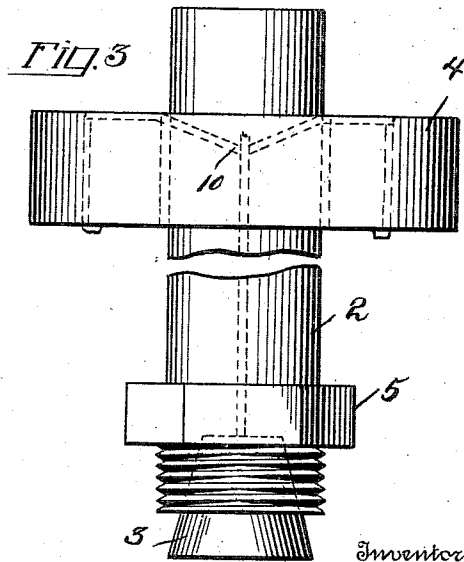
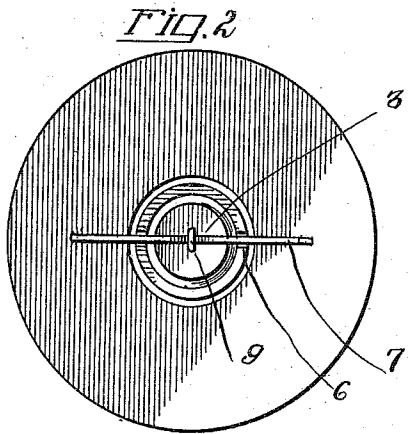
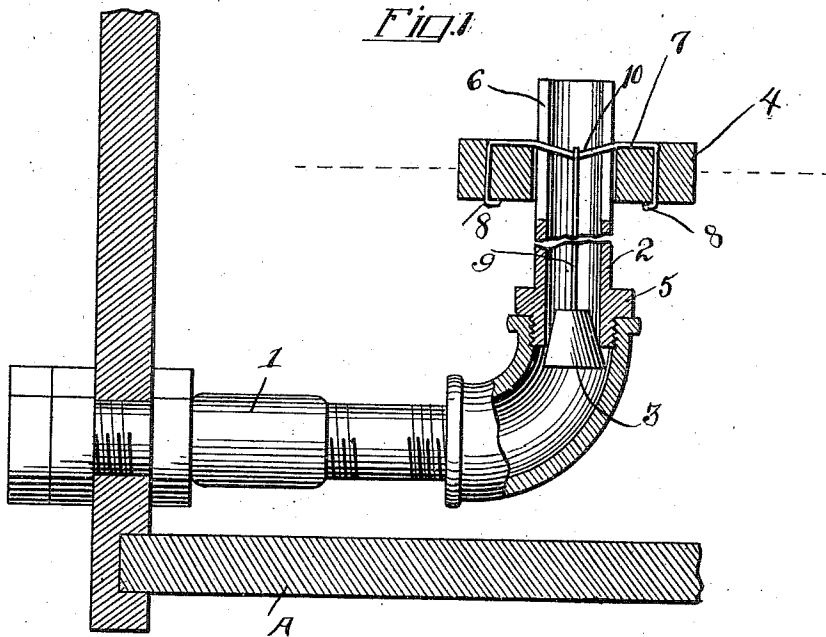


J. E. TOWNSEND.  
 STOCK WATERER.  
 APPLICATION FILED JAN. 25, 1910.

972,738.

Patented Oct. 11, 1910.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JESSE E. TOWNSEND, OF RICHMOND, INDIANA.

STOCK-WATERER.

972,738.

Specification of Letters Patent.

Patented Oct. 11, 1910.

Application filed January 25, 1910. Serial No. 540,055.

*To all whom it may concern:*

Be it known that I, JESSE E. TOWNSEND, a citizen of the United States, residing at Richmond, in the county of Wayne and State of Indiana, have invented new and useful Improvements in Stock-Waterers, of which the following is a specification.

The present invention appertains to means for supplying troughs arranged for watering stock with water at the required level thereby preventing overflow and at the same time insuring ample supply of water for drinking purposes.

The invention deals more particularly with the valve mechanism for automatically controlling the supply of water so as to maintain the water at a given level in the trough.

