

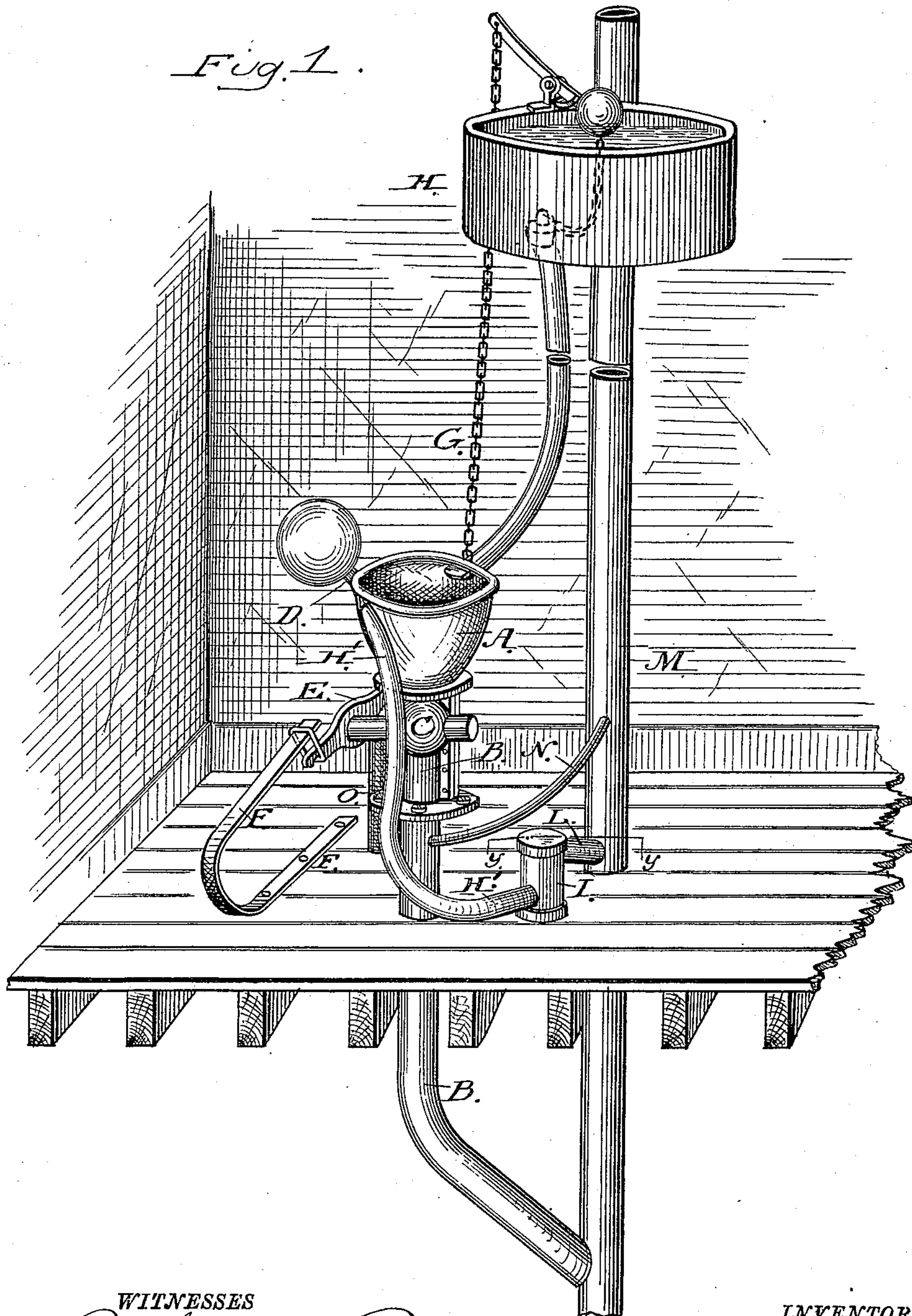
(No Model.)

