(No Model.)

R. W. HYERS.

FLOAT OPERATED VALVE.

No. 596,880. Patented Jan. 4, 1898.

Fig. 1.

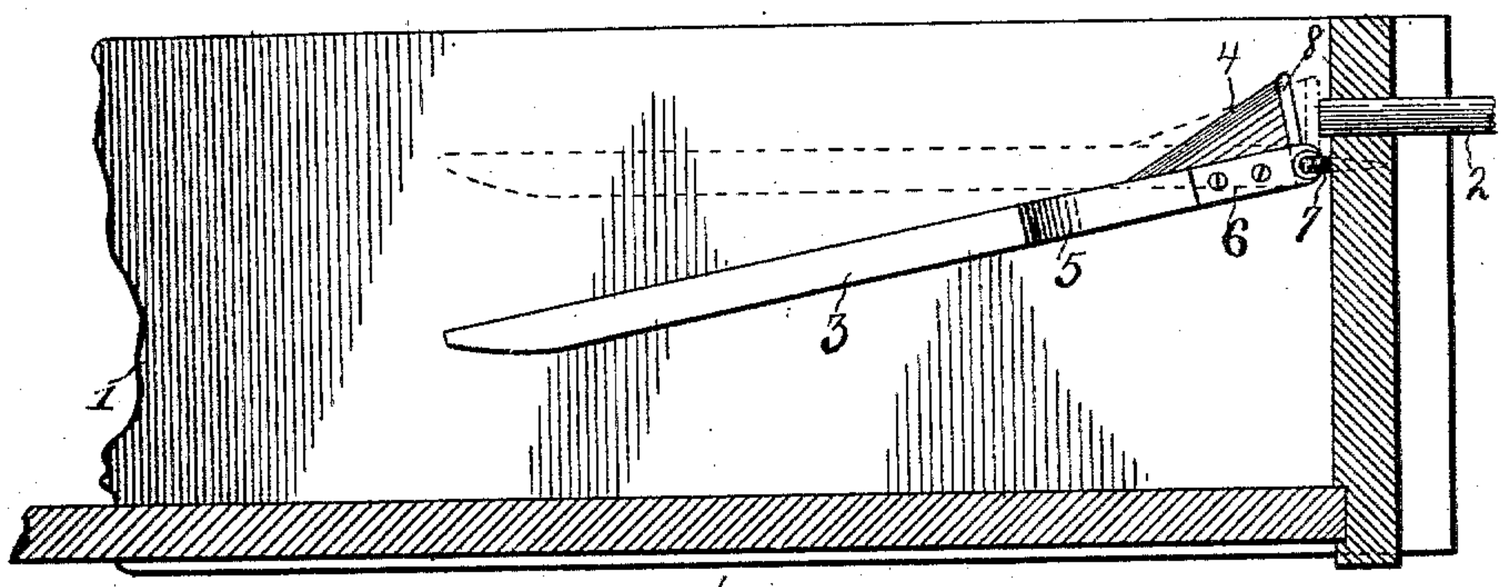


Fig. 2.

