

(No Model.)

R. C. WOODCOCK & C. T. KINGZETT.
DISINFECTING OR VAPORIZING DEVICE.

No. 502,544.

Patented Aug. 1, 1893.

Fig. 1.

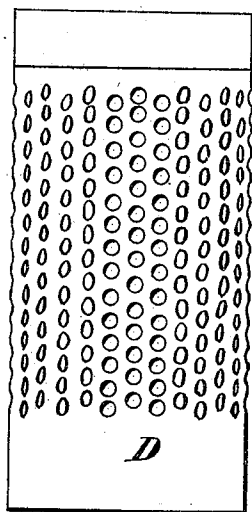


Fig. 2.

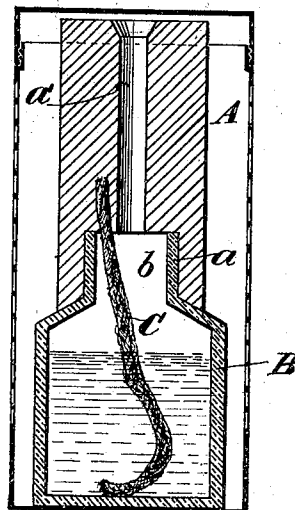


Fig. 3.

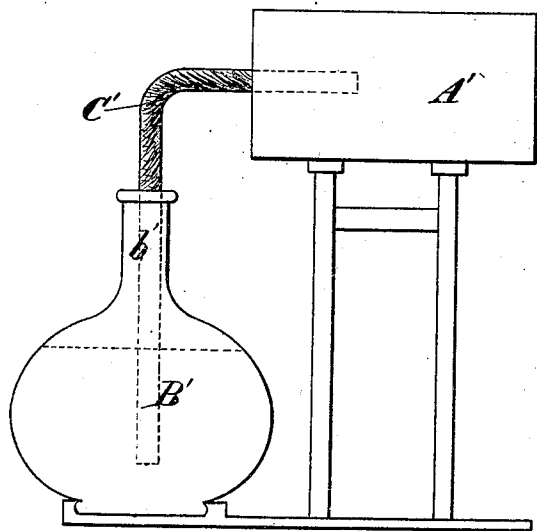
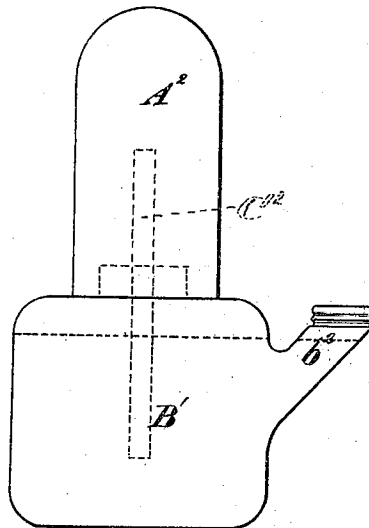


Fig. 4.



Witnesses:-
George Barry,

Arthur Woodward.

Inventors:
Reginald C. Woodcock
Charles T. Kingzett.
by attorneys
Brown & Evans

UNITED STATES PATENT OFFICE.

REGINALD C. WOODCOCK, OF NEW YORK, N. Y., AND CHARLES T. KINGZETT,
OF LONDON, ENGLAND, ASSIGNORS TO THE AMERICAN AND CONTINEN-
TAL SANTAS COMPANY, LIMITED, OF NEW YORK, N. Y.

DISINFECTING OR VAPORIZING DEVICE.

SPECIFICATION forming part of Letters Patent No. 502,544, dated August 1, 1893.

Application filed April 10, 1893. Serial No. 469,805. (No model.)

To all whom it may concern:

Be it known that we, REGINALD C. WOODCOCK, of New York, in the county and State of New York, United States of America, and

CHARLES THOMAS KINGZETT, of London, England, have invented a new and useful Improvement in Disinfecting or Vaporizing Devices, of which the following is a specification.

Our invention relates to an improvement in diffusing or vaporizing apparatus in which a supply of the liquid for purposes of disinfection, deodorization, and perfuming of rooms, hospitals and other places is transmitted by capillary attraction to a body of absorbent material exposed to the surrounding air, whereby the said absorbent material receives a continuous charge of the said liquid to make up for any loss which the absorbent material may undergo by the diffusion of the liquid into the surrounding air.

