(No Model.)

H. T. BUSH.

SIPHON FOR FLUSHING TANKS.

No. 458,044. Patented Aug. 18, 1891.

Fig. 2

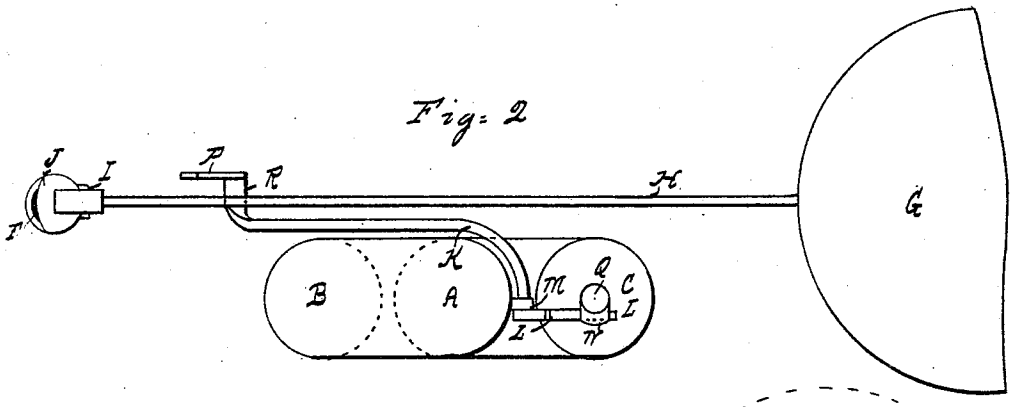
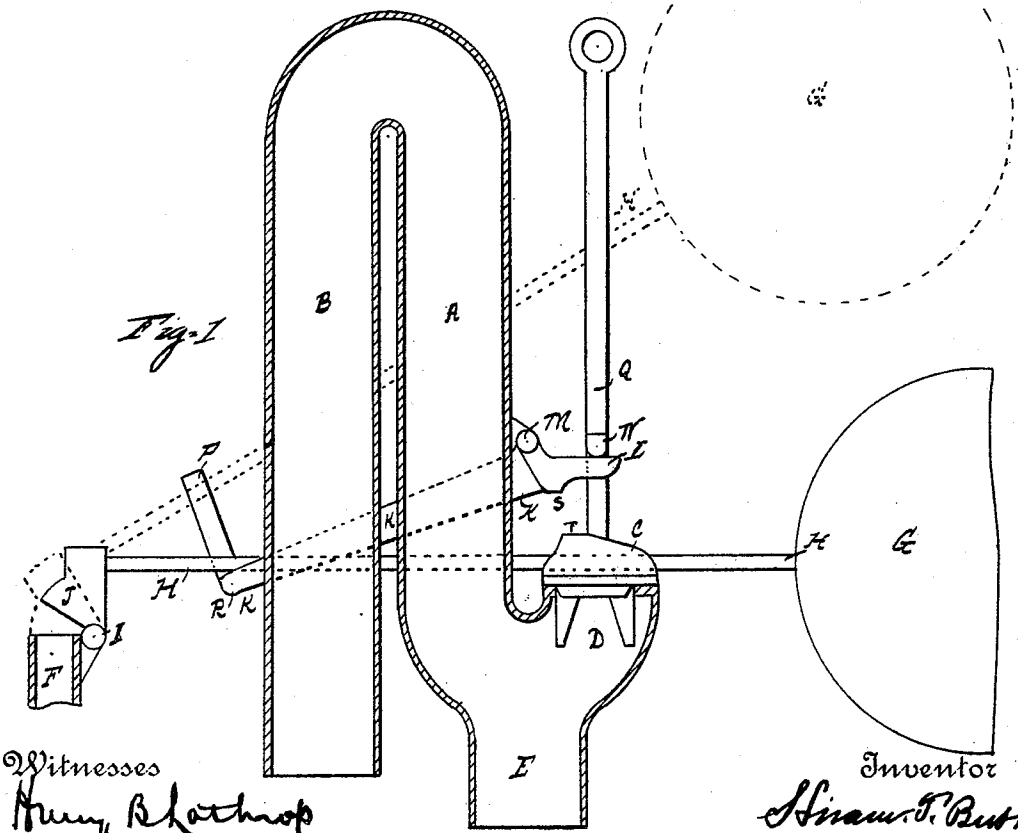


