G. J. LAKIOS.

FLOAT VALVE.

APPLICATION FILED FEB. 6, 1917.

1,258,790. **Patented Mar. 12, 1918.**

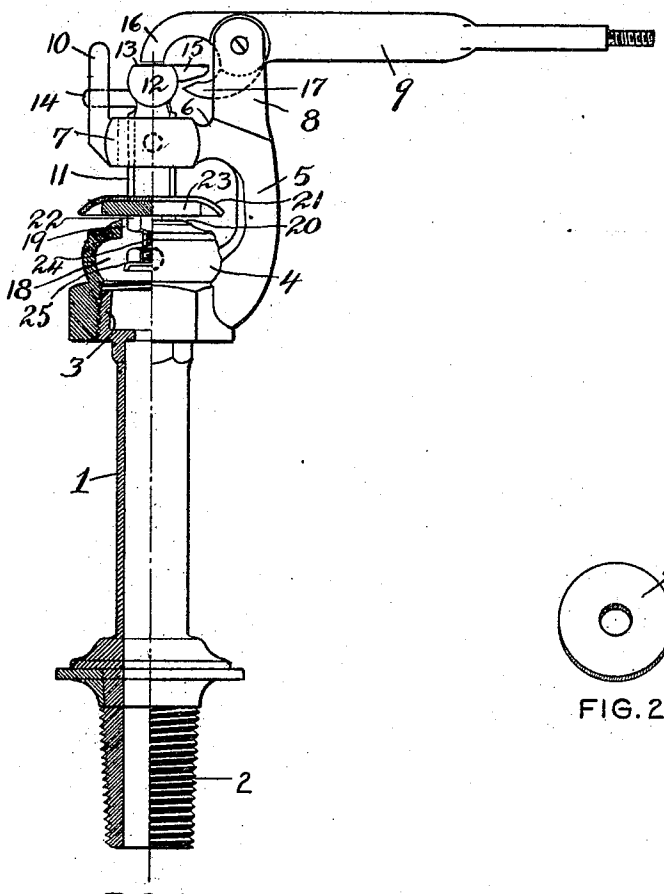


FIG. 1.

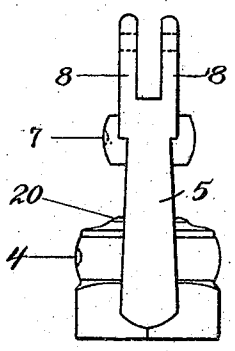


FIG. 4.

FIG. 2.

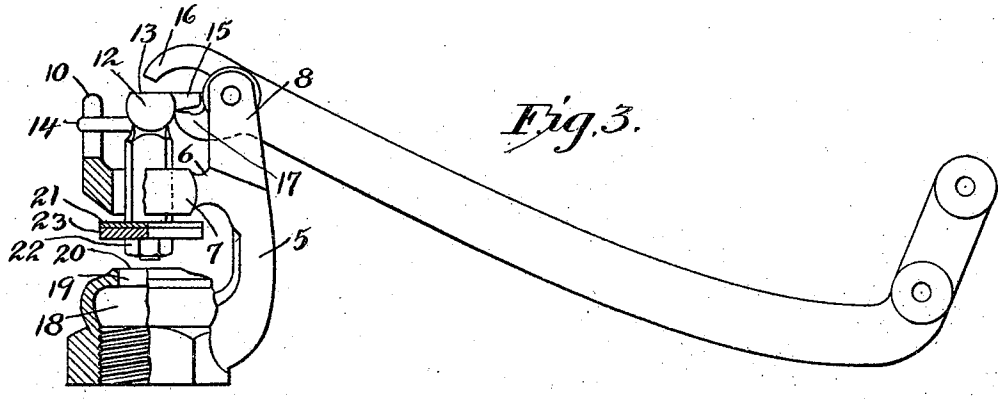


Fig. 3.

WITNESSES:

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FLOAT-VALVE.

1,258,790. Specification of Letters Patent. Patented Mar. 12, 1918.

Application filed February 6, 1917. Serial No. 146,915.

To all whom it may concern:

Be it known that I, GEORGE JOHN LAKIOS, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented a new and useful Float-Valve, of which the following is a specification.

This invention relates to new and useful Improvements in a float valve.

The object of the invention is to provide a valve of the character described which may be used in tanks of all kinds to control the inflow of fluid into the tank after the tank has been emptied.

Another object of the invention resides in the provision of a device of the character described which is simple in construction and which may be easily and cheaply manufactured.

