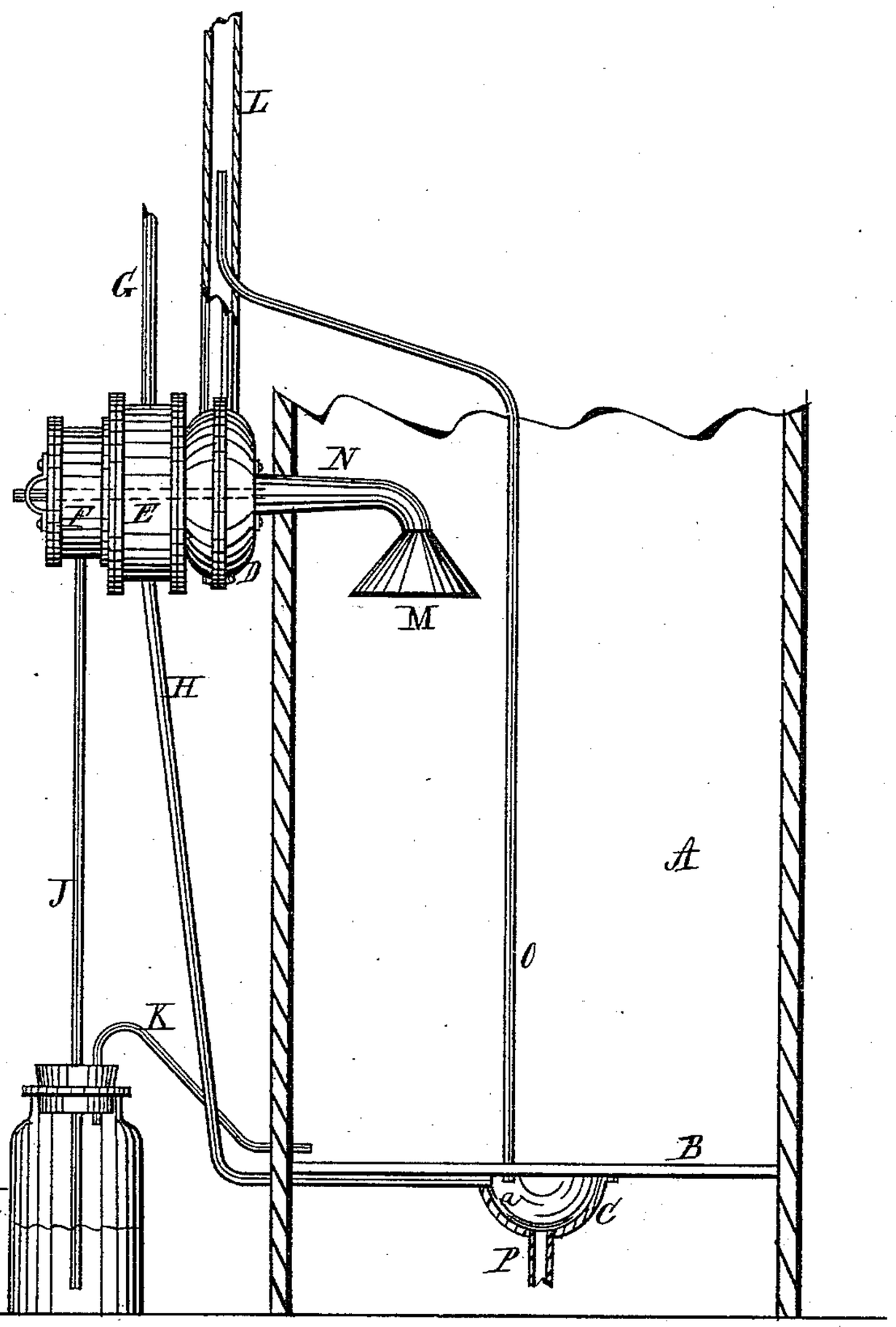
(No Model.)

K. E. KRITCH.

WATER CLOSET APPARATUS.

No. 277,293. Patented May 8, 1883.



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UNITED STATES PATENT OFFICE.

KARL E. KRITCH, OF CLEVELAND, OHIO.

WATER-CLOSET APPARATUS.

SPECIFICATION forming part of Letters Patent No. 277,293, dated May 8, 1883.

Application filed December 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, KARL E. KRITCH, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Water-Closet Apparatus; and I do hereby declare that the following is a full, clear, and complete description thereof.

