(No Model.)

J. LIMING.

FLUSH WATER CLOSET VALVE.

No. 524,176. Patented Aug. 7, 1894.

fig. 1.

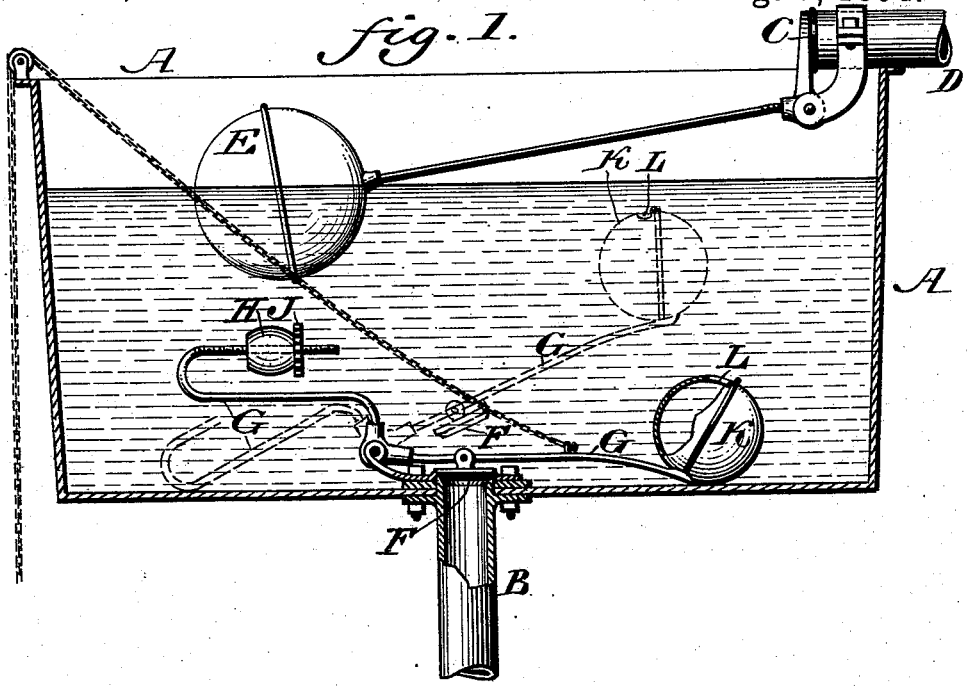
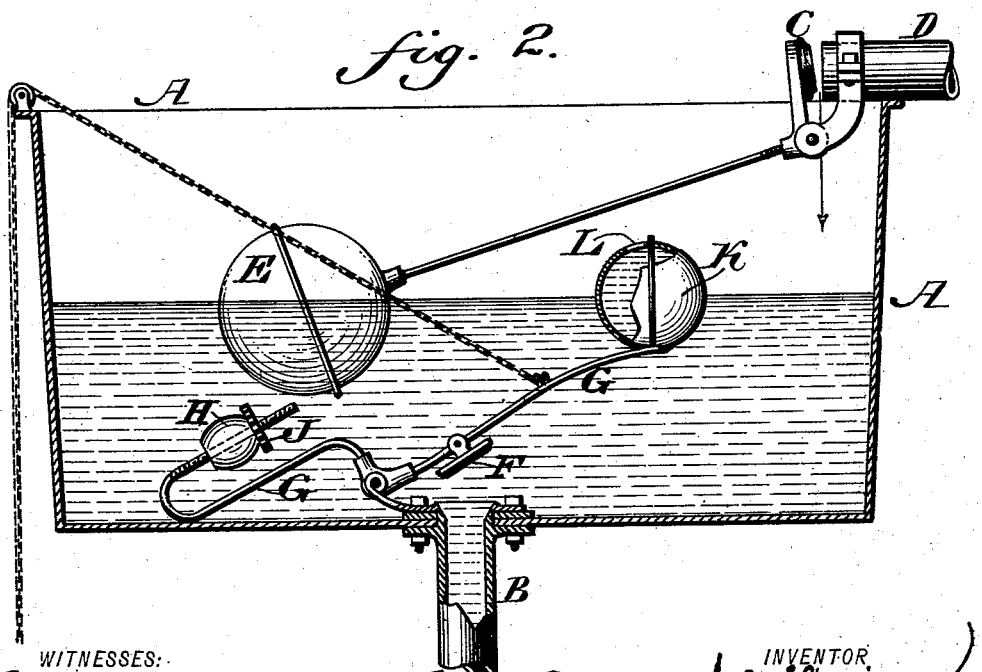


fig. 2.

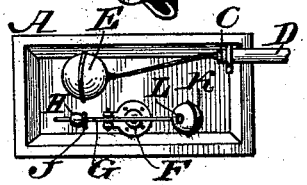


WITNESSES:

L. Douville,

P. F. Eagle.

fig. 3.



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FLUSH WATER-CLOSET VALVE.

SPECIFICATION forming part of Letters Patent No. 524,176, dated August 7, 1894.

Application filed October 24, 1893. Serial No. 489,015. (No model.)

To all whom it may concern:

Be it known that I, JOHN LIMING, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Flush Water-Closet Valves, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of the valve of the flushing tank of a water closet valve having a hollow vessel connected therewith, the same being adapted to be in equilibrium while in the water, so as to permit the valve to remain open while the flushing is mainly accomplished, and then close in a gradual manner as the level of the water lowers, whereby the flushing is effectively accomplished, the construction and operation of the parts of the device being hereinafter set forth.

Figures 1 and 2 represent vertical sections of a flush water closet valve embodying my invention, the valve being respectively closed and open in said figures. Fig. 3 represents a top or plan view on a reduced scale.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates a flush tank for a water closet, and B designates the pipe which leads from the same to the water closet.

C designates the valve of the supply pipe D, which opens into said tank A, the stem of said valve carrying the float E, as usual in such cases.

F designates the valve of the pipe B, and G designates an arm which is connected with said valve on opposite sides of the axis thereof, and has on one limb the adjustable weight H and nut J, and on the other limb the hollow ball or vessel K, in whose wall is an opening L, whereby said vessel may be filled with water, it being seen that when the vessel is submerged in the water of the tank, as it is also filled with water, it will be in equilibrium or become an equipoise. Consequently if it is raised to partial extent within the water, it will remain in the position to which it is placed, as shown by the dotted lines Fig. 1. Consequently when the valve F is opened to flush the closet, the water discharges rapidly from the tank. Then when part of the vessel K becomes uncovered, it will gradually sink with the level of the water and thus close the valve F, about which time the closet has been sufficiently flushed. Meanwhile the valve C has opened, due to the descent of the float E, and the tank is re-supplied.

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

The flush tank A, with the inlet and outlet pipes D and B and float valve C, the arm G, the adjustable weight H on one limb thereof, the vessel K on the other limb thereof, the valve F on said arm intermediate of its limbs, and the lifting chain or cord which is connected with said arm, said parts being combined substantially as described.

JOHN LIMING.

Witnesses:
JOHN A. WIEDERSHEIM,
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