

C. C. LEATHERS.
VAPORIZER FOR DISINFECTANTS.
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940,604.

Patented Nov. 16, 1909.

Fig. 1.

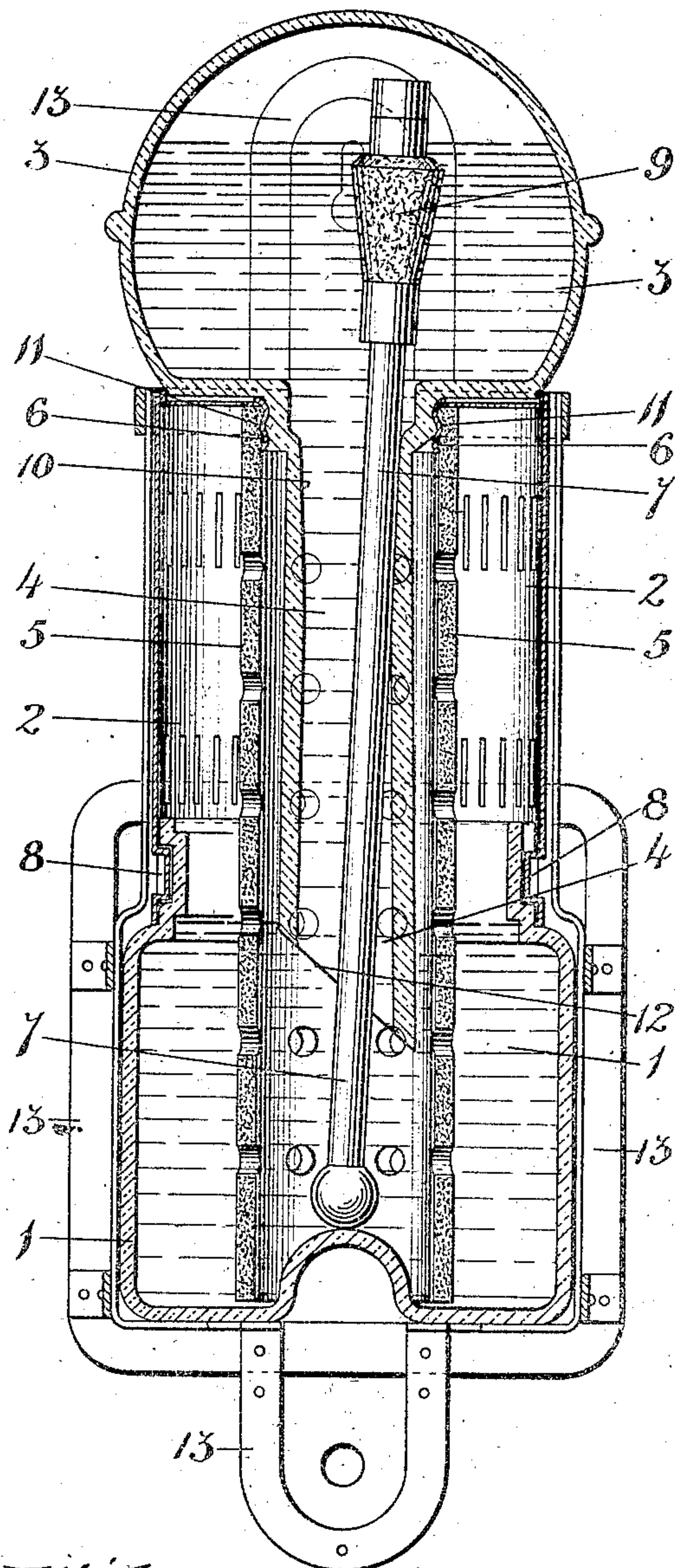
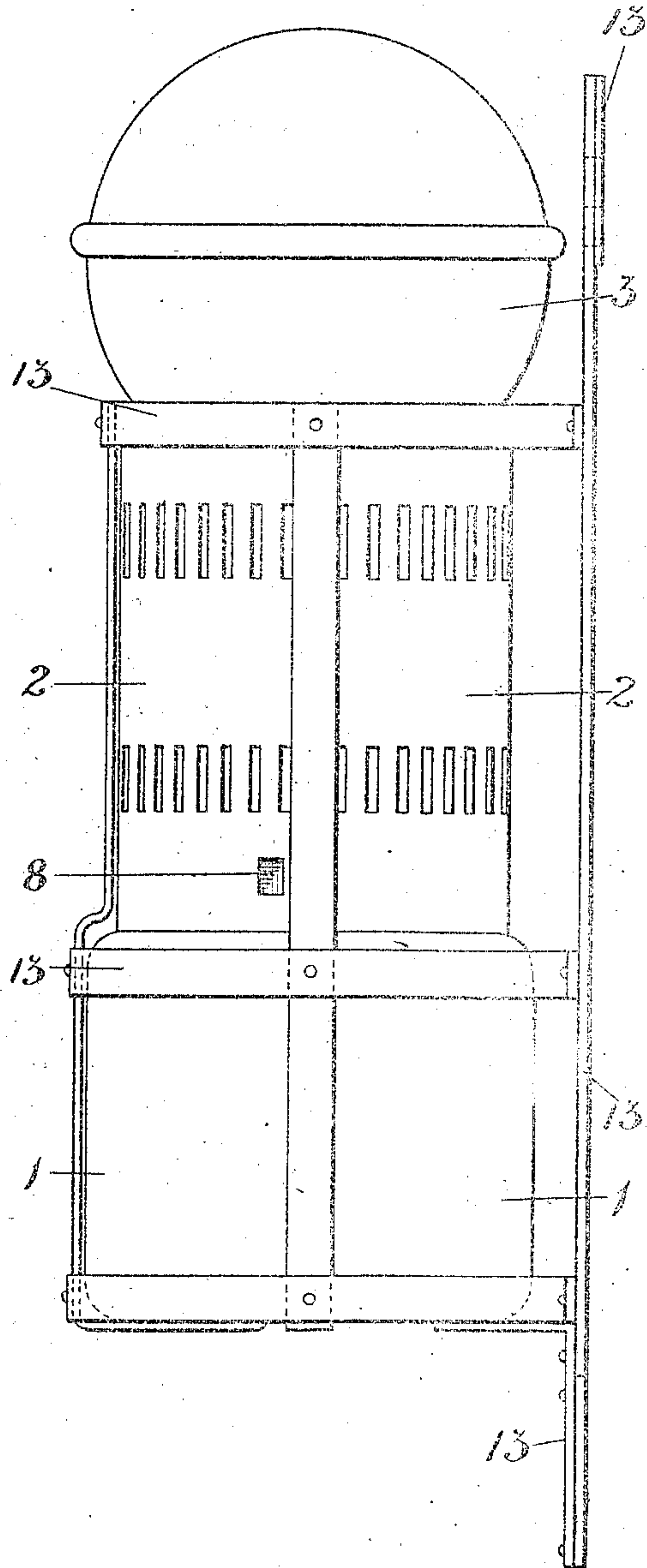


