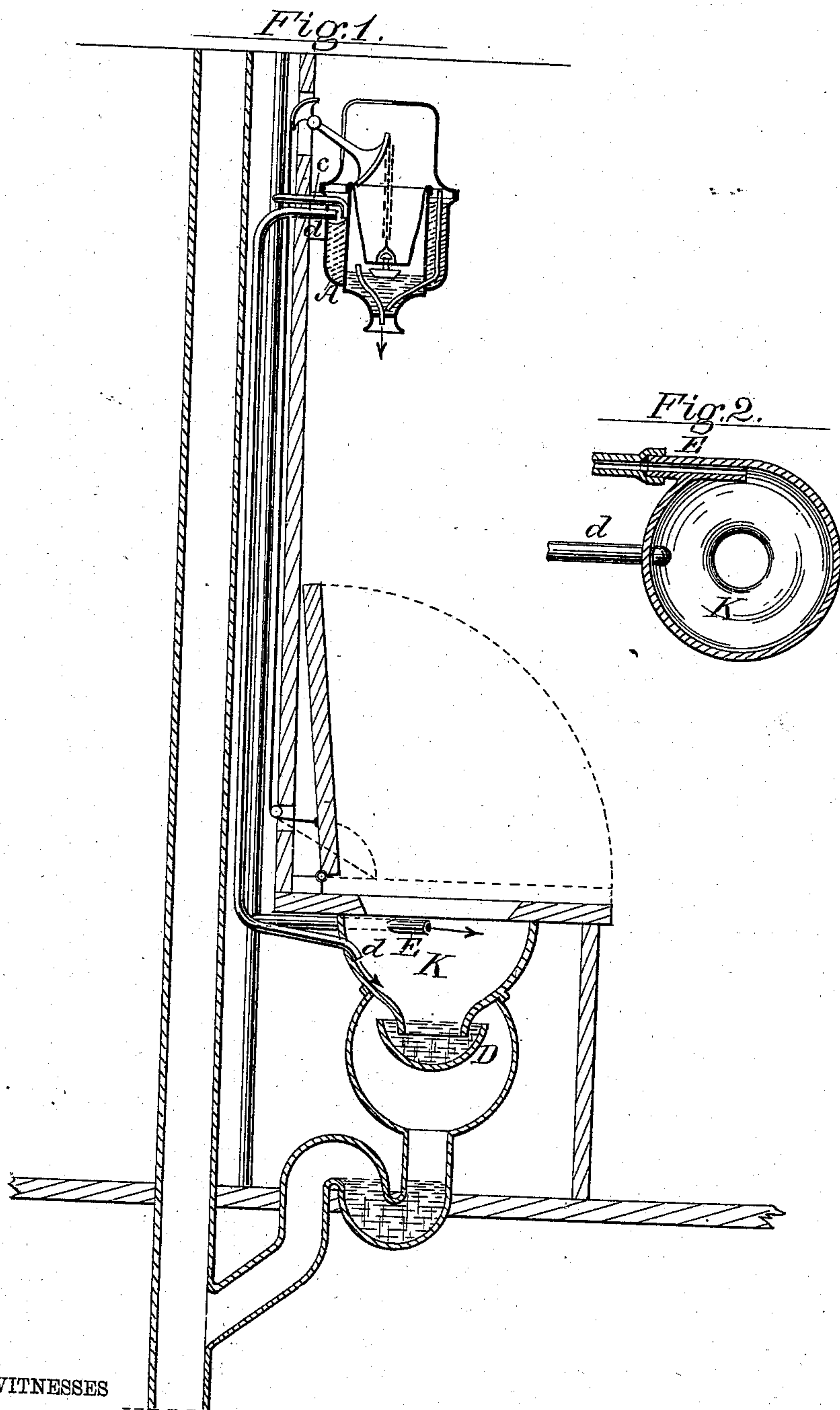


E. J. MALLET, Jr.  
 Disinfecting Apparatus for Water-Closets, &c.  
 No. 224,553.      Patented Feb. 17, 1880.



WITNESSES

*George*  
*E. A. Sick*

INVENTOR

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*by W. Bailey*  
 his ATTORNEY



# UNITED STATES PATENT OFFICE.

EDWARD J. MALLETT, JR., OF NEW YORK, N. Y.

## DISINFECTING APPARATUS FOR WATER-CLOSETS, &c.

SPECIFICATION forming part of Letters Patent No. 224,553, dated February 17, 1880.

Application filed January 10, 1880.

