

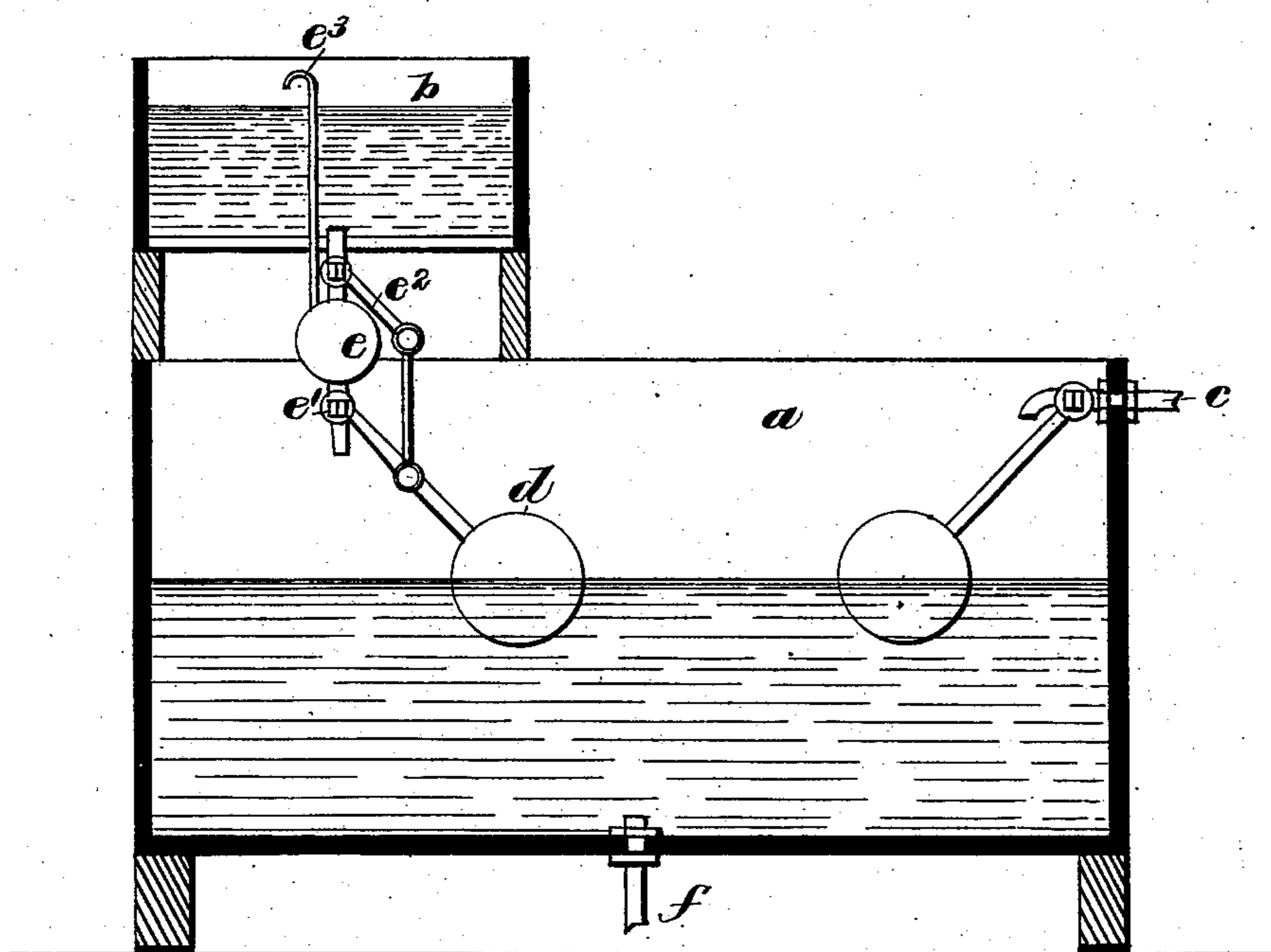
(No Model.)

G. NOBES.

DEODORIZING AND DISINFECTING APPARATUS.

No. 294,327.

Patented Feb. 26, 1884.



Witnesses:

Chas. J. Hyer.

Vinton Coombs

Inventor:

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By James L. Norris

Atty.

