

(No Model.)

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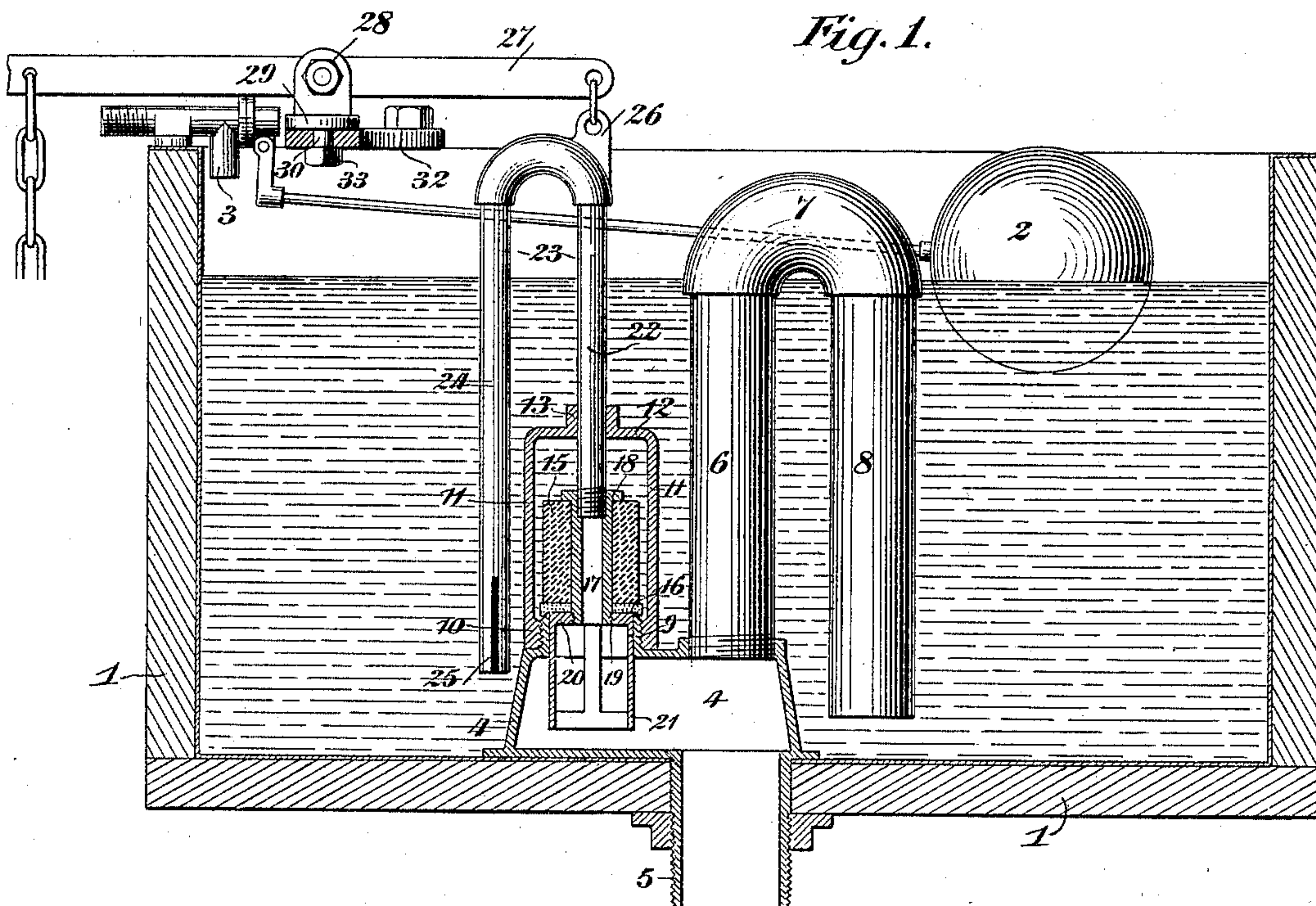
J. H. TABELLE.

TANK OR CISTERN FOR WATER CLOSETS.