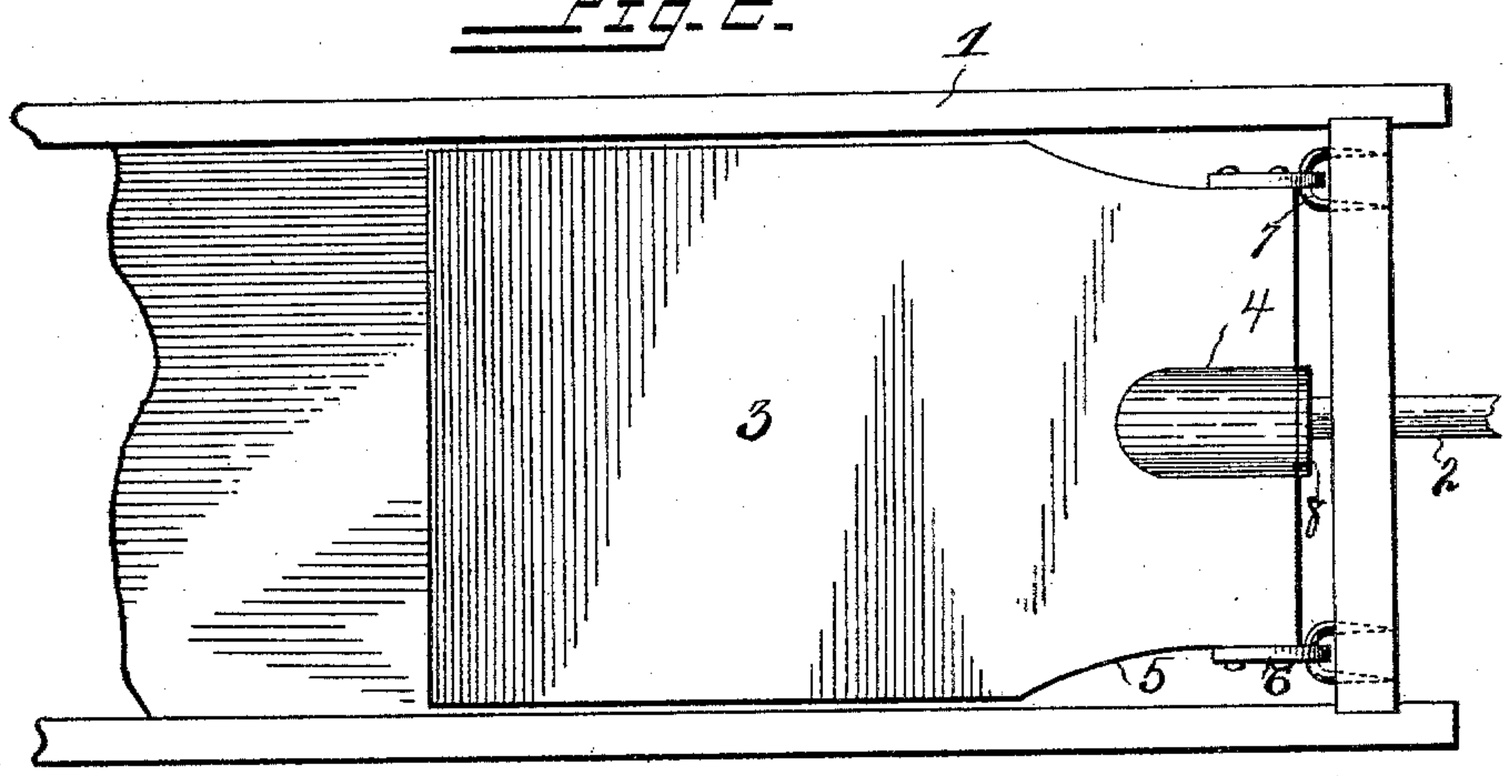
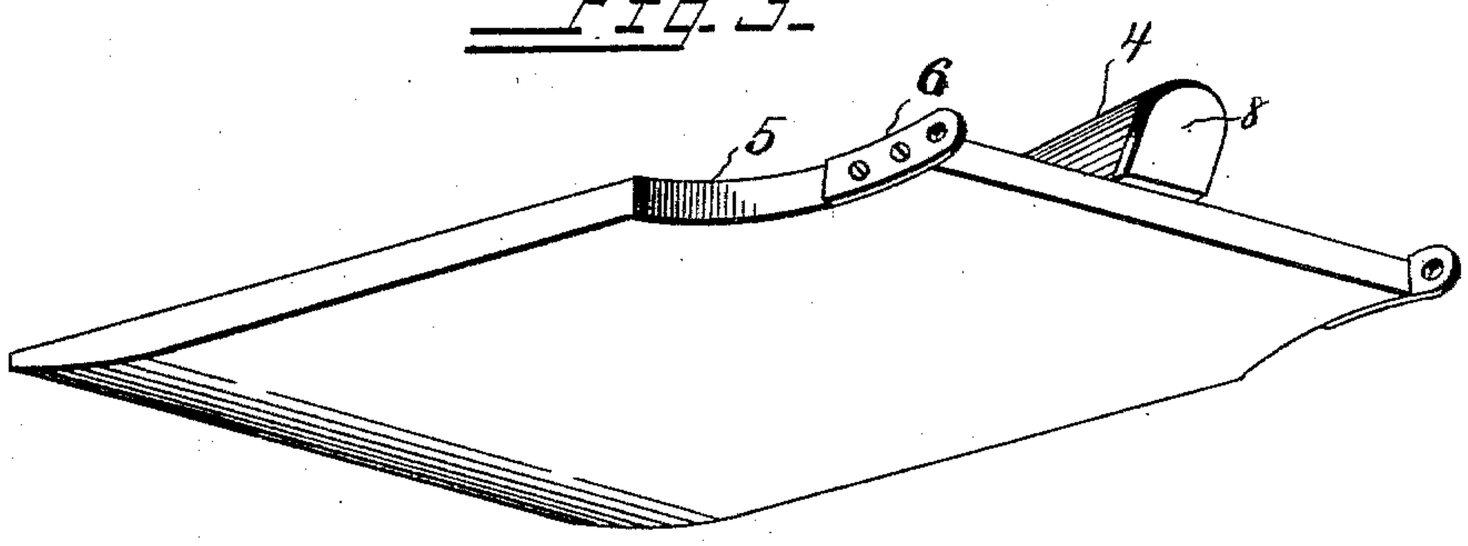


