

(No Model.)

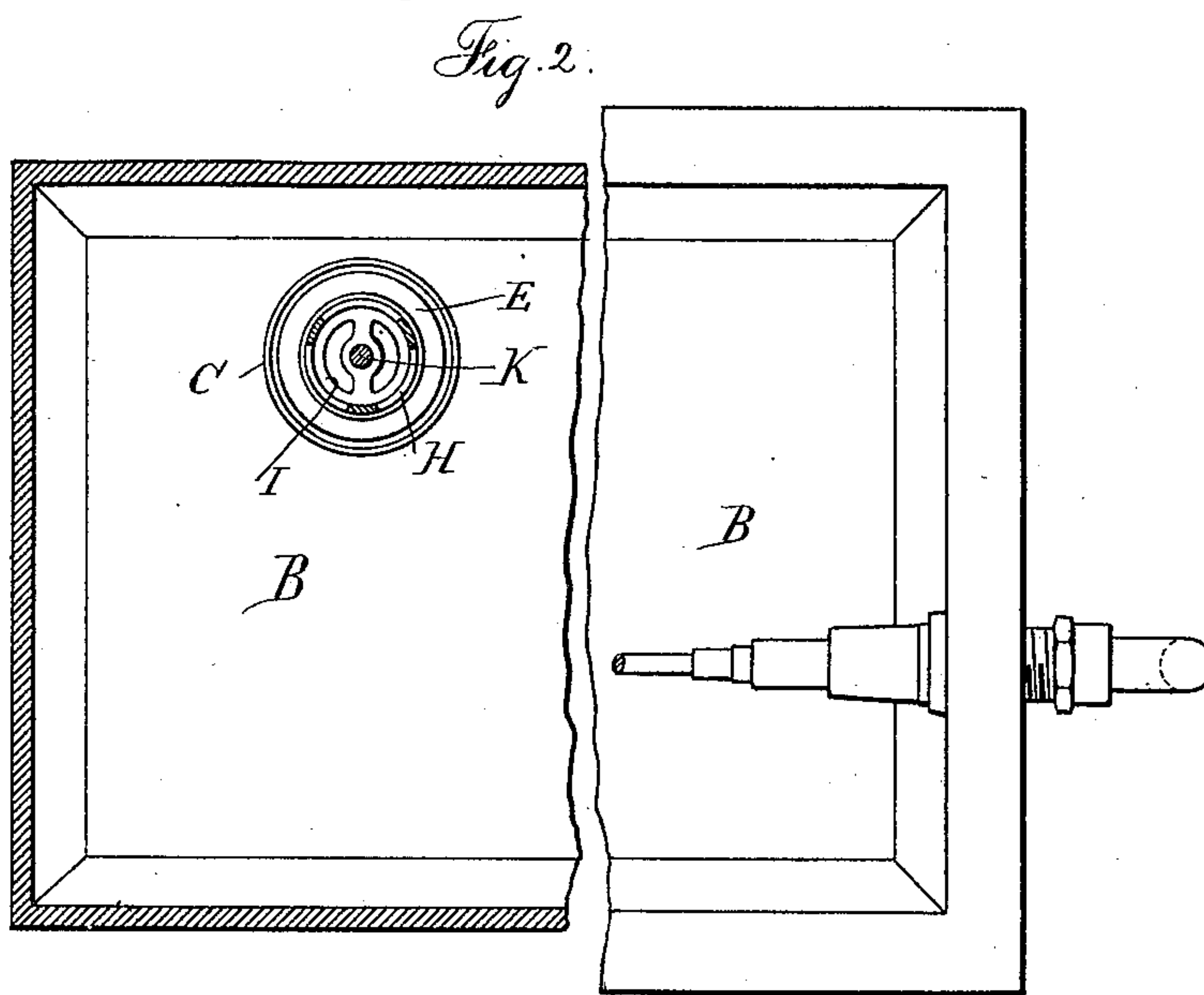
