(No Model.)

S. & E. TAUSSIG.

DISINFECTING DEVICE.

No. 522,863. Patented July 10, 1894.

Fig: 1.

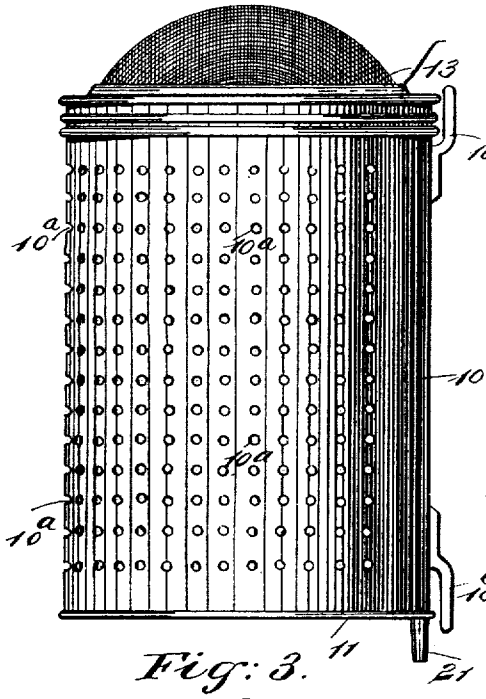


Fig: 2.

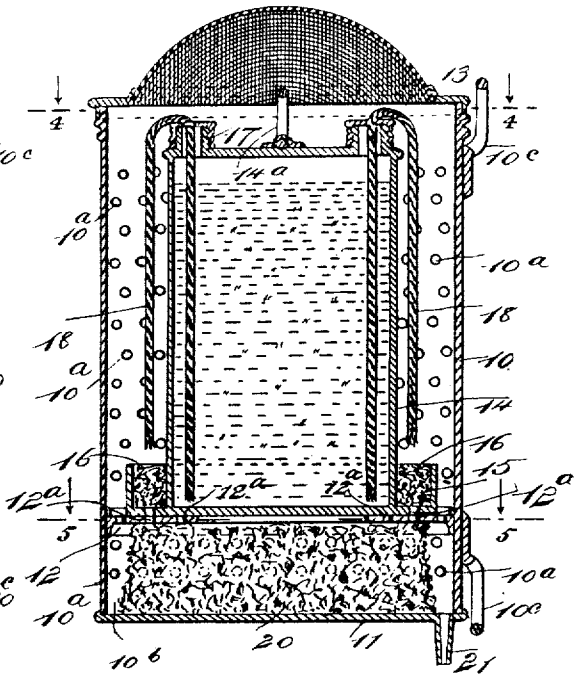


Fig: 3.

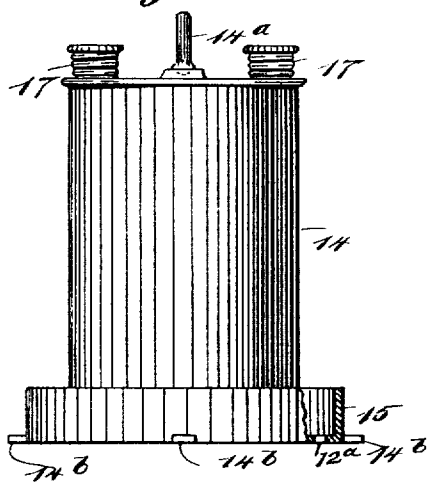


Fig: 4.

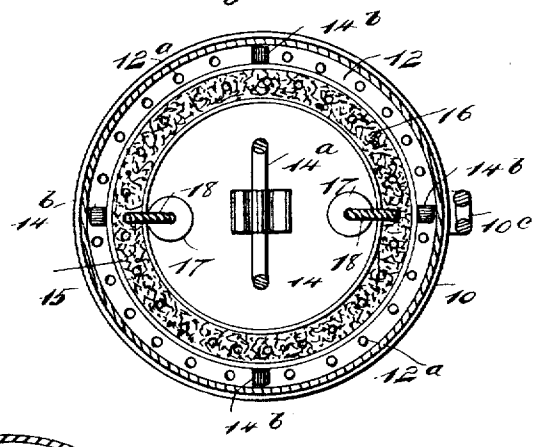
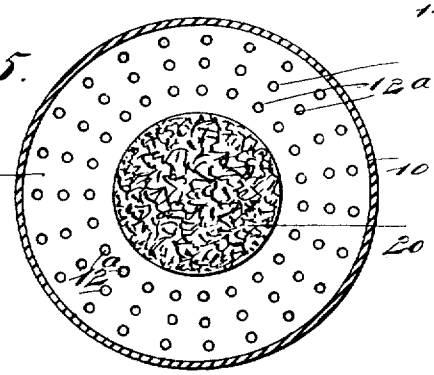


Fig: 5.



WITNESSES:
Wm P. Patton
C. Sedgwick

INVENTORS
S. Taussig
BY E. Taussig
Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SALOMON TAUSSIG AND EMIL TAUSSIG, OF NEW YORK, N. Y.

DISINFECTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 522,863, dated July 10, 1894.

Application filed March 12, 1894. Serial No. 503,282. (No model.)