A practical embodiment of our invention is represented in the accompanying drawings in which—

Figure 1 is a view in side elevation of a perforated case in which the diffusing apparatus may be housed. Fig. 2 is a transverse section through the case and one form of the diffusing apparatus in position therein. Fig. 3 represents, in side elevation, a different form and arrangement of the parts of the apparatus, and Fig. 4 represents, in side elevation, still another form and arrangement of the several parts.

In each of the forms of the apparatus represented in Figs. 2, 3, and 4, is a body of absorbent material for diffusing the liquid disinfectant or perfume into the surrounding air, a reservoir for holding a supply of the liquid which is to be diffused, and the connection between the body of liquid and the absorbent material, which connection consists of one or more capillary tubes sufficient to convey the liquid from the reservoir to the mass of absorbent material. The capillary tube, or tubes, which we have chosen to illustrate our invention is formed of a piece of ordinary lamp or candle wick.

Referring to Fig. 2, the absorbent material represented by A is here shown of cylindri-

cal form having its lower end provided with a socket *a* adapted to receive the neck *b* of a reservoir B containing the liquid to be diffused. The reservoir B may conveniently be an ordinary jar or bottle. The absorbent material A is here provided with a single opening *a'* extending from its upper to its lower end and opening at its lower end into the jar B. This opening *a'* may be conveniently utilized for filling the jar B with the liquid to be diffused as often as required. A wick C has its upper end embedded in the absorbent material A and its lower end extends down into the reservoir B into the supply of the liquid therein.

The absorbent material A may be plaster of paris, or any other suitable substance sufficiently porous to permit the liquid to percolate throughout the mass and come in contact with the surrounding air at its surface.

For convenience in transportation, in order to protect the apparatus against contact with the surrounding objects, we find it convenient to inclose it within a suitable case D which case may be provided with numerous perforations to permit the diffused or vaporized liquid to freely escape.

In the form shown in Fig. 3, the absorbent material A' is supported wholly independent of the reservoir B', the absorbent material and the reservoir being conveniently supported upon a single stand, although that is not necessary. In this arrangement, we have shown the absorbent material located to one side of the neck *b'* of the reservoir, so that the liquid to be diffused may be at any time supplied to the reservoir B'. In this instance, the absorbent material A' may be made in a solid mass without any perforation, such as that denoted at *a'*, and the wick C' may have its upper end embedded in the end of the absorbent material A' and its lower end extended down into the reservoir B'.

In the form shown in Fig. 4, the absorbent material A² may be fixed over the neck of the reservoir B², the latter being provided with a filling spout *b²* off at one side. In this case, the mass of absorbent material A² may be solid and the upper end of the wick C² may be embedded centrally in it and extend down

into the reservoir. In this case, as in the form shown in Fig. 2, the absorbent material is supported upon the reservoir.

5 While we have shown the absorbent material in the form of a cylinder, it is obvious that it might be of various shapes as found most desirable for the particular purpose or purposes for which the device is to be used, and that its arrangement with respect to the
10 reservoir might be varied in numerous other ways than those suggested, without interfering with its connection with the liquid in the reservoir by the capillary tubes.

What we claim is—

15 1. In diffusing or vaporizing device, the combination with a body of absorbent material such as plaster of paris for diffusing the disinfectant and a reservoir for containing a supply of liquid to be diffused, of a flexible
20 capillary attachment embedded at one end within the body of absorbent material and

adapted to enter into the supply of liquid, substantially as set forth.

2. In diffusing or vaporizing device, the combination with a reservoir for the liquid 25 to be diffused, of a body of absorbent material supported on the reservoir, and having an opening therethrough for filling the reservoir and a piece of wick embedded at one end in the body of absorbent material and extending into the liquid in the reservoir for
30 transmitting the liquid to the absorbent material by capillary attraction, substantially as set forth.

REGINALD C. WOODCOCK.

C. T. KINGZETT.

Witnesses for Reginald C. Woodcock:

FREDK. HAYNES,

IRENE B. DECKER.

Witnesses for Charles Thomas Kingzett:

H. DE MARA,

WM. THOS. MARSHALL.