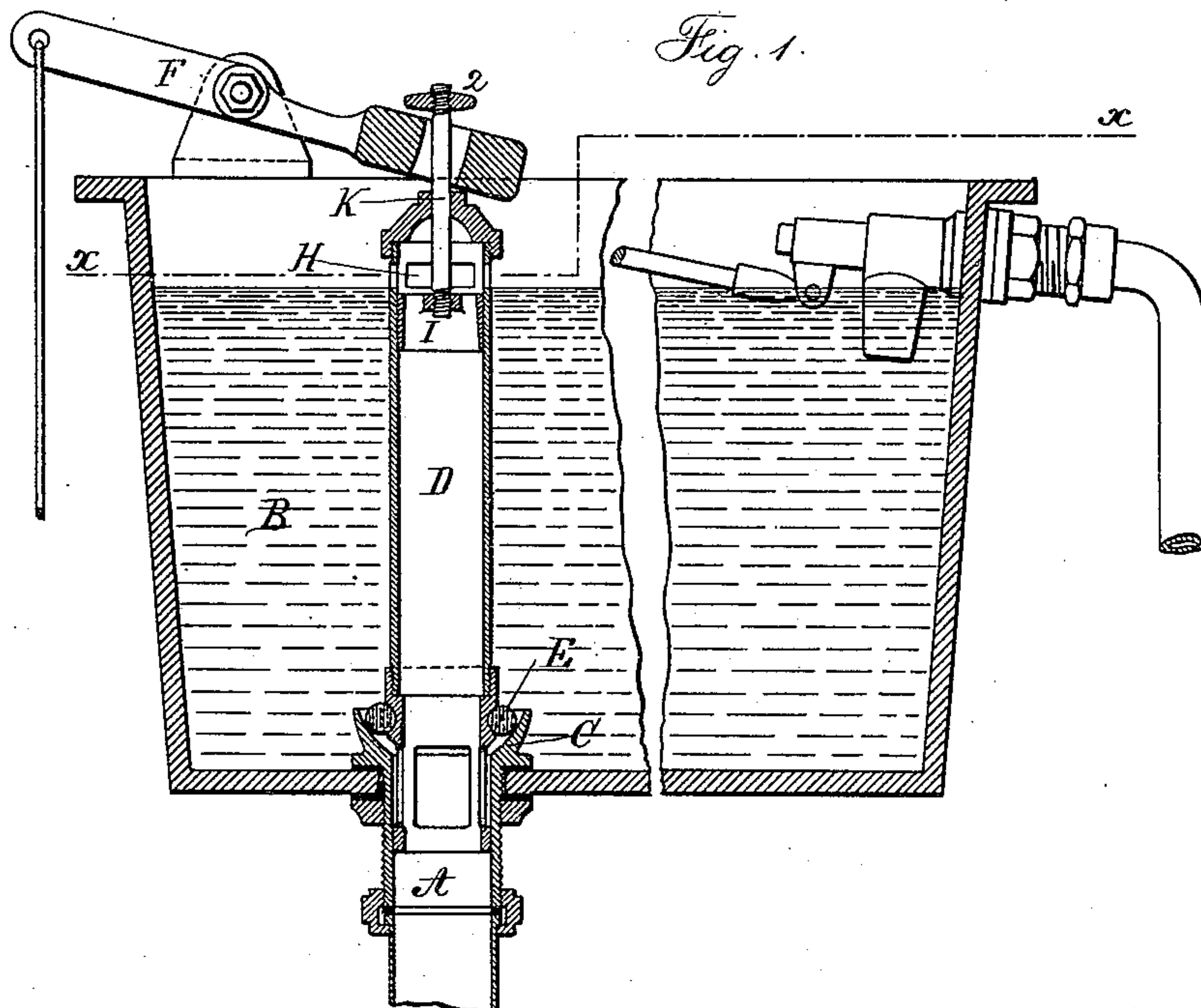
2 Sheets—Sheet 1.

