, but for such adjustments the foregoing difficulties are not encountered. The slide 4 is held in the desired position by frictional contact with curled spring beads 7 which are formed integrally with a plate 8 to which the conduit 2 is secured.

The plate 8 is formed with a pair of elongated projections 9 to receive the lower edge of the slide 4 as the latter is being pushed down, and guide the lower edge of the slide so that the lower edge of the slide will not hit the upper edge of the conduit 1 and hinder the insertion of the slide.

What we claim is:

1. A flume gate, comprising a conduit, the lower wall of which is V-shaped, a slide movable across the end of the conduit, said slide having a V-shaped opening arranged with its apex opposite the apex of the bottom wall of the conduit, and a plate extending laterally from the end of the conduit, said plate being formed with a pair of projections for guiding the lower end of the slide over the upper edge of the end of the conduit when the slide is pushed down.

2. A flume gate comprising a conduit the lower wall of which is V shaped, a slide movable across the end of the conduit, said slide having a V shaped opening arranged with its apex opposite the apex of the bottom wall of the conduit, a plate extending laterally from the end of the conduit, and means for guiding the lower end of the slide over the upper edge of the end of the conduit when the slide is pushed down.

In testimony whereof, we have hereunto set our hands at Redlands, California this 15 day of January, 1913.

MINNIE BEDORIE ANDERSEN.  
MARTIN ANDERSEN.

In presence of—  
THOS. A. OGDEN,  
C. C. HOLLOWAY.