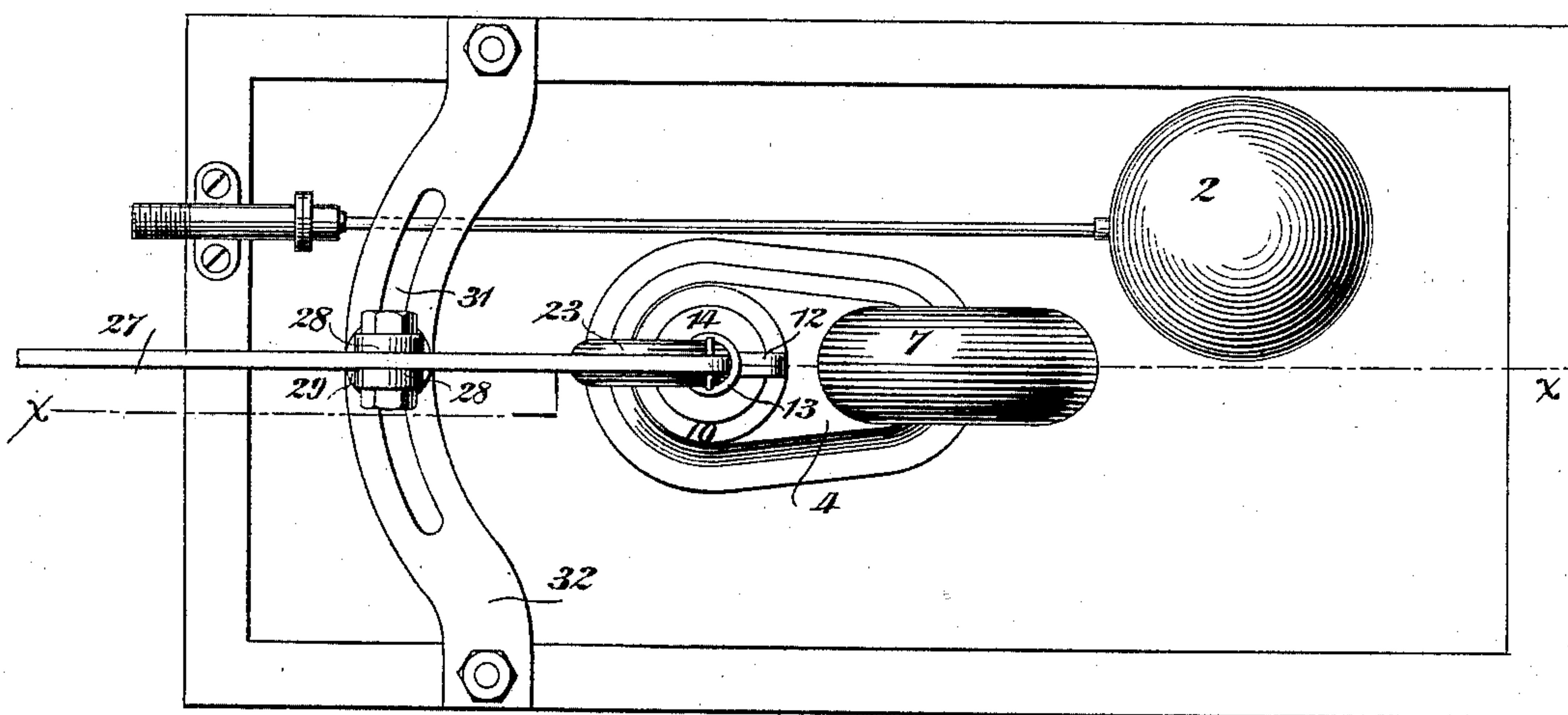
No. 473,980.

Patented May 3, 1892.

