

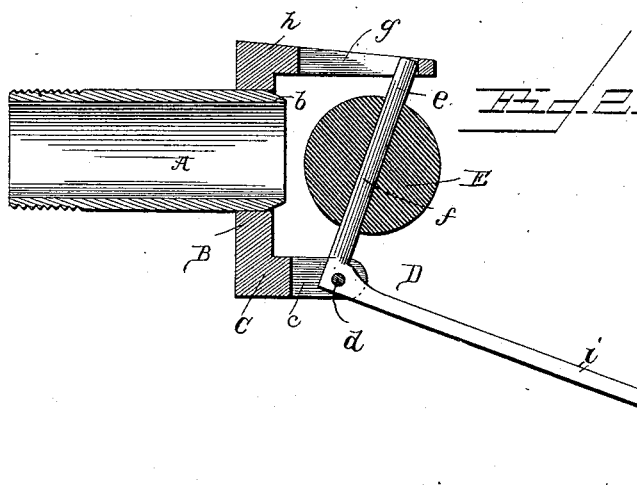
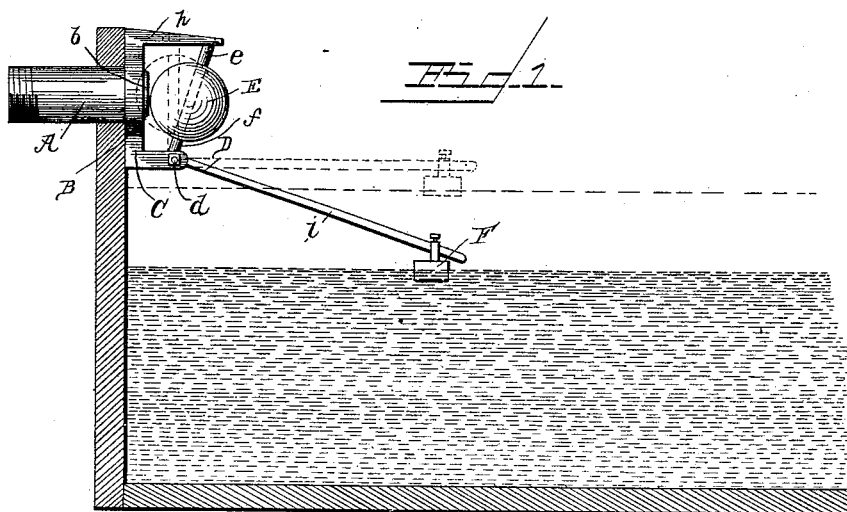
(No Model.)

G. FRY.

TANK FOR WATERING STOCK.

No. 386,242.

Patented July 17, 1888.



Witnesses,

Henry S. Dietrich.

E. J. Siggers.

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By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

GEORGE FRY, OF MEMPHIS, MISSOURI.

TANK FOR WATERING STOCK.

SPECIFICATION forming part of Letters Patent No. 386,242, dated July 17, 1888.

Application filed February 25, 1888. Serial No. 265,237. (No model.)

To all whom it may concern:

Be it known that I, GEORGE FRY, a citizen of the United States, residing at Memphis, in the county of Scotland and State of Missouri, have invented a new and useful Improvement in Tanks for Watering Stock, of which the following is a specification.

This invention relates to tanks for watering stock; and it consists in an improved valve and float device for the same, designed to automatically regulate the supply of water to the tank, and embodying the improved features of construction hereinafter described.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of my improved valve and float device, the valve being open; and Fig. 2 is a longitudinal section.

A designates a small pipe section, which is externally threaded at one end for connection with the supply-pipe of the tank. The other end of said pipe A is beveled to present a seat, *b*, having a knife-edge.

A yoke-casting, B, consists of a circular body portion adapted to be forced rigidly upon the pipe A, so that the knife-seat of the same will project beyond the outer face of said ring. A horizontal lug, C, extends from the bottom of the ring, and is provided with a vertical open slot, *c*, in which is pivoted the elbow of a bell-crank lever, D. A pin, *d*, passes through the arm, so as to serve as the pivot. The upper end, *e*, of the vertical member *f* of the bell-crank lever plays in a slot, *g*, formed in a horizontal arm, *h*, extending integrally from the upper portion of the ring. Mounted upon the said vertical member is a sphere, F, of rubber, which forms the valve of the device. The horizontal member *i* of the lever D is extended to exert considerable leverage, and is provided upon its outer end with a float, F, of any suitable construction.

A convenient form of float consists in an air-tight metallic vessel.

As will be well understood, when the water-level in the tank falls below the normal posi-

tion of the lever D, the horizontal member will fall and throw the vertical member and its sphere away from the knife-valve seat to permit the water to flow from the pipe into the tank. As the water rises to the desired level, the float rises and moves the lever to restore the sphere to its bearing against the seat.

The vibrations of the lever are limited by having the vertical end bear in the slotted arm. The knife-edge and the convex face of the valve avoid all tendency of the choking of the supply-pipe by trash, since said portions present no faces suitable for the lodgment of said material.

The valve bears against its seat with a yielding pressure, thus insuring a water-tight joint thereat. When the active face of the valve becomes worn or irregular from constant use, it will only be necessary to slightly revolve the sphere upon the vertical member to bring a new bearing-face into position. By withdrawing the pin and removing the bell-crank lever an entirely new sphere may be substituted. The parts are simple and may be cheaply produced by casting.

I claim—

The combination of the pipe having its beveled end forming a valve-seat, the casting having its ring part fitted securely on the pipe just within its end, and having the integral arms C and *h*, the former having the open slot C and the latter having the longitudinal slot *g*, the angle-lever pivoted at its bend in the slot *c* and having its upstanding arm projecting in the slot *g*, the float on the outstanding arm of said lever, and the rubber ball-valve, of larger diameter than the pipe and rotatable on the upstanding arm of the lever, substantially as specified.

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

GEORGE FRY.

Witnesses:

JAMES W. HARRIS,
JOHN W. BARNES.