

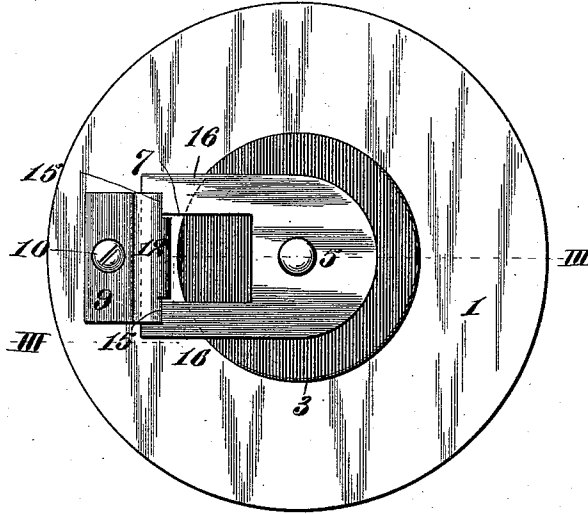
(No Model.)

T. S. EVANS.  
BUCKET VALVE.

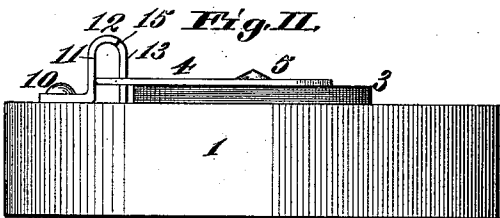
No. 538,956.

Patented May 7, 1895.

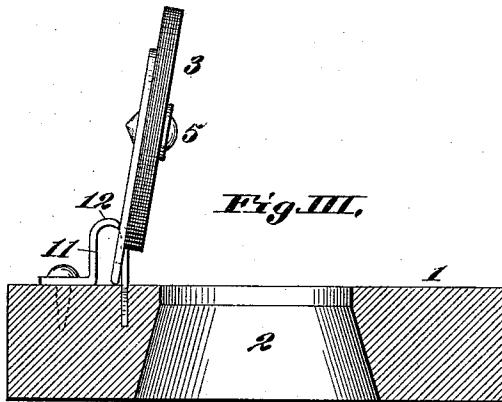
*Fig. I.*



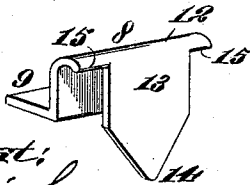
*Fig. II.*



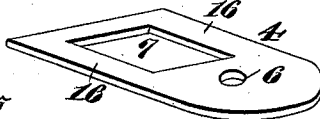
*Fig. III.*



*Fig. IV.*



*Fig. V.*



Attest:

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# UNITED STATES PATENT OFFICE.

THOMAS S. EVANS, OF ST. LOUIS, MISSOURI.

## BUCKET-VALVE.

SPECIFICATION forming part of Letters Patent No. 538,956, dated May 7, 1895.

Application filed October 10, 1894. Serial No. 525,450. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS S. EVANS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Bucket-Valves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention relates to improvements in bucket valves, the object being to provide a simple and cheap arrangement which will provide for free inflow of water unobstructed by the valve when the bucket descends.

My invention consists in features of novelty hereinafter fully described and pointed out in the claims.

Figure I is a top or plan view illustrative of my invention. Fig. II is a side elevation. Fig. III is a section taken on line III III, Fig. I. Fig. IV is a perspective view of the clip or bracket by which the valve is hinged to the bottom of the bucket. Fig. V is a perspective view of the plate to which the valve is secured and which receives the clip or bracket.

Referring to the drawings, 1 represents the bottom of a bucket, having an opening 2, through which the water passes into the bucket as the latter descends. 3 represents a valve composed of leather or other suitable material and which is connected to a plate 4, by means of a rivet or screw 5, passing through a perforation 6 in the plate. The plate has an opening 7.

8 represents a bracket or clip having a flat portion 9 by which it is secured to the bottom of the bucket by means of a screw or other fastening, 10. The bracket has a vertical portion 11, a bend 12, and a vertical portion 13, terminating in a point 14.

In putting the parts together, the valve is adjusted over the opening 2, and the bracket is then applied, the part 13 fitting in the opening 7 of the plate 4, and the point 14 penetrating the bottom of the bucket as shown in Fig. III. The screw 10 is then inserted and the work is done. The vertical part 13 of the bracket is narrower than the rounded end 12, thus forming

shoulders, 15. The width of the opening 7 is about the width of the part 13 of the bracket, and when the valve opens the sides (16) of the plate come against the shoulders 15 of the bracket and limit the movement of the valve as shown in Fig. III, so that the valve cannot open quite to a vertical position, and thus when the bucket is raised after being lowered the tendency of the water is to force the valve closed or in a forward direction rather than in a rearward or straight downward direction, as would be the case if the valve opened back of a vertical position or to a vertical position.

When the valve is open, it entirely clears the opening 2 so as not to retard the inflow of the water in a column equal to the size of the opening.

The device is cheap and durable and can be quickly applied.

I claim as my invention—

1. In a bucket valve, the combination of a plate having an opening and to which the valve is secured, and a bracket, formed of a piece of flat metal having a horizontal portion by which it is secured to the bottom of the bucket, a vertical portion extending therefrom, a top portion, and a vertical portion depending from the top portion below the horizontal portion so as to form a loop and terminating in a point, said last-mentioned vertical portion fitting in said opening of the plate, substantially as set forth.

2. In a bucket valve, the combination of a plate having an opening and to which the valve is secured, and a bracket formed of a piece of flat metal having a horizontal portion, vertical portions 11 and 13 and a top portion 12, the vertical portion 13 fitting in the opening in the plate and extending below the horizontal portion so as to form a loop and being narrower than the top portion 12 so as to form shoulders 15 which limit the movement of the valve, substantially as and for the purposes set forth.

THOS. S. EVANS.

In presence of—  
E. S. KNIGHT,  
W. FINLEY.