*Fig. 1.*



*Fig. 2.*



Witnesses

C. E. Ashley  
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Inventor

Joseph H. Tabele

By his Attorney

Jacob Felbel

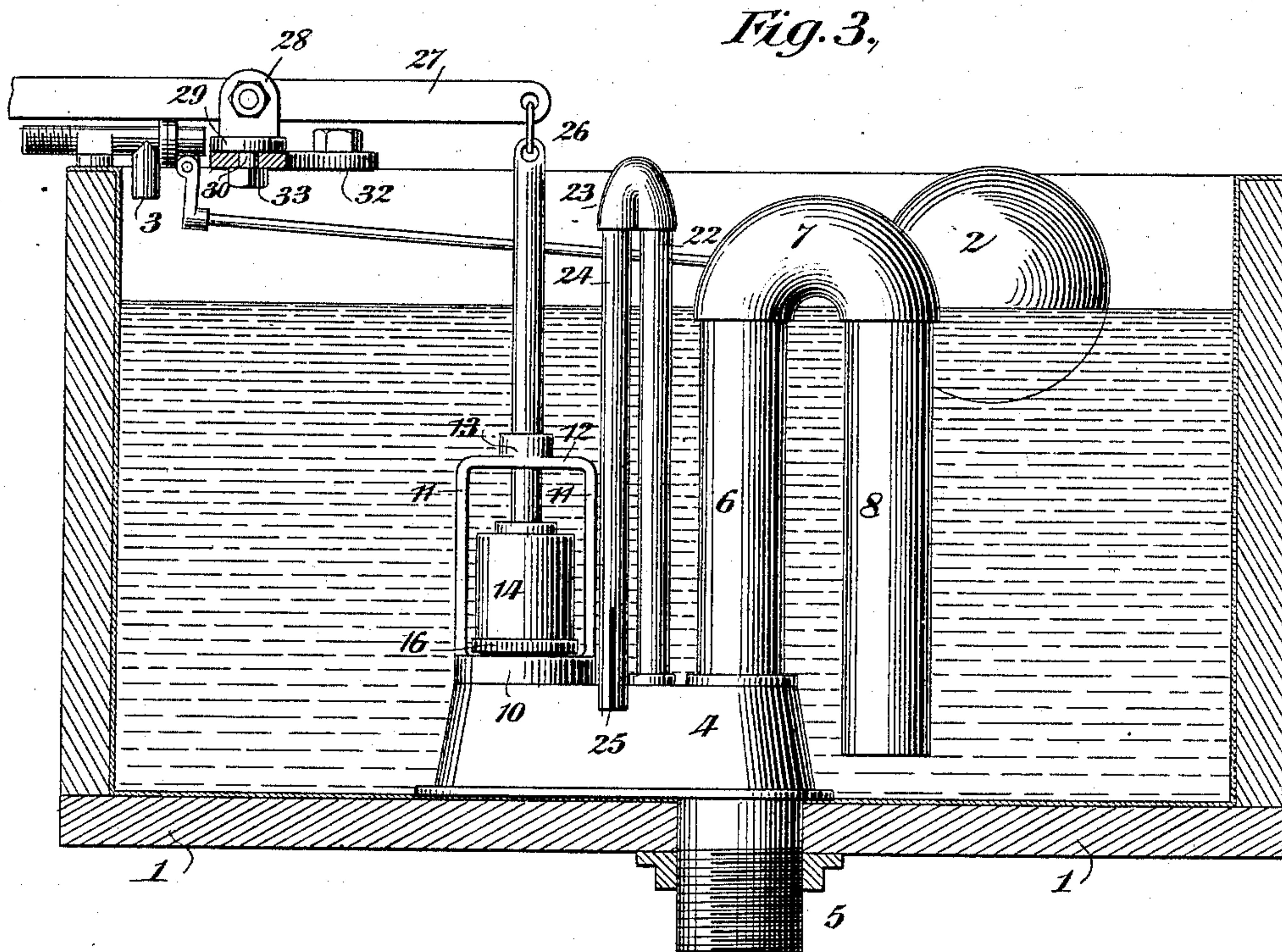
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*W. W. Lloyd.*

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By his Attorney *Jacob Felbel*



# UNITED STATES PATENT OFFICE.

JOSEPH HENERY TABELLE, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO THE MEYER SNIFFEN COMPANY, LIMITED, OF NEW YORK, N. Y.

## TANK OR CISTERN FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 473,980, dated May 3, 1892.

Application filed December 5, 1891. Serial No. 414,096. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH HENERY TABELLE, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Tanks or Cisterns for Water-Closets, of which the following is a specification.

My invention relates to that class of tanks or cisterns for water-closets in which a siphon is employed to effect the discharge of the flushing-water to the bowl or basin of the closet, and has for its main object to provide means whereby the action of the siphon is rendered less noisy than heretofore at or about the cessation of the flushing operation.

My invention consists, primarily, in combining with the main discharging-siphon a supplemental siphon adapted to feed air to the main siphon, so as to gradually destroy its power, and in certain features of construction and other combinations of devices, all as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a vertical section, taken at the line *xx* of Fig. 2, of a tank or cistern embodying my invention. Fig. 2 is a top plan thereof, and Fig. 3 is a sectional elevation showing a modification of my invention.

In the several views the same part will be found designated by the same numeral of reference.

1 represents the tank or cistern; 2, the usual ball-float, and 3 the supply-cock to which the float is connected.

