(No Model.)

C. B. HYSLIP.

DISINFECTING APPARATUS.

No. 478,697. Patented July 12, 1892.

Fig. 1.

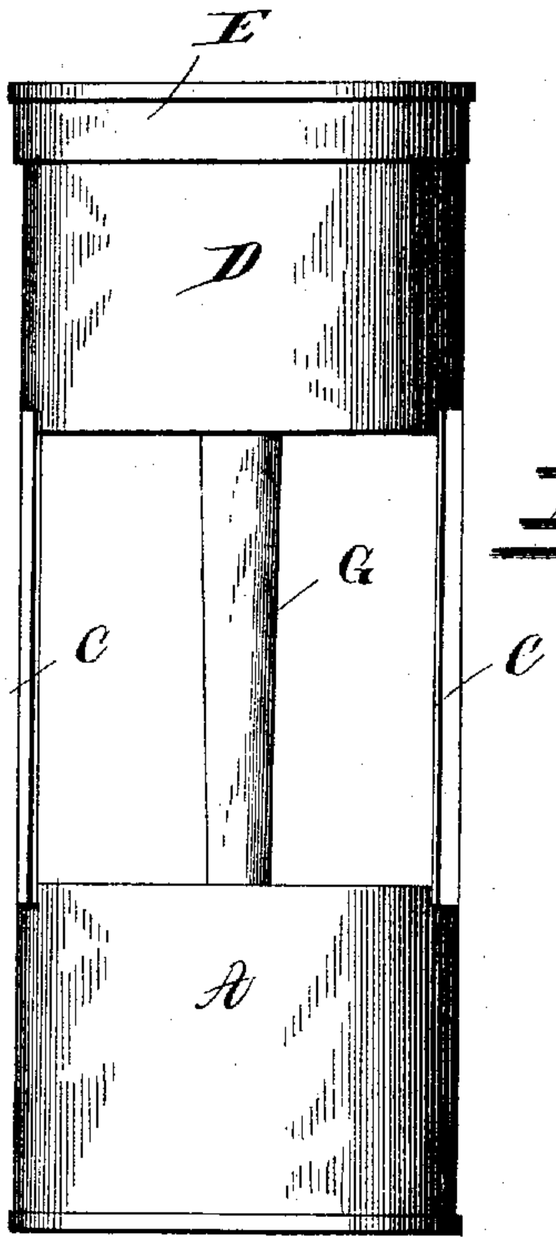


Fig. 2.