The purpose of this invention is to deodorize water-closets, impure cellars, foul vaults, sewers, &c., by impelling therein a disinfectant-gas by means of an air-pump, and removing the foul gases therefrom by an induced current of air, using for that object a rotary fan or blower, which, together with the air-pump above alluded to, is operated by a water-wheel driven by the water from a hydrant or from other available source, all of which is fully described in the following specification and illustrated in the accompanying drawing, making a part of the same.

The figure is a side elevation, partly in section, of the device.

Water-closets of hotels, boarding-houses, manufactories, official buildings, &c., are pervaded more or less with unwholesome gases, to dispose of which water is freely used and disinfectant agents of various kinds, and by various means, which in many cases fail to effect, or imperfectly, the end desired. That this may be more fully accomplished is the special object of this invention, as herein described and illustrated.

In the drawing, A represents an interior view of a water-closet, B the seat, and C the bowl, all of which may be like those of the ordinary construction. On the outside of the closet, in any convenient place, or within, if the room will admit of it, is placed a rotary fan or blower, D, arranged in connection with a water-wheel, E. Connected with said wheel is a rotary air-pump, F. The fan of the blower and the arms of the rotary pump are on the shaft of the water-wheel, and are driven thereby, for purposes presently shown.

The water-wheel above alluded to is preferably a small overshot wheel, taking water through the induction-pipe G and discharging the waste water through the eduction-pipe H. Said water-wheel is a too well-known motor to need a detailed description thereof in this place. Hence it is omitted. The rotary blower and the pump are also well-known devices, being constructed substantially like those in ordinary use. Therefore a description of the same is not required for a proper understanding of the invention.

The waste-pipe H above referred to extends from the wheel to the bowl C, into which it discharges the waste-water for cleansing said bowl.

I is a vessel containing some disinfectant liquid agent. The vessel is put in communication with the air-pump F by the pipe J. Said pipe enters the vessel and descends therein near to the bottom, as seen in the drawings. The vessel is put in open communication with the room or closet A by a pipe, K, the outlet of the vessel.

L is the outlet air-pipe of the blower, the inlet of air being in through the side in the usual way, passing therein through the funnel-shaped mouth M of the pipe N, extending from the side of the blower into the water-closet, and terminating in or near the ceiling.

From the bowl G above referred to extends a pipe, O, to the outlet-pipe of the blower, into which it passes and turns upward therein, as seen at L.

Practically the operation of the above-described devices for the purpose specified is as follows: The water-wheel, as above said, is driven by water passing therein through the pipe G and discharged into the bowl C at *a*, thereby washing out the offensive matter that may be therein through the discharge-pipe P and cleansing the bowl. During the operation of the water-wheel the air-pump F forces a current of air into the vessel I, wherein it becomes charged with the disinfectant it contains, and escapes therefrom into the closet through the pipe K. The antiseptic property of the air driven into the closet or room deodorizes the air therein, which is educted from the room by the action of the blower, which draws the air therefrom through the pipe N and discharges it to the outside of the building through the pipe L, above alluded to. This induced outward current of air from the closet takes with it all the foul gases, leaving the room or closet free of offensive smells and purified by the air from the vessel, which, if desired, may be charged with some innocuous and pleasant odor. The effluvia that may arise from the bowl is partly carried directly

therefrom by the pipe O, through which it ascends into the eduction-pipe of the blower, drawn therein by the induced outward current caused by the blower as aforesaid.

From the above it will be obvious that water-closets or other place or places can be kept perfectly free from unsavory smells and noxious gases, and rendered harmless to health and inoffensive. The apparatus may be so operated as to either force or draw off the impure and offensive gases.

As hereinbefore said, it is not essential that the several devices above described should hold the same position in relation to each other and to the place to which they are applied as shown in the drawing; but such other conditions and relations may be adopted as circumstances may require without changing the nature of the invention.

I am aware that water-wheels and rotary fans and blowers are not new devices, and that air-pumps are in common use; and I am also aware that disinfectant agents have been and still are used for renovating purposes. Hence I do not claim, separately, the above specified devices; but

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

For the disinfection of water-closets and other analogous uses, the combination and cooperation of the water-wheel E, blower, air-pump, and vessel charged with an antiseptic agent, with their respective pipe-connections, arranged in relation to each other substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

KARL E. KRITCH.

Witnesses:
W. H. BURRIDGE,
J. H. BURRIDGE.