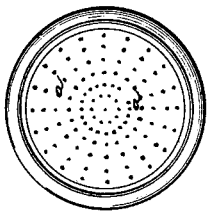
W. SMITH.

EFFLUVIA EJECTOR FOR WATER-CLOSETS.

No. 190,919. Patented May 15, 1877.

Fig. 2.



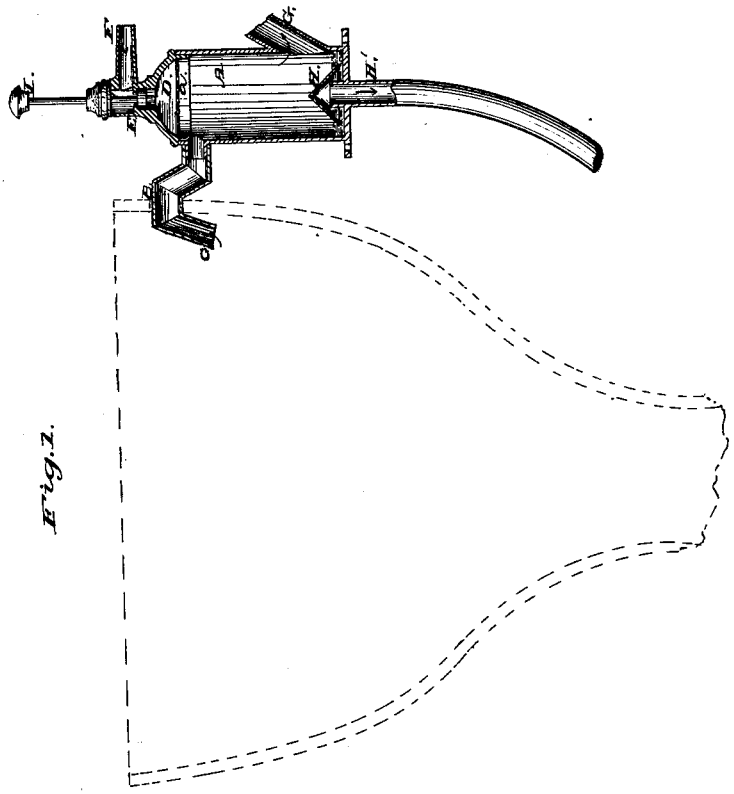


Fig. 1.

Witnesses:

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Inventor:

William Smith

By Wm. Smith Abby.

UNITED STATES PATENT OFFICE.

WILLIAM SMITH, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN EFFLUVIA-EJECTORS FOR WATER-CLOSETS.

Specification forming part of Letters Patent No. **190,919**, dated May 15, 1877; application filed October 20, 1876.

To all whom it may concern:

Be it known that I, WILLIAM SMITH, of San Francisco, in the county of San Francisco and State of California, have invented a certain new and useful Effluvia-Ejector for Water-Closets, of which the following is a description:

My invention relates to an attachment for withdrawing and expelling the effluvia from water-closets when in use, so arranged that the effluvia is sucked or drawn into a receiver and expelled by means of jets of water into an outlet or ventilating chimney.

In order to better understand the nature and object of my invention, reference is made to the accompanying drawings, and to the letters marked thereon, forming a part of the specification, in which a vertical sectional elevation is shown attached to a water-closet in Figure 1, and Fig. 2 shows the perforated diaphram detached.

A represents the receiver, which is located at one side of the water-closet, and may be inclosed to its casing and seat. From near the upper end of the receiver extends a curved angular pipe, B, passing under the seat, and extending into the water-closet basin or hopper. The end of this pipe is provided with a flaring mouth, which forms the suction-inlet C. Just above the entrance of this pipe, where it leads into the receiver, is placed a perforated diaphragm, D, through which the water from the cock or valve E above passes into the receiver below. This cock or valve receives its supply of water from the independent pipe F.

Near the lower end of the receiver is placed an outlet-chimney or ventilator, G, through which the effluvia passes as it is forced down by the small jets of water.

In the bottom of the receiver is formed a trap, H, the outlet of which connects with a waste pipe or conduit, H′, which leads into the trap of the water-closet, and thus prevents any effluvia from being received from that source, and also affords an exit for the water passing into the receiver through the perforated diaphragm.

Its operation will be as follows: The piston or plunger I, being operated, admits water from the supply-pipe F into the chamber below the cock or valve, which passes through the perforations or holes *a* of the diaphragm into the receiver in fine jets or spray, which creates a vacuum and sucks the foul air or effluvia from the water closet or bowl, which causes it to rush in through the pipe B to the receiver, when it is forced out into the discharging-chimney or ventilator G. By this means the disagreeable odor so incident to the use of the water-closet is avoided.

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

1. In combination with a water-closet, the receiver A, provided with a perforated diaphragm, D, so that water can be received through a cock or valve into the body of the receiver, and create a vacuum to draw the effluvia or foul air into, and eject or force it out of, the receiver, substantially in the manner as herein set forth and specified.

2. The receiver A, provided with a cock or valve, E, perforated diaphragm D, inlet and outlet air and water pipes H′ F G B, when constructed and operating substantially in the manner and for the purpose herein set forth and specified.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 6th day of October, 1876.

WM. SMITH. [L. S.]

Witnesses:
C. W. M. SMITH,
PHILIP MAHLER.