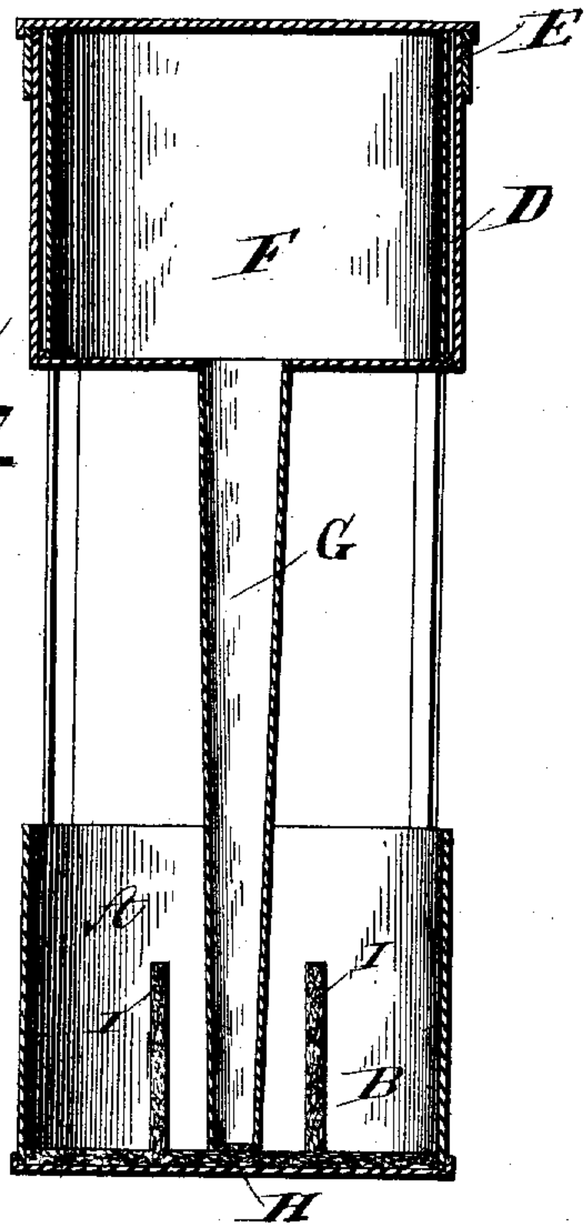


Fig. 3.

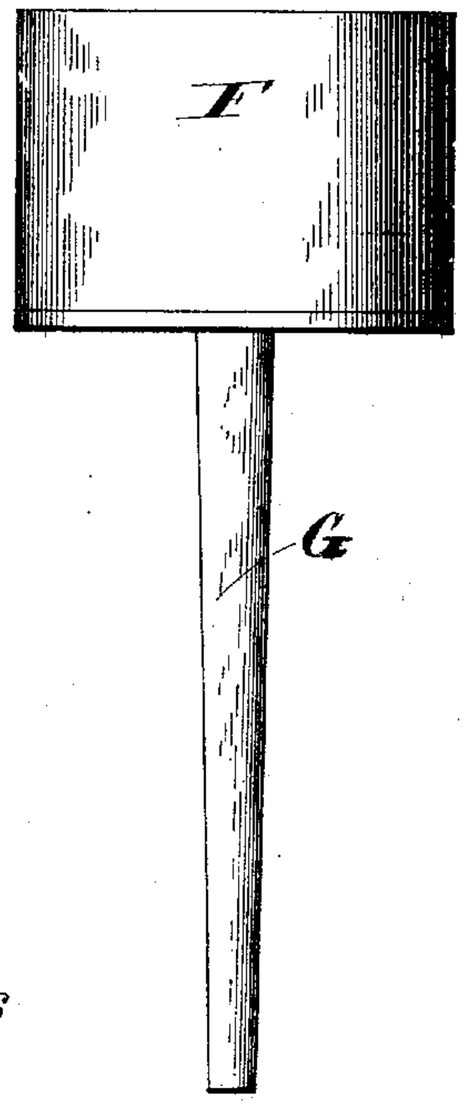
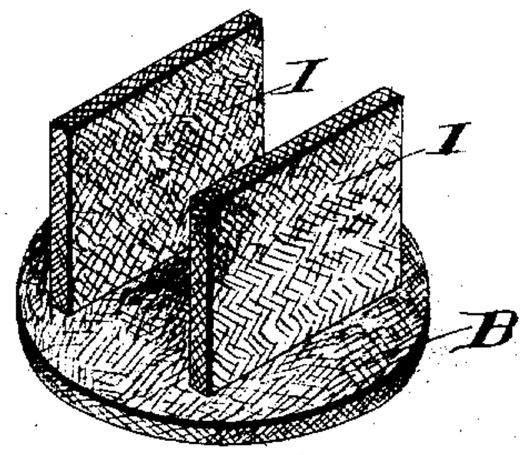


Fig. 4.



WITNESSES

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DISINFECTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 478,697, dated July 12, 1892.

Application filed March 22, 1892. Serial No. 425,891. (No model.)

To all whom it may concern:

Be it known that I, CHARLES B. HYSLIP, a citizen of the United States, and a resident of Bradford, in the county of McKean and State of Pennsylvania, have invented new and useful Improvements in Disinfecting Apparatus; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in devices for disinfecting sick rooms and other apartments where it is desirous to purify the air or relieve it of unpleasant odors; and the object of the invention is the construction of a suitable apparatus which may be supplied with a quantity of disinfectant in liquid form, and which will automatically feed the liquid disinfectant to an absorption-pad to permit the ready evaporation of the disinfectant into the room.

