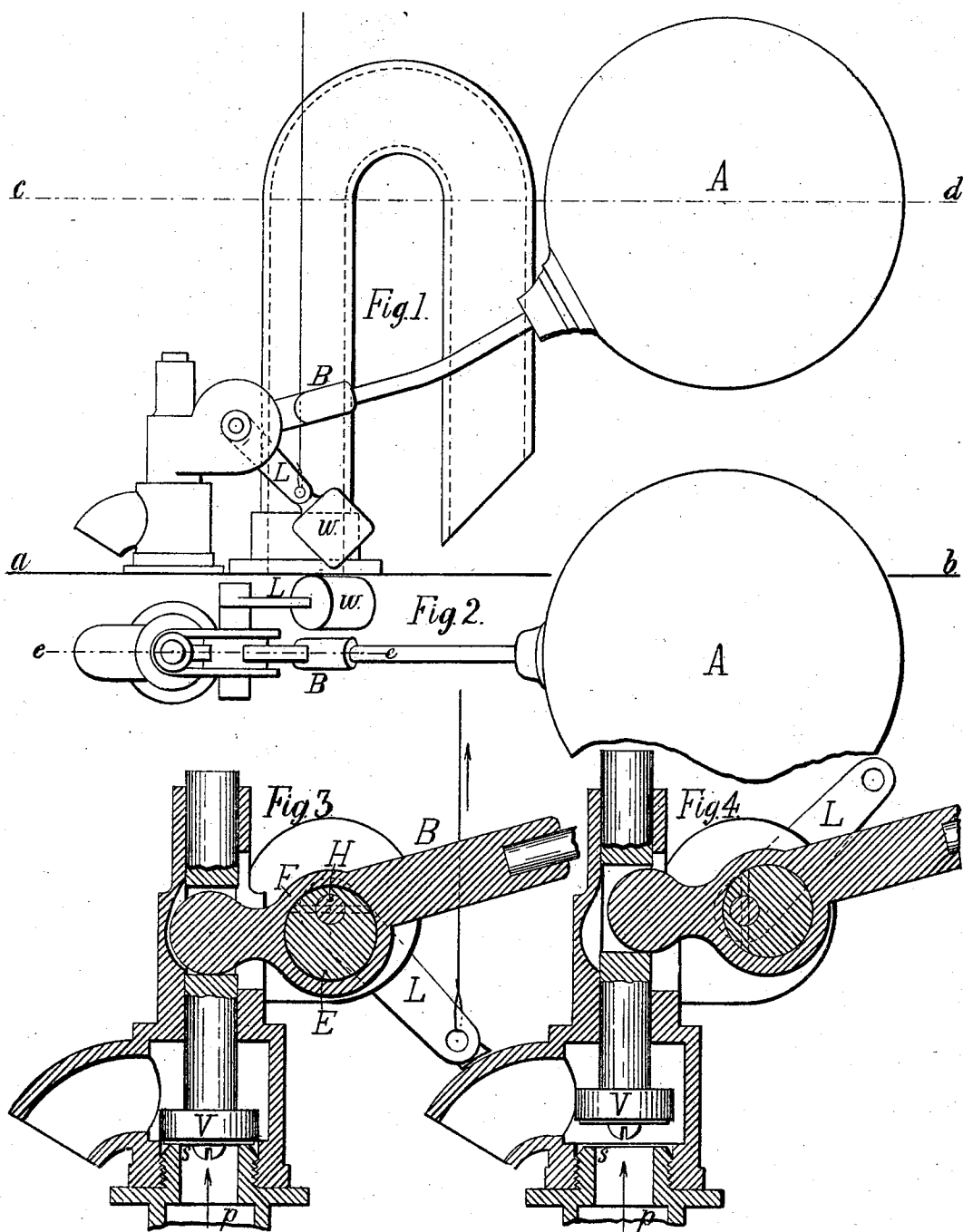


(No Model.)

W. H. EDMONDSON.
SIPHON TANK VALVE MECHANISM.

No. 506,217.

Patented Oct. 10, 1893.



WITNESSES:

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WILLIAM H. EDMONDSON, OF NEW HAVEN, CONNECTICUT.

SIPHON-TANK VALVE MECHANISM.

SPECIFICATION forming part of Letters Patent No. 506,217, dated October 10, 1893.

Application filed September 5, 1892. Serial No. 445,156. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HOWARD EDMONDSON, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Siphon-Tank Valve Mechanism, of which the following is a specification.

My invention relates to mechanism for lifting valves in siphon tanks; and the objects of my invention are, first, to dispense with one of the two valves now employed; and, second, to render it possible to use a tank of smaller capacity than that which has heretofore been made, and at the same time supply the same amount of water as formerly at the time of flushing. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1. is an elevation of the valve box; the ball with its lever and connections; and the siphon. The line *a b* represents the bottom of the tank, and the broken line *c d* the level of the water. Fig. 2. is a plan of the valve box; and the ball with its lever and connections. Figs. 3. and 4. are enlarged sections of the valve box at the line *e e*—Fig. 2., showing the valve closed and open, and the mechanism employed in lifting it, corresponding to the different positions of the valve.

Similar letters refer to similar parts throughout the several views.

The ball A.—Fig. 1. is forced upward by the water, and operates through the lever B (see Figs. 1 and 3.) in keeping the valve V on its seat *s*—Fig. 3., preventing the admission of more water through the service pipe *p*. The ball lever B—Fig. 3. is enlarged at F to admit the eccentric sheave E. The eccentric sheave E is keyed to the spindle H, which is also

fastened to the lever L. That is to say, the eccentric sheave E, the spindle H and the lever L form substantially one and the same piece; while the eccentric sheave E is free to revolve within the ball lever B, which is enlarged at this point and takes the form of an eccentric strap F. The water ordinarily stands at the level indicated by the broken line *c d*—Fig. 1. When it is required to empty the tank, the lever L is raised by pulling the wire in the direction indicated by the arrow Fig. 3. into the position shown at L—Fig. 4. The eccentric sheave revolving with it, raises the ball lever, releasing the valve, which is at the same time forced upward by the service water which enters through the pipe *p*. The water rises until it reaches the bend of the siphon, when the tank is nearly emptied. On releasing the lever L the weight *w* (see Figs. 1 and 2.) restores the eccentric to its original position—Fig. 3. The ball A is now at its lowest position. The valve V therefore remains above its seat *s*, until a sufficient quantity of water has entered the tank to raise the ball A and lever B into the position shown in Figs. 1 and 3., when the valve again closes connection with the service pipe *p*, and prevents the admission of more water.

What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination of an eccentric sheave E, with a ball lever B, enlarged to admit it, and forming an eccentric strap F, a lever L, and a valve V, the round end of the lever B engaging with the spindle *s* of the valve V, substantially as illustrated and described.

WM. H. EDMONDSON.

Witnesses:

EDWIN M. CLARK,
JAMES M. LEE.