4 designates a valve chamber or box having a pipe-like portion 5 extending out through the bottom of the tank and secured by a nut. To the protruding end of the pipe portion 5 is connected, as usual, the flushing-pipe of the water-closet, but not shown herein. Screwed into the top of the valve-chamber is one leg 6 of the main discharging-siphon 7, the other leg 8 thereof terminating near the bottom of the tank. The top of the valve-chamber is formed with a hollow threaded boss 9, to which is screwed a ring 10 upon the lower end of a guide-frame consisting of upright arms 11 and a top cross-piece 12, having an eye or perforation 13. The upper end

of the boss 9 forms a seat for a valve 14, which is composed, preferably, of a lead or other weight 15 and a facing of leather or rubber 16. Through the weight and the facing is passed a tube 17, having a flange 18 at its upper end and formed with a thread 19 at its lower end, to which is screwed a nut 20, formed integral with an open frame 21, which fits in the hollow boss or valve-seat and serves to guide the valve in its up and down movements. To the upper end of the tube is screwed the leg 22 of a small or supplemental siphon 23, whose other leg 24 terminates within the tank, preferably above the mouth of the main siphon. The mouth end of the supplemental siphon is formed or provided with a slit or slot or elongated opening 25, extending above the mouth of the main siphon.

The leg 22 of the small siphon is preferably made to serve as a valve stem or rod for the valve 14 and is guided by the eye or perforation 13 in the cross-piece. To the leg 22 is connected at 26 an operating-lever 27, provided, as usual, with a wire, cord, or chain extending down to the water-closet. The lever is pivoted in ears 28 of an adjustable stand 29, having a screw-pin 30, which passes through a curved slot 31 in a cross-bar 32, secured to the top of the tank. A nut 33 screws upon said bolt or pin and confines the stand or bracket and the operating-lever firmly in position.

In the operation of the contrivance the lever 27 is pulled down at its outer end and the siphon 23 and valve 14 are elevated. As soon as the valve leaves its seat the water in the tank passes through the valve-chamber and down the pipe 5 and puts into action the main siphon, the valve-chamber, the pipe 5, and the flushing-pipe to the closet forming, with the portion 6, the longer leg of said siphon. The valve 14 may be dropped to its seat immediately the main siphon has commenced to work. The tube 17 and the valve-chamber, with the portion 22, form the longer leg of the small siphon, and the power of the main siphon is such as to throw into action the small siphon. When by the discharge of both siphons the level of the water is reduced to the slot 25 in the small or supplemental siphon, said siphon begins to take air and to



feed it to the longer leg of the main siphon to destroy its power. By the arrangement shown air is gradually fed to the main siphon to gradually break its force, so that  
 5 when the level of the water is reduced to the mouth of the main siphon its power to violently and noisily take or suck air is practically, if not wholly, destroyed, and thus the disagreeable sound heretofore heard at the  
 10 cessation of the siphonic action is wholly eliminated or reduced to the minimum. This I have determined by actual practice of the invention.

Referring to Fig. 3 of the drawings, the  
 15 supplemental siphon is disconnected from the valve and made as a fixture, its longer leg communicating with the valve-chamber direct by entering a hole in the top thereof between the valve-seat and the main siphon.  
 20 The valve stem or rod in this construction is made solid and connected to the operating-lever in about the usual way. In this modification of my invention the main and the supplemental siphons act together in the same  
 25 manner that the two siphons shown at Figs. 1 and 2 do, as far as the discharging of the water and the interrupting of the operation of the main siphon are concerned.

Without departing from the gist of my invention, numerous other modifications and  
 30 changes in detail, construction, and arrangement may be made.

What I claim as new, and desire to secure by Letters Patent, is—

35 1. In a tank or cistern, the combination of a

valve-chamber, a lifting-valve, a main siphon secured to said valve-chamber, and a supplemental siphon, also connected to said valve-chamber and communicating therethrough with the said main siphon.

2. In a tank or cistern, the combination of a valve-chamber, a main siphon fixed thereto, and a supplemental movable siphon carrying a valve adapted to a seat on said valve-chamber and communicating through said valve  
 4 and valve-chamber with the said main siphon.

3. In a tank or cistern, the combination, with the main siphon, of a valve-chamber, a valve-seat, a valve composed of a weight and a facing, a tube passing through the valve, a  
 5 supplemental siphon secured to said tube, and an operating-lever connected to said supplemental siphon.

4. In a tank or cistern, the combination, with the main siphon, of a valve-chamber, a  
 5 valve-seat, a valve composed of a weight and a facing, a flanged tube passing through said valve, an open guide-frame screwed onto the lower end of said tube, a supplemental siphon  
 6 screwed into the upper end of said tube, a guide for said supplemental siphon, and an operating-lever connected to said supplemental siphon.

Signed at New York city, in the county of New York and State of New York, this 2d  
 day of December, A. D. 1891.

JOSEPH HENERY TABELLE.

Witnesses:

WM. BUNTING, Jr.,  
 AMASA T. DAY.