To fully comprehend the importance of the result obtained by the apparatus constructed in accordance with my invention, it is necessary to understand that the direct exposure to the air of a quantity of disinfectant liquid is not productive of as great a result as when exposed by a pad saturated therewith. In the first instance the evaporation which takes place is principally that of the water of the compound and not the elements which properly make up the disinfectant solution, while in the second instance the vaporization of the liquid from the saturated pad takes place in such a manner as to cause the disinfectant elements of the composition to be given off more thoroughly, while if the supply of liquid is not exposed directly to the air, but fed down automatically to a pad, the vaporization of the liquid will take place with far greater benefit, as greater disinfectant power is obtained by allowing all the elements of the compound to be vaporized and at the same time the supply of disinfectant liquid is kept fresh.

The invention therefore consists in providing a reservoir or supply-tank with a conducting-tube extending downward therefrom and resting on a pad of absorbent material, the said conducting-tube being provided with an aperture at its lower end and adapted to form a gravity-feed of the liquid disinfectant from the tank or supply to the absorbent pad. It will be seen that the gravity-feed is automatically controlled by virtue of the end of the conducting-tube being pressed and enveloped in the absorbent, which when thoroughly saturated with the disinfectant will prevent the escape from the tube of more liquid, except when by vaporization the absorbent becomes capable of taking up more of the liquid, and thus the pad of absorbent is kept saturated automatically and the body of liquid in the tank or reservoir prevented from being exposed directly to the air.

In the accompanying drawings, in which my invention is fully illustrated, Figure 1 is a side elevation of the apparatus. Fig. 2 is a transverse vertical sectional view of Fig. 1. Fig. 3 is a detached view, in side elevation, of the reservoir and the conducting-tube for feeding the disinfectant compound to the absorbent pad. Fig. 4 is a perspective view of the absorbent pad.

In carrying out my invention I prefer to follow the construction shown, as by it the greatest simplicity of structure is presented and a perfect and convenient operation of the invention obtained. A bottom receptacle A, of preferably cylindrical form, is provided as the base of the device as well as to contain the absorbent pad B. Secured to the outer side of the cup-receptacle A are supports C for supporting a cylindrical casing D, having preferably the same form and size as the receptacle A. This casing D is open at both top and bottom, but is provided with a cover E, which is adapted to fit the top tightly.

Within the casing D is held inclosed the tank or reservoir F for containing the supply of liquid disinfectant, and in the bottom of this tank F is provided a conducting-tube G, of conical form, whose tapering end extends down to the bottom of the receptacle A and is closely pressed onto the absorbent pad B. By this tube G the tank is supported and the liquid disinfectant allowed to escape into the absorbent pad. The small aperture H is provided in the lower end of the conducting-tube G, so that the flow of the liquid will not be too free and be practically stopped when the pad is completely saturated.

The theory on which the operation of the absorbent pad depends is that the disinfectant liquid is more thoroughly exposed to the vaporizing influence of the air, and in addition to having the flat horizontal pad B it is preferable to provide upwardly-extending portions or wings I, one on each side of the tube G, thereby more effectually absorbing the disinfectant and furnishing an increase of evaporatory surface, which increases the surface of exposure.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A disinfecting device consisting of a lower receptacle, a casing supported above the same leaving air-openings between the two, a supply-tank inclosed and supported by the receptacle and provided on its lower side with a tapering discharge-tube, an absorbent pad located in the lower receptacle provided with two absorbent vertical wings I I, rising from the said pad at a short distance from both tube and casing and permitting access of air to both sides of said wings, as set forth.

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

CHARLES B. HYSLIP.

Witnesses:
JNO. K. WILSON,
JNO. O'BRIEN.