Fig. 1



Witnesses
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HIRAM T. BUSH, OF DETROIT, MICHIGAN, ASSIGNOR TO COPE BROTHERS, OF MICHIGAN.

SIPHON FOR FLUSHING TANKS.

SPECIFICATION forming part of Letters Patent No. 458,044, dated August 18, 1891.

Application filed January 31, 1891. Serial No. 379,835. (No model.)

To all whom it may concern:

Be it known that I, HIRAM T. BUSH, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Siphons for Flushing Tanks, of which the following is a specification.

My invention consists in an improvement in siphons for flushing tanks, hereinafter fully described and claimed.

Figure 1 is a vertical elevation partly in section; and Fig. 2 is a plan view, the tank itself being omitted in both cases.

E represents an outlet-pipe leading through the bottom of the tank, and B and A represent, respectively, the up and down legs of a siphon, the down leg A being a continuation of the pipe E.

D represents an offset in pipe E, the upper end of which is closed by a valve C, adapted to rest on the valve-seat by gravity and provided with a stem Q, in the upper end of which is formed a ring for the attachment of a chain by which the valve may be raised.

K represents a lever pivoted at M to the down leg A of the siphon, a suitable lug or lugs being formed thereon for this purpose, and its short arm L extends into a slot N in valve-stem Q, the parts being so arranged that pressure applied to the long arm R of lever K will raise the short arm L, and thereby unseat valve C.

F, J, and I represent an inlet-supply valve, which may be of any known form of float-valve, being governed by a float G, connected with the valve by a lever H. The lever H of the float-valve extends in a path which intersects the long arm R of lever K, and for the purpose of preventing disengagement of these parts by lateral motion of the float I prefer to turn up the end of the long arm R, as shown at P, to guide the lever H of the float-valve.

T represents a lug on the top of valve C, adapted to strike against the under side S of lever K, and thus limit the upward motion of said valve.

The operation of my invention is as follows: On raising valve-stem Q the valve C is unseated, and water from the tank rushes in through offset D into pipe E. On releasing valve-stem Q the valve C falls to its seat and the water in pipe E establishes the siphon up through leg B and down through leg A. The action of the siphon draws the water out of the tank, and this permits float G to descend from the position shown in dotted lines in Fig. 1, which it occupies when the water stands at its highest level in the tank until it reaches the position shown in full lines in Fig. 1, at which point the lever H is pressing on the long arm of lever K. Up to this point the valve C is still seated; but as the water continues to fall in the tank the weight of lever H and float G presses down the long arm R of lever K and unseats valve C, thus permitting air to enter offset D and break the siphon. As soon as this occurs the siphon ceases to act, water rises in the tank and raises float G, valve C again comes to its seat, and the tank fills to its normal level.

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

1. The combination, with a siphon having its down leg provided with an opening below the normal water-level, of a valve controlling the opening, means for unseating said valve by hand, an inlet-valve, a float-lever connected with the inlet-valve, and a lever having one arm arranged in the path of and depressed by the float-lever and the other arm connected with and serving to temporarily unseat the valve which controls the opening in the down leg of the siphon for breaking the siphon, substantially as described.

2. In combination with a float-valve controlling the supply of water to a tank, a siphon having an opening therein below the normal water-level, a valve controlling said opening, and a lever having one end connected with said valve and having its other arm in the descending path of the float-valve lever and depressed by the descent of the float-lever to temporarily unseat the valve and thereby break the siphon, substantially as shown and described.

HIRAM T. BUSH.

Witnesses:
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