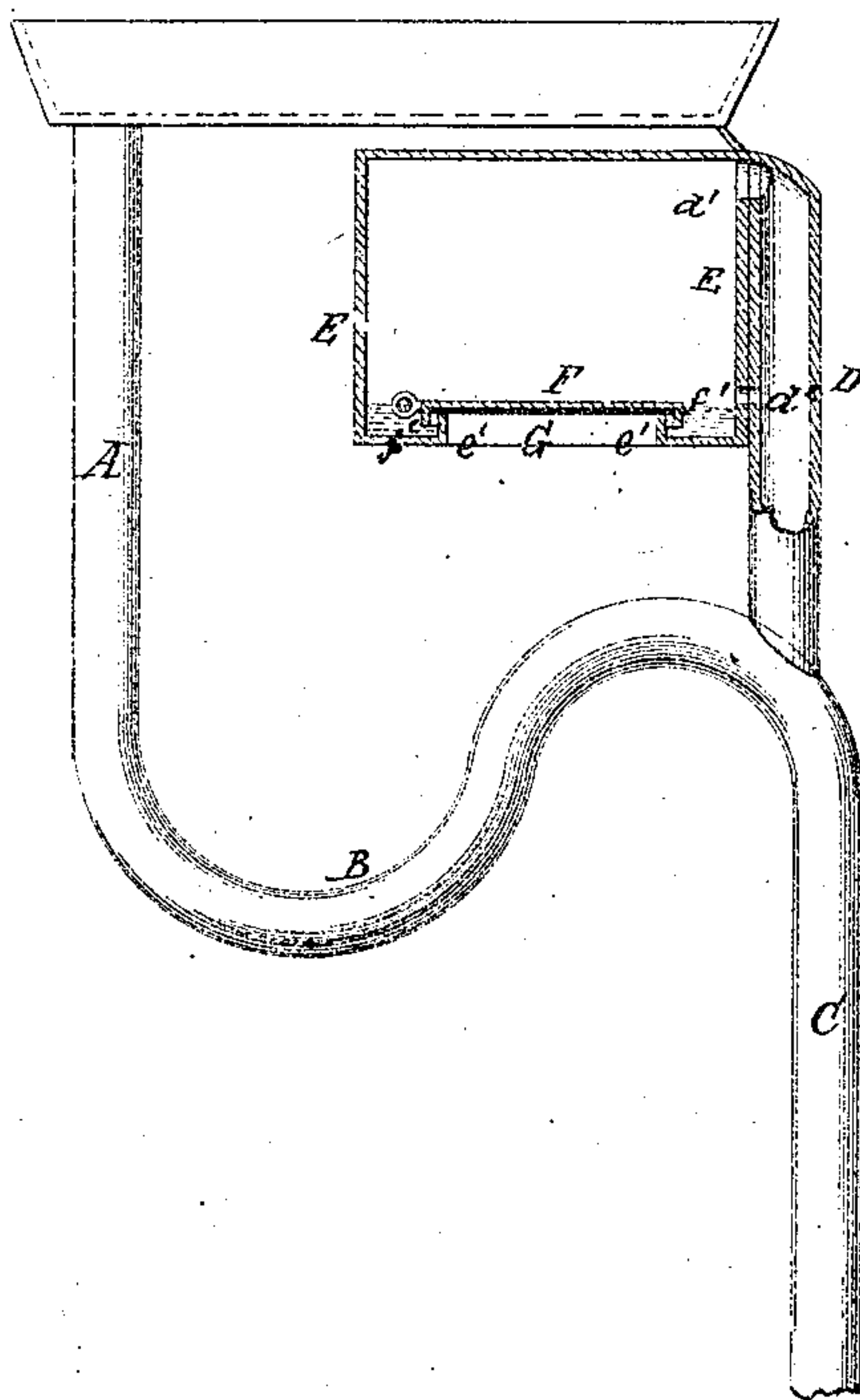


S. Lawrence. Stench Traps.

116967

PATENTED JUL 11 1871



Witnesses:

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SAMUEL LAWRENCE, OF NEW YORK, N. Y.

IMPROVEMENT IN STENCH-TRAPS.

Specification forming part of Letters Patent No. 116,967, dated July 11, 1871.

To all whom it may concern:

Be it known that I, SAMUEL LAWRENCE, of the city, county, and State of New York, have invented a new and useful Improvement in Stench-Traps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which the figure is a side view of a stench-trap to which my improvement has been attached, partly in section, to show the construction.

My invention has for its object to furnish an improved attachment for stench-traps, which shall be so constructed as to prevent the trap from being drawn dry by the siphon action of the discharge-pipe, and which will thus prevent any foul gas or odor from passing back from the discharge-pipe; and it consists in the combination of a valve attachment with the discharge-pipe leading from the stench-trap, as hereinafter more fully described.

A represents the pipe leading from a sink or water-closet. B is the stench-trap, and C is the discharge-pipe. With the upper part of the discharge-pipe C is connected a pipe, D, with which is connected a small valve-chamber, E, which I prefer to make square. In the bottom of the chamber E is formed a square or other shaped hole having an upwardly-projecting flange, *e'*, all around it. F is the valve, which is made a little smaller than the chamber E and a little larger than the hole through the bottom of said chamber E. The valve F is hinged at one edge, and has a flange, *f'*, formed all around its edge projecting downward into the channel or space between the flange *e'* and the sides of the chamber E, which space should be filled with water, thus

forming a water-joint which will effectually prevent any gas or offensive odor from passing up from the discharge-pipe C through the pipe D and escaping through the valve E F. To make the joint still more perfect a rubber plate, G, may be attached to the under side of the valve F to rest upon the upper edge of the flange *e'*. The main passage *d*¹ from the pipe D to the chamber E should lead into the upper part of said chamber E, but there should be another passage, *d*², leading into said pipe D from the lower part of said chamber E, so that, should the water set back from any stoppage of the pipe C or other cause and fill the chamber E, said water will flow off, upon the removal of said stoppage, through the passage *d*². The passage *d*² should be above the lower edge of the flange *f'* and below the upper edge of the flange *e'*, so as not to draw off the water that forms the water-joint.

By this construction, should the flow of water be sufficient to fill the discharge-pipe C and cause it to act as a siphon, the least tendency to a siphon action will cause the pressure of air to raise the valve F and enter the pipe D, effectually preventing any siphon action upon the water in the trap B.

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

The combination of a valve, E *e'* F *f'*, with the discharge-pipe of a stench-trap, substantially as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me this 27th day of May, 1871.

SAMUEL LAWRENCE.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.