2 Sheets—Sheet 1.

E. A. STRAAT.
WATER CLOSET VALVE.

No. 326,528.

Patented Sept. 15, 1885.



WITNESSES

T. Walter Fowler,
H. B. Applewhite,

INVENTOR

Earnest A. Straat
Per A. H. Evans & Co.

Attorneys

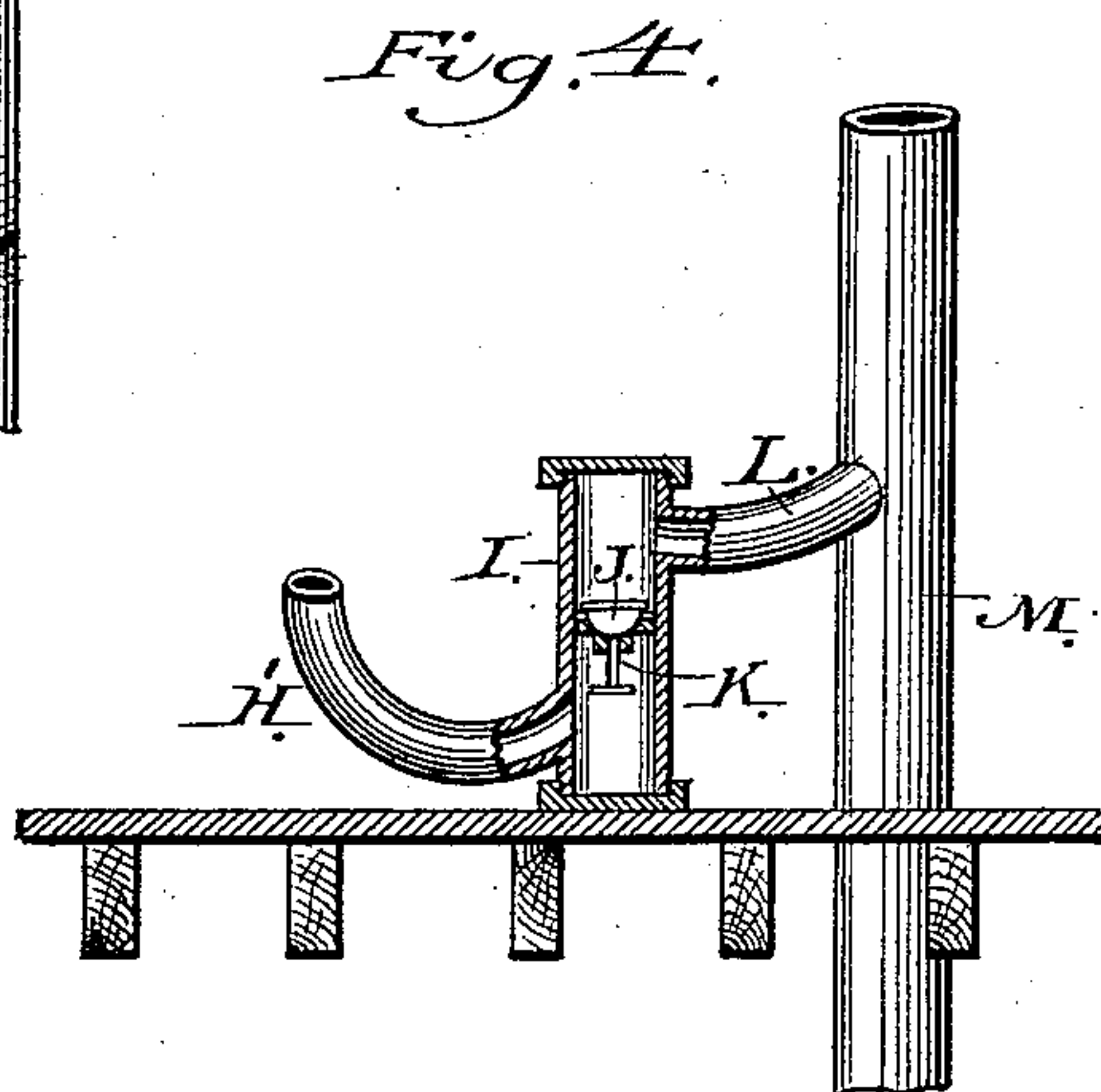
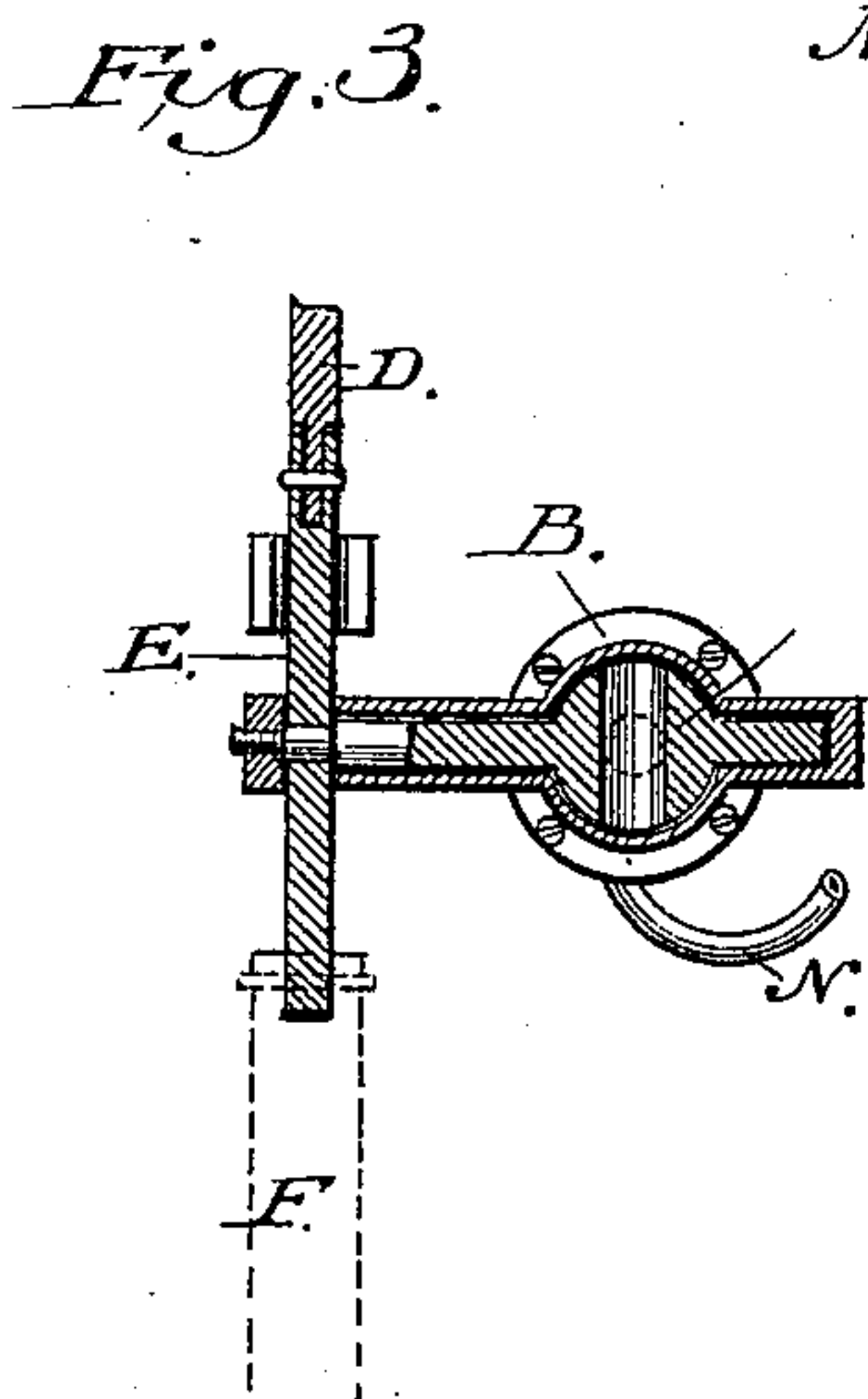