The invention relates to valve mechanism of the type embodying a float controlled by the change of level of water in the trough and a valve connected with said float and movable therewith.

The present invention provides a novel arrangement of valve and float and a peculiar mounting for the latter and a unique connection between the float and valve, the parts being so arranged as to insure responsive movement of the valve accordingly as the float rises or falls with the change of level of the water.

The invention consists of the novel features, details of construction and combinations of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawings and pointed out in the appended claims.

Referring to the drawings forming a part of the specification, Figure 1 is a sectional view of a valve mechanism and part of a trough with which the valve mechanism co-operates. Fig. 2 is a top plan view of the float, the pipe upon which the float is mounted and the valve. Fig. 3 is a view in elevation of the valve mechanism showing the parts on a larger scale.

Corresponding and like parts are referred to in both views of the drawings by the same reference characters.

The valve mechanism is adapted to be located in a trough which may be of any construction, a portion of the same being indicated by the reference letter A in the accompanying drawing. A pipe 1 extends through a portion of the trough, receptacle or other device for containing water for sup-

plying stock with drink and leads to a suitable source of supply, not shown. The valve mechanism is fitted to the delivery end of the pipe 1 by means of which water is supplied to the trough or other receptacle. The valve mechanism comprises a pipe 2, a valve 3 and a float 4. The lower end of the pipe 2 is threaded to make screw-thread connection with the supply pipe 1 and said pipe 2 is also provided with an outer shoulder 5 at the base of the threaded end, said shoulder being formed with a plurality of flat faces for coöperation with a wrench, spanner or other form of tool for tightening or loosening said pipe as may be required. The pipe 2 occupies a vertical position and is provided in opposite sides with vertical slots 6. The float 4 is mounted upon the pipe 2 and is directed in its movements thereby and may be of any construction to maintain a position upon the surface of the water and to move therewith as the level of the water changes in the trough. The wire 7 extends across the opening provided centrally of the float for reception of the pipe 2 and its end portions are bent and passed through openings in the float and clenched as indicated at 8. That part of the wire 7 extending across the opening of the float passes through the vertical slots 6 of the pipe 2 and prevents turning of the float upon the pipe. The valve 3 has its stem 9 connected with the wire 7 and in order to centralize the connection between the stem 9 and wire 7 the latter is depressed at a central point as indicated at 10. The valve 3 is of conical form and opens downward and closes upward against a seat formed at the lower end of the pipe 2.

The supply pipe 1 may enter the trough A in any direction and its discharge end has the pipe 2 fitted thereto. The parts are so arranged that when the valve 3 is closed the float 4 will occupy a position corresponding approximately to the required level of the water in the trough. When the level of the water in the trough lowers from any cause the float 4 descends and the valve 3 moves away from its seat thereby permitting water to pass from the supply pipe into the trough and as the level of the water rises the float 4 correspondingly moves upward and finally closes the valve 3 and shuts off further supply. This occurs when the level of the water in the trough corresponds to the predetermined point.

From the foregoing taken in connection with the accompanying drawings it will be understood that the invention provides a valve mechanism which may be readily fitted to any style, make or construction of trough, barrel, tank or receptacle for containing water for supplying stock with drink, said valve mechanism being wholly automatic in action and preventing over-flow of the trough and at the same time insuring ample supply of water for drinking purposes.

Having thus described the invention, what is claimed as new is:—

1. A valve mechanism for stock-watering troughs the same comprising a pipe having a valve seat and formed in opposite sides with vertically disposed slots, a float mounted upon the pipe and directed in its movements thereby, a connection passing through the vertical slots of the pipe and secured at its ends to the float and a valve adapted to

close upward and having connection with the said connection attached to the float and passing through the vertical slots of said pipe.

2. Valve mechanism for stock-watering troughs comprising a vertically arranged pipe having a valve seat and provided in opposite sides with vertical slots, a float mounted upon the pipe, a wire passing through the vertical slots of the pipe and having its end portions connected with the said float, having its intermediate portion depressed, a valve adapted to close upward against said seat, and a stem connecting said valve with the depressed portion of the wire attached to said float.

In testimony whereof I affix my signature in presence of two witnesses.

JESSE E. TOWNSEND.

Witnesses:

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J. G. HUNT.