With the above and other objects in view, the invention has particular relation to certain novel features of construction, operation and arrangement of parts, an example of which is given in this specification and illustrated in the accompanying drawings wherein:—

Figure 1 is a vertical sectional view of the float valve.

Fig. 2 shows a plan view of a disk-like guard employed in one form of the valve.

Fig. 3 is a side elevation partially in section of another form of valve, and

Fig. 4 is a side view of the valve showing the float lever removed.

Referring now more particularly to the drawings, wherein like numerals of reference designate similar parts in each of the figures, the numeral 1 refers to an inlet pipe whose lower end is threaded at 2 so as to screw into a corresponding socket in the bottom of the tank (not shown). The upper end of this pipe has an externally threaded head 3 to receive the valve casing 4 which is threaded thereon. Integral with, and upstanding from, this casing is the standard 5 having the extended arm 6 which is formed into the ring 7. The standard 5 is extended upwardly forming two extensions 8, 8, spaced apart and between which the float lever 9 is pivoted and opposite these extensions and integral with, and upstanding from, the ring 7 are the guide fingers 10, 10, which are spaced apart and provided for the purpose hereinafter set forth. The ring 7 forms a bearing for the valve stem 11 whose upper end carries the head 12 having the flat upper face 13. Extending out from the stem is the guide 14 which plays between the fingers 10 to prevent the stem from turning and extending from the head in the opposite direction is a catch 15. The inner end of the float lever is formed into two oppositely disposed fingers 16 and 17, the former of which is curved downwardly and its free end rests against the flat face 13 of the head 12 and the other of which is upwardly curved and alined under the catch 15. When the outer end of the lever 9 is elevated, the finger 16 will force the valve downwardly and when the outer end of said lever 9 is lowered, the finger 17 will engage under the catch 15 and lift said stem. The valve casing 4 is provided with an enlarged internal cavity 18 and the upper side of said casing has a restricted outlet 19 surrounding which is the valve seat 20. The lower end of the stem 11 is reduced to receive the concaved washer 21 and locked against the under side of said washer by means of the lock nut 22 is the rubber disk-like valve 23.

In the form of valve used for toilet tanks and the like, the lower end of the stem is extended, as shown in Fig. 1, said extension being exteriorly threaded as at 24 and receiving a baffle 25 which is threaded on to the lower end thereof and alined above the pipe 1. When the valve is open, the current of water passing through the inlet pipe 1 under pressure will be checked by said baffle and the force of the current broken and the water will pass on out through the outlet 19 and will be deflected downwardly by the concaved washer 21, thus preventing the water from splashing over the tank as is often the case when valves now in common use are employed. In case the valve is used for outside tanks, such as are commonly used for watering stock, railroad purposes and the like, the stem is not extended below the lock nut 22, this form of valve being shown in Fig. 3, as for such use it is immaterial that the water inflowing through the valve should splash over the tank.

It will be observed in the form shown in Fig. 3 that the washer 21 is made flat as in that form it serves only the purpose of backing and strengthening the valve 23. In the

form shown in Fig. 1, the outer end of the float lever 9 is threaded to receive a suitable float (not shown) which will be lifted when the tank fills with water and will cause the valve to close. In the form shown in Fig. 3, the valve lever is extended and its free end is shown formed to receive a float (not shown) such as is commonly used in large tanks for watering stock, for filling railroad locomotives and for other similar purposes.

What I claim is:

1. A device of the character described including a hollow casing provided with a valve seat, a standard upstanding from the casing provided with an arm which is formed into a ring, guide fingers upstanding from the ring, a float lever pivoted to the standard, a valve stem whose upper end is in operative connection with the float lever, said stem operating through said ring as a bearing, a guide carried by the stem and playing between the fingers, a valve secured to the lower end of the stem, a deflector carried by the stem above the valve, and a baffle which projects through the seat and is carried by the lower end of the stem.

2. A device of the character described including a hollow casing provided with an exterior valve seat, a standard upstanding from the casing whose upper end is bifurcated, an arm integral with the standard and formed into a ring, guide fingers upstanding from the ring, a float lever pivoted between the arms of the upper end of said standard whose inner end is formed into two oppositely disposed fingers, a valve stem whose upper end is formed into a head having a flat upper face, a guide carried by said stem and playing between said guide fingers to prevent the stem from turning, a catch extending from said head, the free end of one of the fingers of the float lever resting against the flat face of said head and the other finger of said float lever being alined under said catch, a concave washer carried by the lower end of said stem and a disk like valve secured against the under side of said washer.

GEORGE JOHN LAKIOS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."