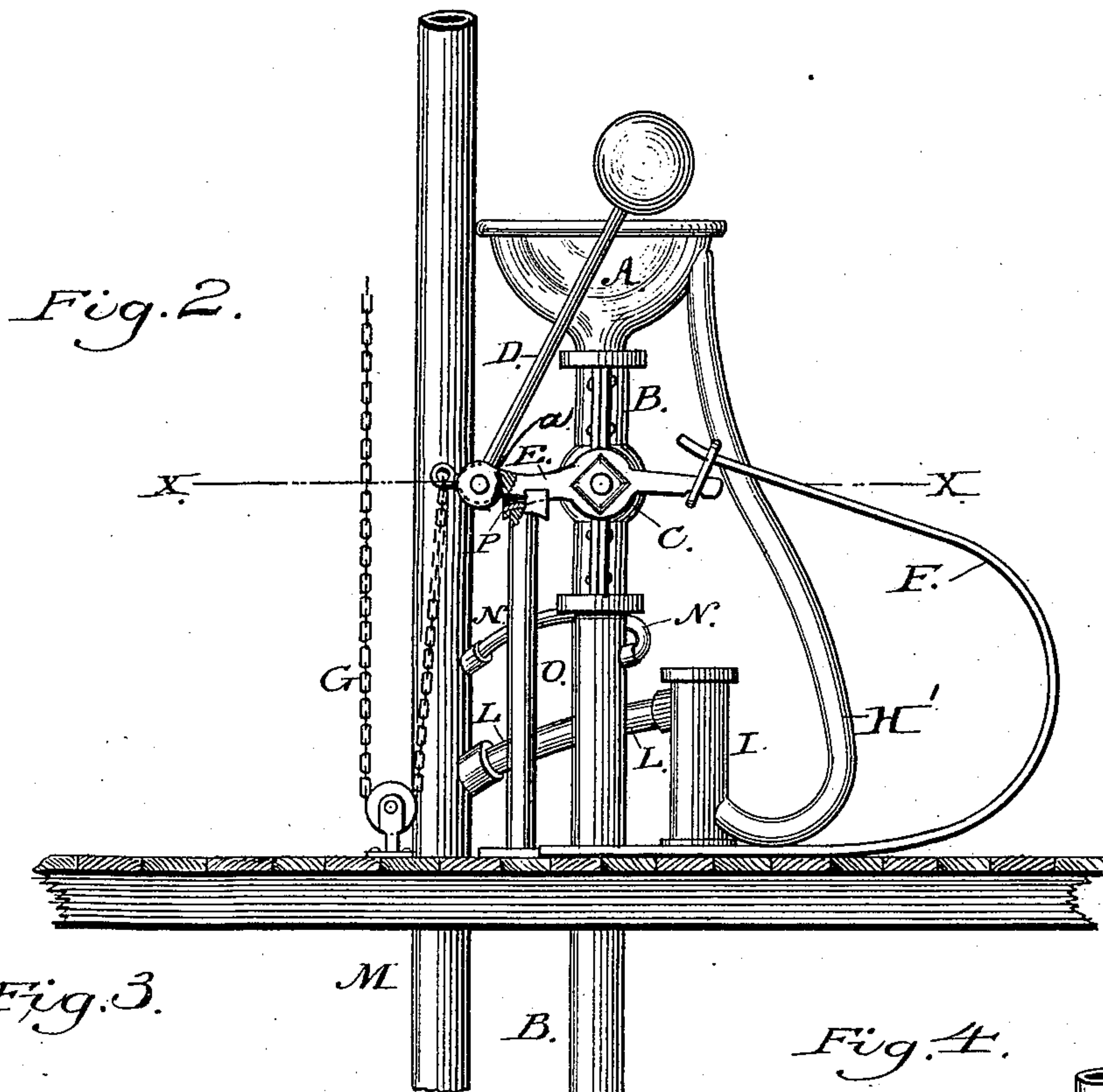
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UNITED STATES PATENT OFFICE.