E. HAMMANN.

OVERFLOW PIPE FOR WATER CLOSETS.

No. 354,133.

Patented Dec. 14, 1886.



Witnesses.
J. Stail
Chas H. Smith

Inventor
Edward Hammann
per Lemuel W. Ferrell
Atty.

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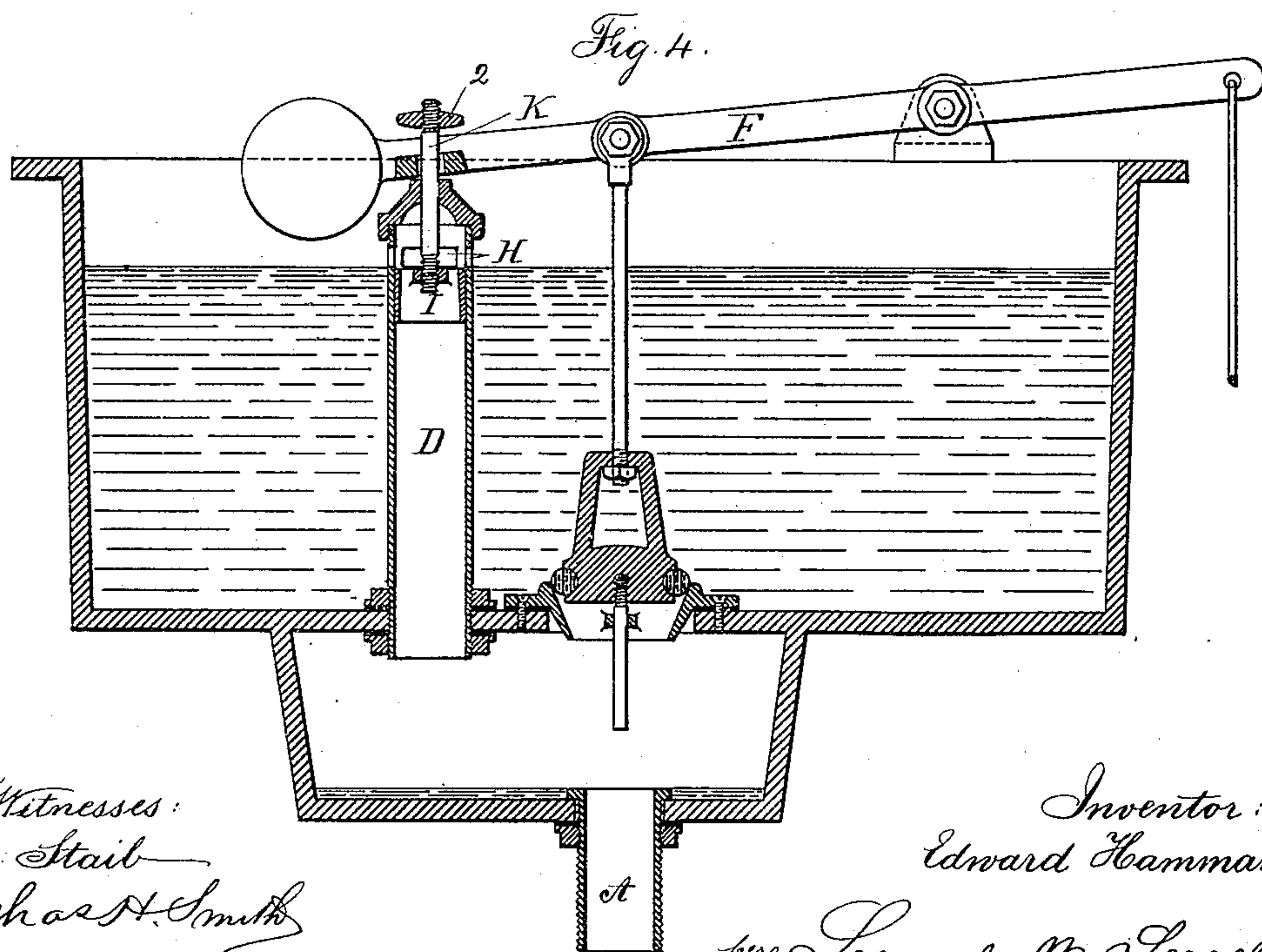
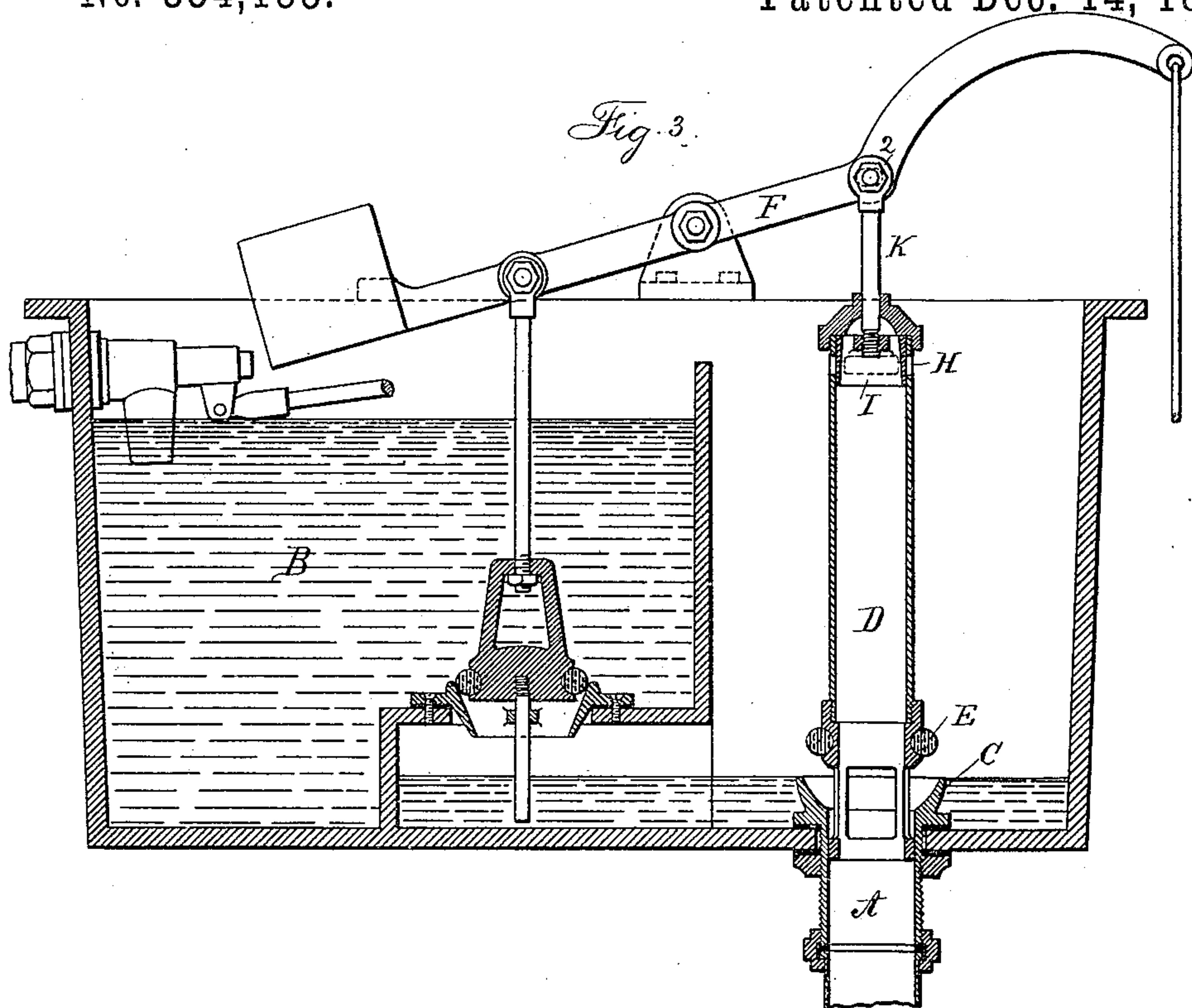
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UNITED STATES PATENT OFFICE.

