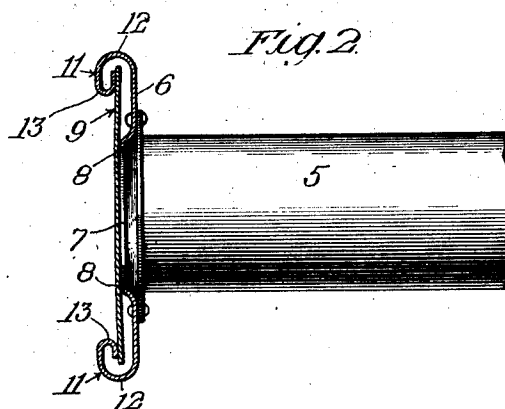
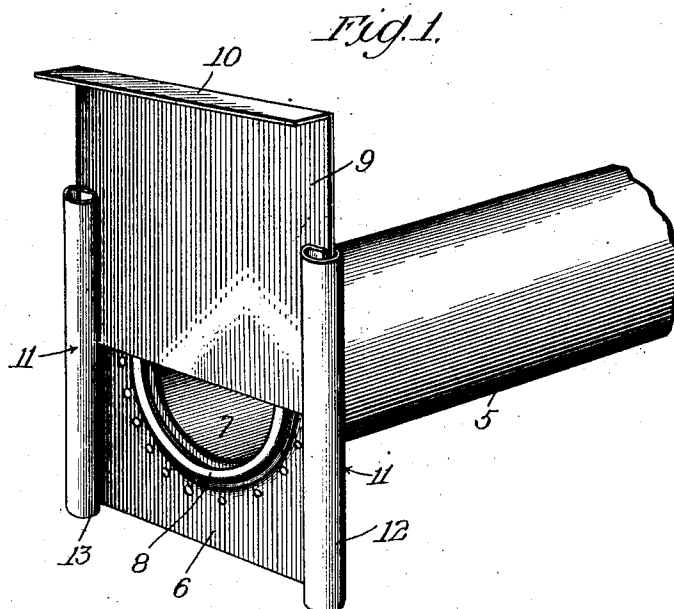


No. 868,863.

PATENTED OCT. 22, 1907.

F. M. HUNTOON.
FLUME GATE.

APPLICATION FILED MAY 13, 1907.



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FLUME-GATE.

No. 868,863.

Specification of Letters Patent.

Patented Oct. 22, 1907.

Application filed May 13, 1907. Serial No. 373,227.

To all whom it may concern:

Be it known that I, FRED M. HUNTOON, a citizen of the United States, residing at Riverside, in the county of Riverside and State of California, have invented new and useful Improvements in Flume-Gates, of which the following is a specification.

The main object of my invention is to provide a flume gate for irrigation flumes which is complete in itself, the flume forming no part of the gate and being attached thereto in a manner which does not interfere with the operation of the gate.

A further object is to provide a gate that will not become clogged with sand and one that is simple in construction and highly efficient in operation.

I accomplish these objects by means of the device described herein and illustrated in the accompanying drawings, in which:—

Figure 1—is a perspective view of my flume gate attached to an irrigation flume. Fig. 2—is a transverse section of the flume gate attached to an end of the flume.

In the drawings 5 designates a cylindrical metallic flume of usual construction, to which is rigidly secured in a suitable manner a plate 6 which forms the body of the flume gate. Plate 6 is provided with a circular opening 7 of approximately the same diameter as the flume 5 with which it registers when secured thereto. The edge of this circular opening is bent or forced outwardly so as to form a water tight seat 8 for slide 9. Heretofore an end of the flume has formed a seat for the gate and while this has in a certain measure prevented the clogging and packing of sand and debris around the gate, its mode of attachment to the flume has rendered its attachment and detachment therefrom one of extreme difficulty.

The peculiar manner of securing the gate to the flume and the consequent formation of the water tight non-clogging gate seat, constitutes one of the most important and distinguishing features of my invention, as the flume itself forms no part of the gate or seat and consequently forms an extremely simple method of attachment and removal.

The slide 9 consists of a flat plate, the upper edge of which is bent at right angles thereto to form operating means 10 and the plate or slide 9 is resiliently held against the seat 8 by cylindrical springs 11 which are

formed on the longitudinal edges of plate 6. The edges of these springs are bent so that they lie in the same plane as the plate or slide 9 against which they bear, thus forming a wide bearing surface for plate 9, and forcing it squarely against the seat 8. The formation of the springs 11 into double curved portions 12 and 13 contribute greatly to their resiliency and to the ease with which the slide or plate may be operated.

It will be observed from the foregoing description that I have provided a flume gate that is complete within itself and which will not be affected by the flume being out of alinement. It will be further observed that my construction affords large bearing surfaces for the gate slide which render the gate more nearly water tight than is the case with narrow and restricted bearing surfaces.

Having described my invention what I claim as new and desire to secure by Letters Patent is:—

1. A flume gate, comprising a body portion having an aperture therein with raised edges of said body portion adapted to form a gate seat, a gate slide adapted to bear against said seat, and resilient means to hold said slide against said seat.

2. A flume gate, comprising a sheet metal body portion adapted to be secured to a flume end and having an aperture therein with raised edges of said body portion adapted to form a gate seat, the edges of said body portion being turned to form springs adapted to press against a gate slide, and a gate slide adapted to be pressed against said seat around said aperture by said springs.

3. A device of the class described, comprising a slide holder adapted for placement on an end of a flume, said slide holder provided with an aperture having outwardly turned edges adapted to form a seat for a slide, of a slide adapted to bear against said seat, and a plurality of springs formed on said holder adapted to hold said slide in yielding engagement with said seat.

4. A flume gate, comprising a slide holder adapted for placement on an end of a flume, said slide holder provided with an aperture having out turned edges adapted to form a seat for a slide, of a slide adapted to bear against said seat, and a plurality of retaining springs formed on said holder having flattened bearing edges adapted to retain said slide in frictional engagement with said seat.

In witness that I claim the foregoing I have hereunto subscribed my name this 4th day of May, 1907.

FRED M. HUNTOON.

Witnesses:

W. S. WEBSTER,
F. G. HALL.