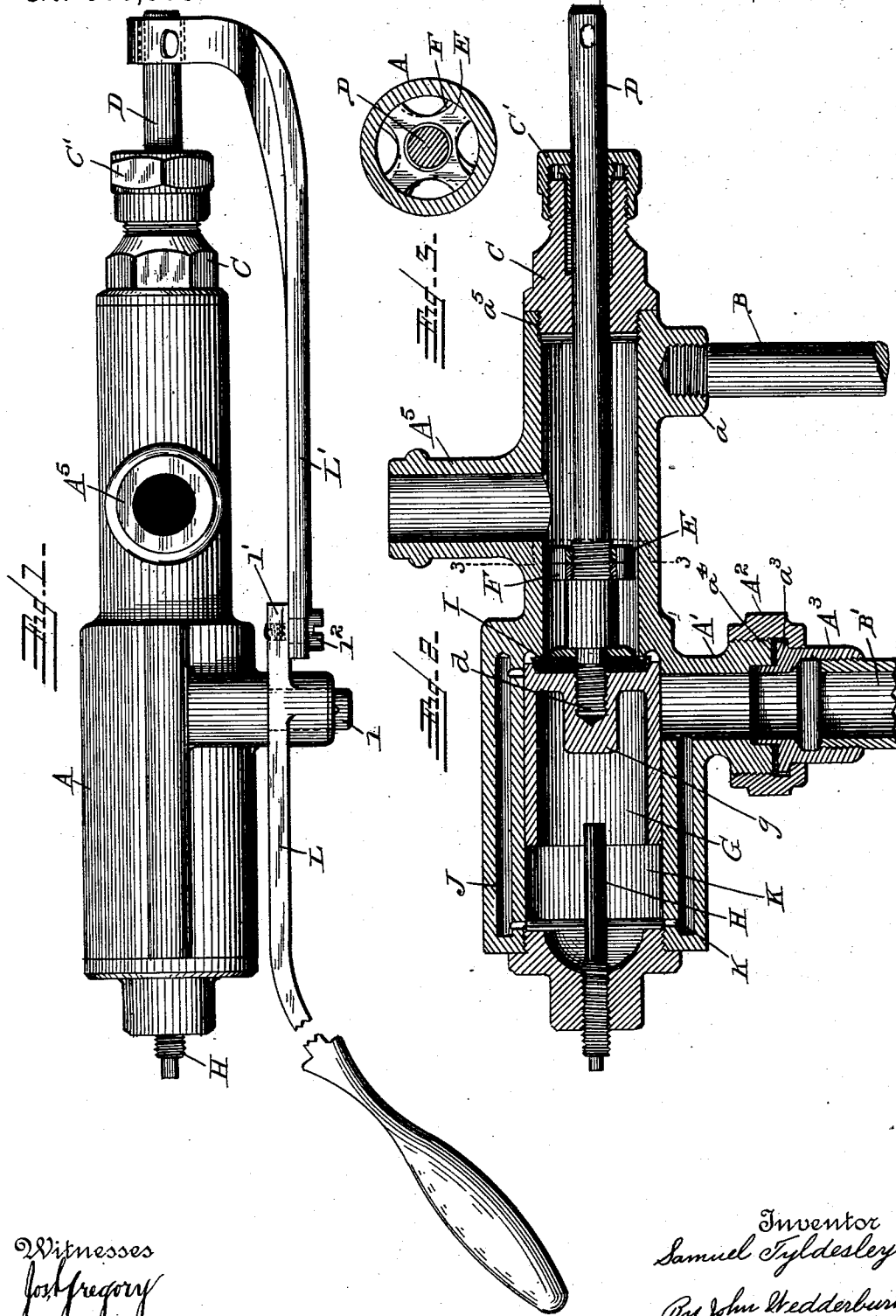


(No Model.)

S. TYLDESLEY.
VALVE.

No. 568,965.

Patented Oct. 6, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL TYLDESLEY, OF WATERTOWN, NEW YORK.

VALVE.

SPECIFICATION forming part of Letters Patent No. 568,965, dated October 6, 1896.

Application filed December 18, 1895. Serial No. 572,543. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL TYLDESLEY, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in valves or flushing devices; and it has for its object, among others, to provide a simple, cheap, and improved device whereby the opening and closing of the supply-pipe may be readily regulated and whereby the piston is moved to cut off the supply just ahead of the main valve, so as to stop the suction at the moment of closing.

The parts are simple, few in number, easily assembled, and positive and accurate in their action.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a plan view of my improvement. Fig. 2 is a substantially central vertical longitudinal section through the valve. Fig. 3 is a cross-section of the valve on the line 3 3 of Fig. 2.