EDWARD HAMMANN, OF BROOKLYN, ASSIGNOR TO THE J. L. MOTT IRON WORKS, OF NEW YORK, N. Y.

OVERFLOW-PIPE FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 354,133, dated December 14, 1886.

Application filed October 27, 1886. Serial No. 217,310. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HAMMANN, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Overflow-Pipes for Water-Closets, of which the following is a specification.

Water-closet cisterns have been made with an overflow-pipe through which surplus water from the cistern passes to the closet. When the valve is lifted by the pull and the water passes down the flushing-pipe, an objectionable noise is often made by air rushing in at the top of the overflow-pipe, or through the lateral openings into the same. Efforts have been made to remedy this difficulty by means of a float at the upper end of the overflow-pipe, which float is raised by the accumulation of water in the cistern, and the float is provided with a sleeve that acts as a valve to close the overflow-pipe as the water rushes out of the cistern, but such float is liable to be interfered with by oxidation or any foreign substance.

My improvement relates to the combination, with the overflow-pipe and valve in a water-closet cistern, of a tubular valve connected with the lever and closet pull, so that when the lever is moved the tubular valve is acted upon previous to lifting the overflow-pipe and the flushing-valve, whereby the opening at the top of the overflow-pipe is closed at the proper time to prevent the whistling noise by the suction of air into the top of such overflow-pipe; but in the normal conditions the tubular valve of the overflow-pipe is open to allow surplus water to pass freely away from the cistern.

In the drawings, Figure 1 is a vertical section of the overflow-pipe and valve with my improvements as usually applied in a cistern. Fig. 2 is a horizontal plan sectionally at the line xx , and Fig. 3 is a section showing a modification in the arrangement of the parts; and Fig. 4 shows my improvement with a stationary overflow-pipe.

A is the flushing-pipe passing from the cistern B to the water-closet. C is the valve-seat at the upper end of the flushing-pipe A and within the cistern B.

D is the overflow-pipe having around it the valve E; and F is the lever connected to the

closet-pull and acting to lift the overflow-pipe D and valve E when the closet is to be flushed, as usual.

In the upper end of the overflow D are openings at H, and through these openings surplus water will pass should the valve and float fail to close the supply when the cistern is filled to the normal point.

Within the stand-pipe D is a tubular valve, I, connected by the stem K and button L with the operating-lever F, and the length of the stem and the position of the parts is such that when at rest the valve I is below the openings H; but as soon as the closet-lever F is pulled the valve I is first raised and covers or closes the openings H, and the further movement causes the valve I and stem K to lift the overflow-pipe D and valve E and allow the flushing-water to pass to the closet, and the rush of water down the flushing-pipe A will not make any objectionable noise, because the valve I prevents air being drawn rapidly through the openings H, as heretofore; but when the operating-lever F descends the valve E first rests upon its seat, closing the supply and then the valve I descends, uncovering the openings at the upper end of the overflow-pipe D.

By this improvement the valve that opens and closes the air-openings at the upper end of the overflow-pipe D receives a positive motion from the operating-lever F and it is not liable to become obstructed. In some instances the overflow-pipe and valve remain elevated when the closet is not in use. This is the case in that class of cisterns having two compartments, the first or main compartment being supplied with water by a float and cock, and a valve operated by the closet-pull allows water to pass into the second compartment when the lever is operated, and this lever simultaneously allows the valve of the overflow-pipe to descend and rest upon the seat. A cistern of this character will be seen in Letters Patent No. 292,160, granted January 22, 1884.

My improvement is available with overflow-pipes and valves with cisterns of this kind, as shown in Fig. 3, as well as with cisterns having stationary overflow-pipes, in which case the air-valve at the upper end of the overflow-

pipe will be moved simultaneously with the flushing-valve and by the same lever, as indicated in Fig. 4.

I claim as my invention—

- 5 1. The combination, with the overflow-pipe, the valve upon the same, the valve-seat, and flushing-pipe, of a tubular valve at the upper part of the overflow-pipe, a stem to the same, and the operating-lever with which the stem
10 is connected, whereby the tubular valve closes the openings at the top of the overflow-pipe before lifting the flushing-valve, substantially as set forth.

2. The combination, in a water-closet cistern, of a flushing-pipe and valve, a lever for 15 operating the same, an overflow-pipe, a valve for closing the upper end of the overflow-pipe, and a connection from the said valve to the operating-lever, substantially as set forth.

Signed by me this 18th day of October, A. 20 D. 1886.

EDWARD HAMMANN.

Witnesses:

MAX GOEBEL,
R. W. HALLEY.