# UNITED STATES PATENT OFFICE.

GEORGE NOBES, OF 27 DUDLEY GROVE, HARROW ROAD, COUNTY OF MIDDLESEX, ASSIGNOR TO JOHN WILLIAM RAIMES, OF ACASTER MALBIS, ENGLAND.

## DEODORIZING AND DISINFECTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 294,327, dated February 26, 1884.

Application filed April 20, 1883. (No model.) Patented in England August 30, 1882, No. 4,138.

*To all whom it may concern:*

Be it known that I, GEORGE NOBES, a subject of the Queen of Great Britain, residing at 27 Dudley Grove, Harrow Road, in the county of Middlesex, England, have invented certain new and useful Improvements in Deodorizing and Disinfecting Apparatus, (for which I have obtained a patent in Great Britain, No. 4,138, bearing date August 30, 1882,) of which the following is a specification.

This invention relates to improvements in apparatus for deodorizing and disinfecting cisterns, water-closets, urinals, drains, and sinks, and has for its object to provide novel and efficient means for injecting a regulated or determined quantity of disinfecting fluid each time the closet, urinal, or other device is used.

To this end the invention consists in the novel construction and combination of devices hereinafter described and claimed, reference being had to the accompanying drawing, in which the figure is a vertical sectional view of an apparatus embodying my invention.

Referring to the drawing, *a* indicates the water-cistern; *b*, a smaller cistern for containing the disinfecting-fluid; *c*, a water-supply pipe entering the water-cistern, and controlled by a valve and a ball, as usual, for regulating the admission of water to the cistern; *d*, an additional ball for controlling the admission of a certain quantity of disinfecting-fluid from the cistern *b* to the water-cistern *a*; *e*, a hollow holder or vessel, which receives and holds a definite quantity of disinfecting-fluid. This holder is provided on opposite sides, respectively, with cocks or valves *e'* *e''*, which are connected by rods with the ball *d*, so that by the rising and falling movements of the latter the valves are operated. When the valve *e'* is closed or turned off, the valve *e''* is opened or turned on and the holder is filled with disinfecting-fluid from the cistern *b*, the air from the holder escaping through the medium of a small air or vent tube or pipe, *e'''*. When the water-cistern is filled through the supply-pipe *c*, the ball *d* rises, thus closing the valve *e''* and opening the valve *e'*, thus permitting the definite quantity of disinfecting-fluid in the holder *e* to discharge into the water-cistern, the disinfecting-fluid being of such strength as to charge the water and make it a disinfectant.

The pipe *f*, leading from the cistern *a*, is to connect with the closet, urinal, or other place to be deodorized or disinfected, and the discharge of the fluid from the cistern *a* will be controlled by a valve connected with suitable mechanism, whereby each time the closet or other device is used the quantity of disinfecting-fluid in the cistern *a* can be discharged through the pipe *f* to the place to be disinfected.

The means for discharging the contents of the cistern may be of any usual construction, and, as it constitutes no part of the present claims, I do not deem it essential to further illustrate the same.

Having thus described my invention, what I claim is—

1. The combination of a cistern for containing a fluid disinfectant, a cistern for containing a supply of water, means for automatically maintaining a supply of water in the latter, a disinfectant-holder arranged between the two cisterns, and connected with the cistern containing the fluid disinfectant and discharging directly into the water-supply cistern, a vent to the holder, two cocks arranged, respectively, on opposite sides of the holder, and means for operating the valves by the rise and fall of the water-level in the water-supply cistern, the falling of the water-level opening the cock between the holder and the fluid-disinfectant cistern, and the rising of the water-level closing said cock and opening the other cock to discharge the contents of the holder into the water-supply cistern to charge the water therein with the disinfectant-fluid.

2. The combination of the water-supply cistern *a*, a supply-pipe, *c*, therefor, the fluid-disinfectant cistern *b*, the holder *e*, connected with the said cisterns, connected valves arranged on opposite sides of the holder, and a ball in the water-supply cistern, raised and lowered by the change of water-level in the water-supply cistern to control the two connected valves, substantially as described.

In testimony whereof I have hereto set my hand this 6th day of April, 1883.

GEORGE NOBES.

Witnesses:

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Both of Quality Court, London.