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES C. LEATHERS, OF LEYTONSTONE, ENGLAND.

VAPORIZER FOR DISINFECTANTS.

940,604.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed October 30, 1908. Serial No. 460,348.

To all whom it may concern.

Be it known that I, CHARLES CARROLL LEATHERS, a citizen of the United States of America, residing at Leytonstone, England, have invented certain new and useful Improvements in Vaporizers for Disinfectants, of which the following is a specification.

This invention relates to that class of apparatus for disinfecting, deodorizing, perfuming or otherwise treating air in rooms or other places, in which the disinfecting liquid or perfume is contained in a receiver and is conveyed through an outlet to a shallow vessel or tray in proportion to the evaporation taking place, the vessel being provided with a wick or flannel, which is saturated by the liquid to insure a large surface for the air to act upon.

The object of this invention is to construct an improved form of apparatus, easier of construction, and more efficient in action, for disinfecting, deodorizing, perfuming or otherwise treating air in rooms or other places.

My invention will be clearly understood from the following description aided by the accompanying drawings in which:—

Figure 1 is a longitudinal sectional elevation of a complete apparatus for hanging on a wall. Fig. 2 is a side elevation of same.

For the purpose of my invention I employ three vessels 1, 2, and 3, connected together by screw, bayonet joint or other means, and these vessels I arrange in a superposed manner. The lower vessel 1 is of glass, earthenware or like non-porous material, the center vessel or tubular connection 2 is of open meshed or openworked material or character, and the upper vessel 3 is of glass, earthenware or like non-porous material, having a depending tube 4 which passes through the center vessel 2 into the lower vessel 1. Positioned in the lower and central vessels, and surrounding the tube is a porous tube 5, plaited wick or other like tube, held in position by the glass or like tube 4, depending from the upper vessel 3, or standing in the lower vessel 1, and held by the screw thread 6 of the tubular connection 2.

The tube 4 projecting from the upper vessel is provided with a valved rod 7, so that after filling the upper vessel 3, the water or liquid contained therein can be sealed for the purpose hereinafter described.

Instead of plaited wick or porous wood

pulp tube and support, the tube from the upper vessel may be surrounded with a tube of wood, cork, or other porous material capable of holding liquid by capillary action.

In action I first detach the three vessels, 1, 2, and 3 from one another, I then fill the lower vessel 1 with a fluid capable of disinfecting, deodorizing, ozonizing, perfuming or otherwise acting upon the air, and I then connect the center vessel 2 to the lower vessel 1 by a bayonet joint 8 or other means of fastening and place in the porous wood pulp tube, plaited wick or the like, this reaching to the bottom of the lower vessel and sucking up some of the liquid and becoming saturated. I then take the top vessel 3 and move the valve 9 on the rod 7 from its seating 10 (if on) and fill the vessel 3 with the liquid. I then pull the valve 9 on its seating 10 to prevent the liquid running out of the tube 4. The tube 4 is now inserted into the center 2 and lower vessel 1, and the top vessel 3 is connected to the center vessel by its screw 11, engaging the screw 6 of the center vessel or otherwise, and in so doing the valve rod 7 will be lifted and move the valve 9 from its seating 10, so that some of the liquid in the top chamber 3 runs down and fills the tube 4, and this being sealed by the water in the lower vessel 1, and there being no vent in the top chamber 3, will remain in the tube 4 and top chamber 3. The air circulates through the openworked or perforated vessel or tubular connection 2, and coming in contact with the wood pulp tube 5, plaited tube or the like, partakes of odor and oils of the deodorizing, disinfecting or perfuming agent, and disseminates same through and about the room. As the evaporation of the liquid in the tube 5 takes place, the liquid from the lower vessel 1 is sucked up the tube 5 and reestablishes the moisture by capillary action, and when the liquid in the lower vessel 1 has reached a depth sufficient to break the seal of the tube 4, sufficient liquid from the upper vessel 3 will pass into the lower vessel 1 to compensate for that taken out and reestablish the sealing of the pipe 4 to stop further supply, so that the feed from the upper chamber 3 to the lower chamber 1 is automatic and only takes place when the liquid in the lower chamber 1 has lowered sufficiently.

I prefer to angle the bottom of the tube 4 as at 12 from the upper vessel 3, so that

the automatic supply to the lower vessel 1 is gradual and not of large volume.

The tube 5 may be perforated to insure the air passing through same so as to better partake of the odor which emanates from the liquor held by the tube 5 in the vessel 2.

The apparatus may be connected to a bracket 13 for hanging to a wall, or may be used as on a table or otherwise.

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

An apparatus for disinfecting or deodorizing purposes, comprising three superposed connected vessels, the top vessel being provided with a valve seat and having a tube depending through the second vessel and into the bottom vessel, an absorbent tube

within said second vessel and surrounding the first named tube, and extending into the lowest vessel a rod and valve associated therewith, said rod being loosely disposed with respect to the walls of the containing vessels and being positioned in the top vessel and said first named tube, extending therefrom and cooperating with the valve seat in said top vessel.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES C. LEATHERS.

Witnesses:

PERCY E. MATTOCK,

WM. O. BROWN.