Fig. 3.



Witnesses

L. C. Cobb.

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Inventor

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UNITED STATES PATENT OFFICE.

REUBEN W. HYERS, OF PLATTSMOUTH, NEBRASKA.

FLOAT-OPERATED VALVE.

SPECIFICATION forming part of Letters Patent No. 596,880, dated January 4, 1898.

Application filed June 8, 1897. Serial No. 639,861. (No model.)

To all whom it may concern:

Be it known that I, REUBEN W. HYERS, a citizen of the United States, residing at Plattsmouth, in the county of Cass and State of Nebraska, have invented a new and useful Float-Operated Valve, of which the following is a specification.

My invention relates to a float-operated valve for stock-watering and other troughs and receptacles; and the object in view is to provide a simple and efficient construction of combined valve and float adapted to be applied with facility to a water trough or receptacle of any ordinary construction having a supply-pipe which enters said receptacle at the side and, furthermore, to provide a float of such construction as to approximately close the top of the trough or receptacle at the end contiguous to the valve, whereby stock in watering are not liable to disarrange the valve or otherwise render the apparatus inoperative.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a longitudinal section of a stock-watering trough, showing in operative position a combined float and valve constructed in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a detail view in perspective of the combined float and valve detached from the receptacle.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a trough or receptacle, through one end wall of which projects a supply-pipe 2, the extremity of said pipe projecting slightly beyond the inner surface of the end wall and being preferably in communication with a source from which a continuous supply may be obtained. In connection with this ordinary construction of trough or receptacle I employ a combined float 3 and valve 4, rigidly secured together, with the terminal or operative face of the valve approximately perpendicular to the plane of the float. The float illustrated and preferred in this connection is a flat plate or board of suitable buoyant material, which is approximately equal in width with the trough or receptacle in which it is arranged, in order to close the top of said trough or receptacle and thereby prevent stock from gaining access to the contents of the trough contiguous to the valve. In other words, the float being of equal width with the trough at the end contiguous to the valve covers the contents thereof, and hence stock is attracted to the portion of the trough where the contents are exposed. Contiguous to the rear or hinged end of the float its side edges are cut away, as shown at 5, to allow sufficient space for securing the hinge-straps 6, and the eyes or portions of the hinge-straps which project beyond the contiguous edge of the float are engaged by simple staples 7, or the equivalents thereof, in order to mount the float upon that wall of the receptacle through which the supply-pipe projects.

The float, as above indicated, is of a width approximately equal to the receptacle to conceal the subjacent contents of the receptacle, and thus prevent stock from approaching the valve while partaking of the contents of the receptacle. I have found in practice that this construction of float serves as a sufficient protection for the valve and effectually prevents stock from attempting to obtain water at a point near the inlet end of the trough.

In practice I prefer to arrange the valve-block 4 at an intermediate point between the hinge-straps 6 and upon the upper side of the float and fit its front face with a suitable packing-disk 8; but it will be understood that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

The combination with an open-topped receptacle provided in one end wall with a supply-pipe, projecting slightly beyond the inner surface thereof, of a combined float and valve, the former consisting of a flat plate or board approximately equal in width with the receptacle, to conceal the subjacent contents

of the portion of the receptacle contiguous to the supply-pipe, and form a top or cover for preventing stock from seeing the contents of the receptacle contiguous to the supply-pipe, and the valve consisting of an upstanding block rising from the upper surface of the plate or board at a point between its side edges and provided with a packing-disk, and hinge-straps secured to the lateral edges of the plate or board and engaged by staples secured in the wall of the receptacle, substantially as specified.

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

REUBEN W. HYERS.

Witnesses:
ALBERTA K. DAVIES,
JOHN A. DAVIES.