(No Model.)

G. M. SHERMAN.

VAPORIZER.

No. 366,693. Patented July 19, 1887.

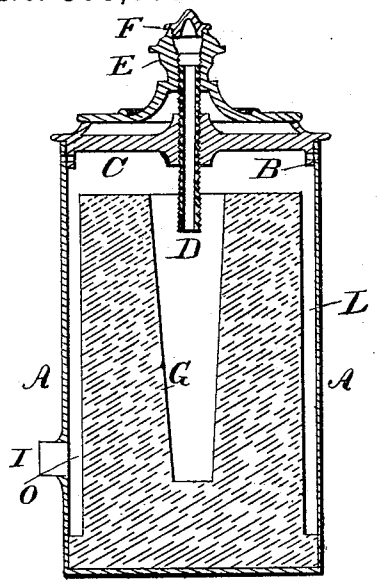


Fig. 1.

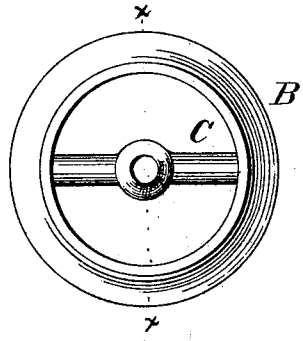


Fig. 2.

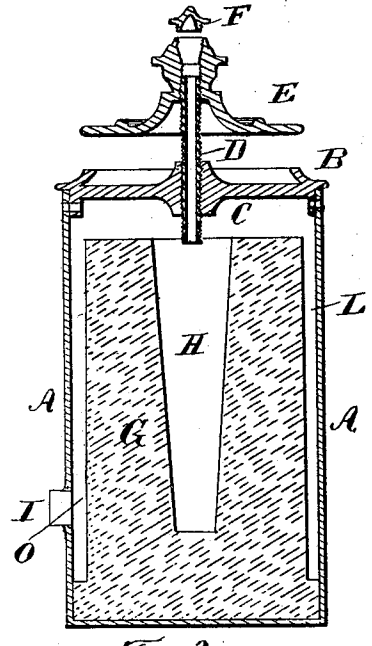


Fig. 3.



Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

GARDNER M. SHERMAN, OF SPRINGFIELD, MASSACHUSETTS.

VAPORIZER.

SPECIFICATION forming part of Letters Patent No. 366,693, dated July 19, 1887.

Application filed October 13, 1886. Serial No. 216,175. (No model.)

To all whom it may concern:

Be it known that I, GARDNER M. SHERMAN, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Deodorizing Evaporators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to deodorizing or disinfecting vessels in which a chemical fluid is placed, and from which the vapors of evaporation are allowed to escape into the room, sewer, or other locality to be disinfected.

Figure 1 is a vertical central section of the vaporizing or evaporating vessel. Fig. 2 is a plan or top view of the head of the retaining-jar. Fig. 3 is a section similar to Fig. 1 with the cover and tip-stopper of the jar lifted. Fig. 4 is a cross-section of Fig. 2 on line *x x*.

A in the drawings represents a tin or other metallic can, or a jar of glass or earthenware, having a head, B, which is provided with a cross-bar, C. The cross-bar C supports a hollow spindle, D, which is screw-threaded externally and works in a thread in the bar C.

The spindle D is screwed or otherwise attached to cover E, so that the rotation of the cover will cause it to be lifted from the rim of the head B, as shown in Fig. 3.

The tip-stopper F has its seat in the cover E, and is held there by a screw-thread or in other suitable manner. When this stopper is closed, the passage-way through the spindle D is stopped.

G indicates a porous cup of plaster, having a base-rim, K, which rim fits closely within the cup A. This leaves an annular recess, L, between the can or jar and the porous cup G.

The cavity H in the porous cup G may be filled with a carbolic solution, or any other similar chemical in liquid form which is used as a disinfectant. This fluid will slowly percolate through the plaster cup, and the gases of evaporation will rise from the exterior of the cup in the annular space L. When the cover is tightly screwed down, the gas cannot escape; but when the cover is slightly lifted on the spindle D an opening is formed all around the edge of the cover, from which opening the gas may escape into the room.

If it is desired to accelerate the rate of evaporation, the plug I may be removed from opening O in the side of the can or jar A, and the upward draft caused by the rising of the fumes or vapors of evaporation will much accelerate the rapidity of such evaporation.

When but a slight escape of the disinfecting-fumes is desired, the cover E may be tightly closed and the stopper F removed, when the escape of gas or vapor will be only through the tubular spindle D.

This apparatus may be used in a sick-room to great advantage, the capability for regulating the escape of the vapors with great nicety making it an excellent device for the purpose. For sewers or cesspools the plaster cup G may be used without the inclosing-can, and a very cheap and efficient device is thus produced.

The stopper S may be used with the cup G when the latter is inclosed in can A, when the evaporation must be entirely through the walls of the porous cup.

I claim—

1. The combination, with the inclosing-jar or can, of the porous cup having a flange near the bottom which fits the inclosing-can, but leaves an annular recess above the same.

2. The combination, with the inclosing-can and the inclosed porous cup, of a cover, and a spindle from said cover engaging a support on the can, by which spindle and support the position of the cover relatively to the can may be fixed and determined, substantially as described.

3. The combination, with the inclosing-can, of the inclosed porous cup, a hollow spindle extending up from the cup, and a stopper at the top of said spindle, substantially as described.

4. The combination of the inclosing-casing having an adjustable cover and a stoppered ventilating or draft opening near the bottom of said casing, said opening communicating with the space between the casing and the inclosed cup, and the porous cup within but not entirely filling the casing, substantially as described.

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

GARDNER M. SHERMAN.

Witnesses:
D. E. WEBSTER,
AUGUST MITSCHKE.