Like letters of reference indicate like parts in the various views.

Referring now to the details of the drawings by letter, A designates the casting or casing having a threaded nipple *a* to receive the bracket or post or other support B, designed to be fastened to the floor. Upon its under side the casting has also a threaded neck or nipple A', adapted to receive the coupling A², which is interiorly threaded to engage the exteriorly-threaded portion of the neck or nipple, and in this coupling is held the coupling A³, which is interiorly threaded and receives the supply-pipe B', the coupling A³ being flanged, as at *a*³, and a suitable valve or packing *a*⁴ being employed to insure a water-tight joint.

The casting is formed upon its upper side between the nipples *a* and *a*' with the neck A⁵, constituting the outlet. The end of the casting adjacent to the nipple *a* is interiorly threaded, as at *a*⁵, to receive the coupling C, which has the coupling C', and suitable packing constitutes a stuffing-box in which the rod D works. This rod carries within the longitudinal portion or bar of the casing or casting the wing-valves E and F, which are disposed thereon, as shown, the disk or plate carrying the one set of wing-valves F being threaded upon a threaded portion of the rod, as seen in Fig. 2, so as to be readily adjusted when desired, so as to be brought coincident with the wing-valves E or otherwise, as indicated in Fig. 3, so that the passage to the outlet may be varied as circumstances may require. The other end of the rod D is screw-threaded, as seen at *d*, and is connected with the piston G, which is hollow, as shown, and the movement of which is limited by the screw H, screwed into the end of the casting or casing A and adapted to engage the boss *g* of the piston, as will be readily understood from Fig. 2.

I is the main valve, secured to the rod D and seated in a recess in the piston-rod.

J is a passage in the casing A to release the pressure in the chamber K and facilitate the opening of the supply-pipe, and this chamber communicates with the interior of the neck A' by a passage *k*, as seen in Fig. 2.

L is the operating-lever pivoted on a stud *l*, projecting from the casing A, as seen in Fig. 1, and to its short arm *l'* is pivoted upon a pivot *l*² the arm L', the other end of which is engaged with the outer end of the rod D.

With the parts constructed and arranged substantially as hereinbefore described the operation will be apparent. It will be observed that the piston cuts off the supply-pipe just before the valve I is seated, so as to stop the suction at the moment of closing, and dispenses with a dash-pot heretofore employed for this purpose.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

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

1. The combination with the casting and

the supply and outlets thereof, of the piston mounted to move in the chamber of the casting the piston-rod and wing-valves thereon, one set of valves being adjustable with relation to the other and a valve carried at the end of said piston, whereby the piston cuts off the supply before the valve is seated, substantially as described.

2. The combination with the casting and the supply and outlet pipes, of a piston mounted to reciprocate in the main chamber of the casting and to move across the end of the supply-pipe and a valve carried by the piston-rod and arranged at the inner end of the piston and wing-valves on the piston-rod, one set of valves being adjustable with relation to the other, whereby the piston cuts off the supply before the valve is seated, substantially as described.

3. The combination with the casting and the supply and outlet pipes, of a piston mounted to reciprocate in the main chamber of the casting and to move across the end of the supply-pipe and a valve carried by the piston-rod and arranged at the inner end of the piston and wing-valves on the piston-rod, one set of valves being adjustable with relation to the other whereby the piston cuts off the supply before the valve is seated, said valve being located in a recess in the end of the piston, substantially as described.

4. The combination with the casting and the supply and outlet pipes, of a piston mounted to reciprocate in the main chamber of the casting and to move across the end of the supply-pipe and a valve carried by the piston-rod

and arranged at the inner end of the piston and wing-valves on the piston-rod, one set of valves being adjustable with relation to the other whereby the piston cuts off the supply before the valve is seated, said valve being located in a recess in the end of the piston, and means for releasing the pressure in the said main chamber of the casting, substantially as described.

5. The combination with the casting and the supply and outlet pipes, of a piston mounted to reciprocate in the main chamber of the casting and to move across the end of the supply-pipe and a valve carried by the piston-rod and arranged at the inner end of the piston and wing-valves on the piston-rod, one set of valves being adjustable with relation to the other whereby the piston cuts off the supply before the valve is seated, said valve being located in a recess in the end of the piston, and means for releasing the pressure in the said main chamber of the casting and communicating with the supply-pipe, substantially as described.

6. The combination with the casting and the piston and valve and piston-rod, of the wing-valves upon said rod, one set of valves being adjustable with relation to the other, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SAMUEL TYLDESLEY.

Witnesses:

WILLIAM REDDING,
CHARLES S. BROWN.