EARNEST A. STRAAT, OF JERSEY CITY, NEW JERSEY.

WATER-CLOSET VALVE.

SPECIFICATION forming part of Letters Patent No. 326,528, dated September 15, 1885.

Application filed July 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, EARNEST A. STRAAT, a citizen of the United States, residing at Jersey City, in the county of Hudson, State of New Jersey, have invented a new and useful Improvement in Water-Closet Valves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a water-closet seat with my improvements attached. Fig. 2 is a side elevation of the same. Fig. 3 is a horizontal section through xx of Fig. 2. Fig. 4 is a vertical section through yy of Fig. 1.

My invention relates to water-closet apparatus designed for the prevention of any possible escape of sewer-gas, and to secure an automatic action of the overflow and the closing of the discharge-valve; and it consists of the combination of devices hereinafter explained and claimed.

In order to enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents the bowl of the closet with a vertical or downward passage, B, in which I place the cut-off valve C, operated by the lever D, attached to the cross-arm E, said arm having a bearing-surface or fulcrum, a , against which the lever abuts. To the opposite end of the arm E is secured the spring F, which, when the lever-arm is released, automatically closes the valve. By this construction the contents of the bowl fall by gravitation, and instantly the valve is again closed, so as to prevent any possible escape of the sewer-gas.

In the act of opening the valve by pressing down the lever D and raising the rear end of the arm E the chain or cord G is drawn, which opens the valve in the tank H and allows a free flow of water in the bowl during the whole time the cut-off valve is open. It is evident that the same result will be produced by simply raising or pulling up the lever, which in turn would pull the chain G and open the valve in the tank.

From the bowl A passes the overflow-pipe H' to the automatic attachment I, which is constructed with a float-valve, J, having a

guide-rod, K, to keep it in its proper position. When an overflow from the bowl takes place, the water raises the float-valve J until it passes above the opening of the discharge-pipe L, when the water passes into and down the ventilator-pipe M. When the water has been discharged, the float again sinks below the opening in the pipe L, and automatically closes the wasteway.

To guard against the upward pressure of gas below the bowl, I connect the downward passage B, at a point below the cut-off valve C, to the ventilator-pipe M, by means of the pipe N. I thus lead any gas which may collect below the bowl through the ventilator into the open air, and prevent its possible escape into the building.

To avoid possible damage to the arm E when the lever is released and the spring F is allowed its play, I provide the stop O, and cushion it with rubber or other elastic packing P, to reduce the shock produced by the force of the spring F to its minimum.

Having thus explained my invention, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the bowl, the tank, and the valve, of the arm E, having a bearing or fulcrum, a , and a lever, D, pivoted to the end of the arm and bearing against the fulcrum a , said lever extending upwardly and forward, whereby the valve in the tank and the cut-off valve are automatically and simultaneously opened by depressing said lever, substantially as herein described.

2. The bowl, the vertical passage, the cut-off valve, and the arm E, in combination with an upwardly-extending lever, D, pivoted to the arm, and bearing against the fulcrum a on the same, a stop, O, a packing on the stop, a chain, G, connected to the short arm of the lever and to the valve in the tank, whereby when the lever is depressed the valve in the tank is opened and the cut-off valve rotated until its opening comes in line with the passage B, and a spring engaging the arm and closing both valves simultaneously, substantially as herein described.

EARNEST A. STRAAT.

Witnesses:

P. WALTER FOWLER,
H. B. APPLEWHAITE.