*To all whom it may concern :*

Be it known that I, EDWARD J. MALLETT, Jr., of the city, county, and State of New York, have invented a certain new and useful Improvement in Disinfecting Apparatus for Water-Closets and the like, of which the following is a specification.

My invention is applicable to water-closets and the like—such, for instance, as urinals, sinks, &c. Its object is to furnish to the appropriate part of the closet a supply of disinfecting-liquid, which shall be continuous and unceasing, maintaining at all times a continuous flow of the disinfectant through the closet independent of and unaffected by the means employed to flush and cleanse out the closet. To this end I combine with the closet and the ordinary means for furnishing water-supply for flushing purposes a duct or pipe communicating with a source of disinfecting-liquid supply, and adapted and arranged to operate at all times to deliver a continuous supply of disinfecting-liquid to the vault-bowl, pan, trap, soil-pipe, or other appropriate part of the closet, which shall be wholly independent of and unaffected by the ordinary flushing-water.

The nature of my invention, and the manner in which the same is or may be carried into effect, will be understood by reference to the accompanying drawings, in which—

Figure 1 is a sectional view of a water-closet and disinfecting apparatus combined in accordance with my invention. Fig. 2 is a horizontal section of the closet-bowl.

I have shown in the drawings a water-closet provided not only with my present improvement, but also with the "aerial disinfecter," so called, shown and described in my Letters Patent No. 222,519, dated December 9, 1879, which requires no further description here.

The apparatus for supplying the disinfecting-liquid is similar in construction to that set forth in my aforesaid Letters Patent, consisting of a vessel, A, containing a disinfecting material—*e. g.*, chloride of zinc—and provided with two pipes, *c d*, the upper one, *c*, connected with a water-service pipe or tank or other source, whence it may draw a continuous supply of water, which through this pipe constantly drips or flows into the vessel A, and the lower one, *d*, leading from the vessel A into the bowl K

of the closet, so that the liquid charged with disinfecting material, as it reaches the level of pipe *d*, will overflow and pass therethrough to the closet-bowl, which will thus constantly and at all times be furnished with a constant supply of disinfecting-liquid, which will thus be always on hand at the proper place to meet and neutralize and stamp out any and all gases that may be from time to time generated in the closet or enter therein from the sewer.

The closet is provided with the usual pan D and flushing-pipe E, through which water is admitted into the closet-bowl in any ordinary or suitable way, after the closet may have been used, in order to flush the closet and carry off the contents of the bowl. The flushing-water supply, however, is entirely separate and distinct from the disinfecting-liquid supply, the latter being independent of and unaffected by the water-supply for flushing purposes, or of the means for regulating the same, a continuous flow of the disinfecting-liquid being maintained whether the flushing-water be turned on or off. The disinfecting-liquid pipe or duct may be connected with the bowl K, as shown, or with the soil-pipe, trap, or other appropriate part of the closet—as, for instance, it may lead into the flushing-pipe E, provided, always, that the point at which it enters said pipe shall be between the bowl and the valve, by the movement of which flushing-water is admitted into or shut off from the bowl.

I remark that instead of one pipe, *d*, I can use two or more of said pipes, so that in event of one becoming stopped or clogged up there will always be another to furnish the requisite supply of disinfecting-liquid.

I also remark that the arrangement of a disinfecting-liquid supply system of pipes independent of the ordinary flushing-water system permits me to supply the disinfecting-liquid in any way and quantity, and either continuously or intermittently, as desired—as, for instance, I might, by the use of known automatically-acting valve arrangements, have an intermittent flow, the liquid running intermittently or at stated intervals—say of a minute, or more or less—independent of the use of the closet.

Having described my improvement, what I claim, and desire to secure by Letters Patent, is—



1. The combination, with a water-closet or the like and the usual flushing-water pipe or duct, of a distinct and separate pipe or duct leading from a vessel or other source from which disinfecting-liquid is continuously supplied to said pipe, to the bowl, or other appropriate part of said closet, and operating at all times to deliver to the closet a continuous supply of disinfecting-liquid independent of and unaffected by the ordinary water supplied through the flushing-pipe for flushing purposes.

2. The combination, substantially as set forth, with a water-closet or the like, of a

flushing-pipe and a distinct and separate duct connected with a source of disinfecting-liquid supply, and adapted and operating to supply said liquid to the appropriate part of the closet continuously or otherwise, as specified, independently of and unaffected by the flushing-water supply.

In testimony whereof I have hereunto set my hand this 9th day of January, 1880.

E. J. MALLETT, JR.

Witnesses:

CASPER L. COHN,  
E. A. DICK.