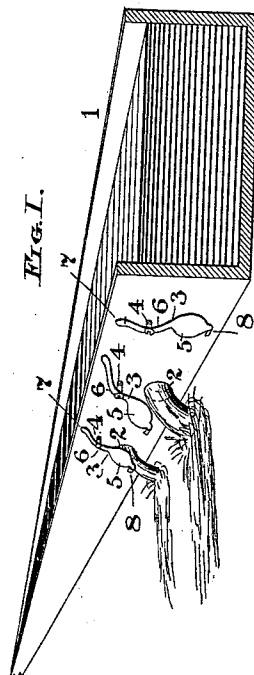
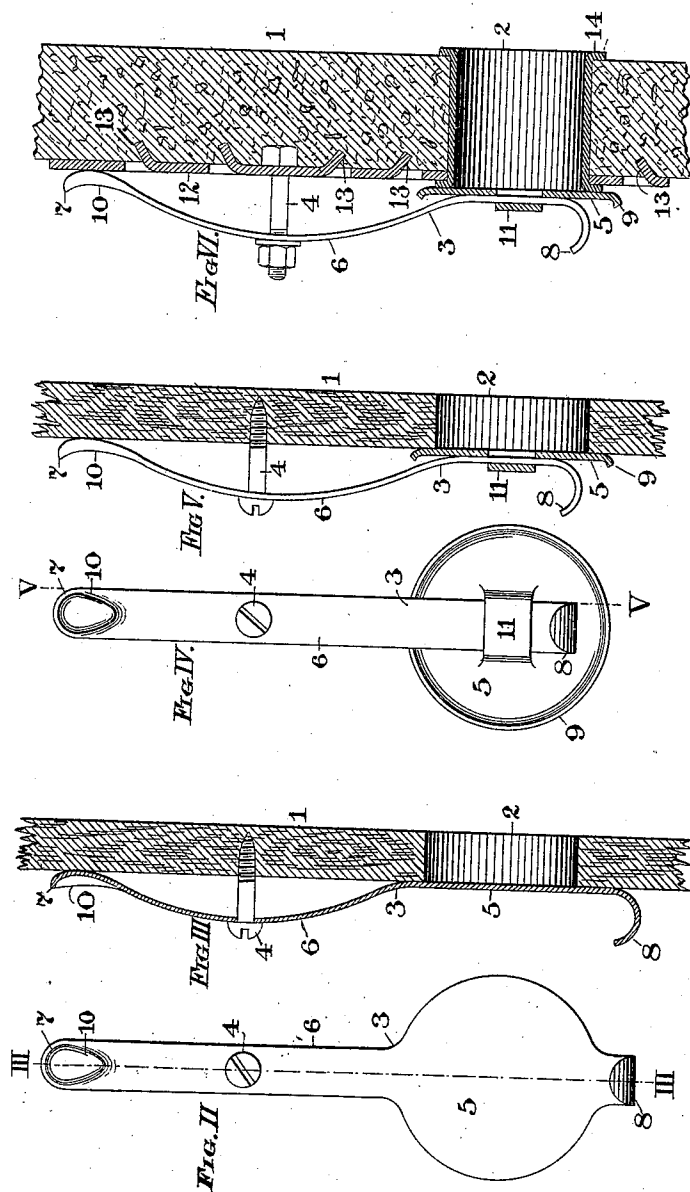


(No Model.)

B. PEARSON.
FLUME GATE.

No. 544,069.

Patented Aug. 6, 1895.



WITNESSES

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BENJAMIN PEARSON, OF REDLANDS, CALIFORNIA.

FLUME-GATE.

SPECIFICATION forming part of Letters Patent No. 544,069, dated August 6, 1895.

Application filed May 16, 1894. Serial No. 511,475. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN PEARSON, of Redlands, in the county of San Bernardino and State of California, have invented certain
5 new and useful Improvements in Flume-Gates, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

10 My invention relates to certain new and useful improvements in flume-gates; and it consists in certain features of novelty hereinafter described, and pointed out in the claims.

Figure I represents a perspective of a flume,
15 showing my improved gate attached thereto. Fig. II is a front view of my preferred form of gate. Fig. III represents a section taken on line III III of Fig. II. Fig. IV is a front view of a slight modification of the preferred form of
20 gate. Fig. V represents a section taken on line V V of Fig. IV. Fig. VI represents a vertical section of one side of a flume, showing my improvement as applied to a brick or cement flume.

25 Referring to the drawings, 1 represents an irrigating - flume, 2 round side openings through which the water is permitted to flow when it is desired to irrigate, and 3 my improved spring-gate secured to the outer side
30 of the flume, preferably by means of a pivot-screw 4. The body 5 of the gate is preferably made circular in form, as shown, to correspond with the round side openings 2 in the flume.

35 The gate 3 is provided with a spring-stem 6, made convex in form and having an outer free bearing end 7, which assists in holding the gate in position. The screw 4 passes through the spring-stem 6 and enters the side of the
40 flume, thus forming a pivotal support for the gate and by which the tension of the gate over the opening 2 may be increased or diminished by adjusting the screw.

45 8 represents an upturned hand-piece providing a handle on the gate by which it may be tilted and moved to the desired position.

I preferably form a flange 9 on the body of the gate, thus making it dish-shaped, and form the free end of the stem 6 spoon-shaped, as

shown at 10, in order that the gate may move 50 freely on its pivot by not presenting a sharp edge, which would have a tendency to interfere with the grain of the wood of the side of the flume.

In Figs. IV and V, I have shown a slight 55 modification in which the body 5 of the gate is made of a separate piece from the stem, this permitting me to use scrap or waste material that could not otherwise be utilized. The spring-stem in the modified form can be made 60 of the material that would be wasted in making the form shown in Fig. II, and the body of the gate can be formed of other waste material. In this modification a portion of the center is struck up, thus forming a strip 11 65 beneath which the stem 6 is inserted.

In Fig. VI, I have shown my gate applied to a brick or cement flume 12, representing a plate having points 13 struck down for the purpose of embedding the plate in mortar or 70 cement, a bolt to correspond with the screw 4, and a thimble 14 surrounding the opening 2 and forming a smooth surface for the gate to rest against.

I preferably place my gate on the outside of 75 the flume, thus avoiding the obstruction to the proper working of the same occasioned by sand, grass, and other foreign substances in the flume. The opening or closing of the gate serves to clean the seat against which it rests, 80 which is not the case in the ordinary gates in use, the spring being sufficiently rigid to hold the gate in the position placed, so that the amount of water used may be regulated.

I do not confine myself to the form of spring 85 shown, but consider it the most simple and efficient for the purpose.

I claim as my invention—

1. In a flume-gate, the combination of a body or valve having an upturned hand-piece and a 90 spring stem for pivoting the body to the flume, having its upper end spoon-shaped; substantially as described.

2. In a flume gate, the combination of a body or valve having its outer edge up-turned, a flat 95 central raised strip thereon, a spring stem for pivoting the body to the flume, said stem having one of its ends inserted beneath said strip

and having its opposite end spoon-shaped,
substantially as described.

3. In a flume gate the combination of a body,
a spring stem by which the body may be piv-
5 oted to a flume, a plate connected with the
flume for supporting the gate and a thimble
against which the gate rests when in its closed

position, substantially as described and for
the purpose set forth.

BENJAMIN PEARSON.

Witnesses:

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L. W. CLARK.