To all whom it may concern:

Be it known that we, SALOMON TAUSSIG and EMIL TAUSSIG, both of New York city, in the county and State of New York, have invented new and useful Improvements in Disinfecting Devices, of which the following is a full, clear, and exact description.

This invention relates to improvements in portable devices for the disinfection of places subjected to contaminating exhalations that are liable to produce disease; and has for its object to provide a novel, simple and effective apparatus, that is of compact form and inexpensive construction, which is adapted to continuously supply a proper amount of the disinfecting fluid to a porous medium of considerable area, which by exposure to air currents, that pass through the device, will impregnate the air with the vaporized disinfectant, and thus effectively sterilize disease germs that may pervade the air.

A further object is, to conveniently combine in a vaporizing disinfecting device, a liquid dropping device, whereby air currents will be disinfected, and a liquid disinfectant be periodically deposited in a cess-pool, water closet, or other place requiring disinfection at the same time, from the same device.

To these ends, our invention consists in the construction and combination of parts, as are hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views shown.

Figure 1 is a side view of the device in complete form. Fig. 2 is a sectional side view taken through the center of the device. Fig. 3 is a detached side view of an essential part of the improvement. Fig. 4 is a sectional plan view, on the line 4—4 in Fig. 2; and Fig. 5 is a sectional plan view, on the line 5—5 in Fig. 2.

The external casing 10 of the improved disinfecting apparatus, is preferably given a cylindrical form, of proper dimensions to receive other parts, avoiding too great bulk, as it is designed to provide a conveniently portable and light device for the indicated purpose, having its side wall numerously perforated, as shown at 10^a. The bottom 11, of the casing 10 is flat, and at a suitable distance above it an annular bracket shelf 12, is secured on the inner surface of the case, as shown in Fig. 2. There is a cover 13, furnished for the casing 10, having a preferably foraminated convex ventilator cap formed on, or secured to the apertured top wall of said cover, which piece may be removably secured on the upper open end of the casing.

The disinfecting liquid holder 14, is an important feature of the invention, and consists of a preferably cylindrical receptacle, formed of sheet metal for the sake of lightness, although it may be otherwise produced.

On the lower end portion of the holder 14, an annular drip-chamber 15 is formed or secured, which is open at the top, and projects from the wall of the holder sufficiently to be adapted for the reception of a sponge filling 16.

On the top wall of the holder 14, two filler apertures are oppositely located, which are inclosed by a separately projecting circular flange secured around each hole, these being preferably threaded externally for the reception of the screw caps 17, that serve to measurably seal the apertures, the tops of the caps being perforated for the introduction of a fibrous feeder wick 18, in each, that are of such a length as will allow portions to hang within and on the outside of the holder, as shown in Figs. 2 and 4.

There is a series of perforations in the bottom wall of the drip chamber 15, which may be arranged opposite a similar row of holes in the annular bracket shelf 12, other concentric rows of holes 12^a being formed in the shelf wall as shown in Fig. 5, for the free escape of fluid that enters the drip chamber.

The compartment 10^b formed below in the casing 10, by the introduction of the shelf 12, is partly filled with sponge 20, rows of perforations 10^a, being produced in the side wall of the compartment along with those formed in the side wall of the casing above the compartment, and near the side edge a small tube 21 is downwardly projected from the bottom wall 11 of the casing 10, for the graduated discharge of disinfecting liquid from the compartment 10^b.

The liquid holder 14 is furnished with a looped handle 14^a, that is secured on the top wall of the same between the filler holes, this

being utilized for the introduction or removal of the part 14.

At one side of the casing 10, the hanger loops 10ª are secured, which projecting in the same vertical plane are so spaced from the wall of the casing, that their looped portions may be placed over two vertically aligned nails or screws, that are projected from an upright wall or other stable support, at a point above the locality that is to receive a dripping discharge of disinfecting liquid from the apparatus.

When the device is put into service, the liquid holder 14, is supplied with a charge of any preferred disinfecting liquid, and then it is introduced within the casing 10, resting on the shelf 12, the holder being centered by the laterally projecting ears 14ª, that extend from it at the bottom of the drip chamber 15.

The feeding wicks 18, by their relative arrangement, hang above the drip chamber 15, as shown clearly in Fig. 2, so that by capillary attraction, and the force of gravity, they will raise liquid from the holder 14, and discharge it by drops into the drip chamber below the outer ends of said wicks.

When the sponge filling 16, in the chamber 15, becomes super-saturated with the volatile disinfecting liquid, it will discharge the surplus into the compartment 10^b, the sponge 20 absorbing it, and after the latter named material is sufficiently charged with the liquid, it will exude a sufficient amount to permit a dropping discharge from the tube 21, that by a constriction of its free end may be adapted to deliver a desired number of drops in a given period of time. If desired the device may be seated on a shelf or other stable support.

It will be seen, that the permeation of surrounding air within the casing 10, through the perforations 10^a, will permit the atmosphere to be charged with the vaporized disinfectant, at the same time the liquid is being dropped from the apparatus, so that disease germs that may not be killed by the liquid application, will be neutralized by the vaporized disinfectant if a proper material is employed.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In a disinfecting device, the combination with a foraminated cylindrical chamber, a perforated cover therefor, and an annular shelf within the chamber, of a cylindrical liquid holder in said chamber seated on the annular shelf, wicks feeding from the liquid holder, an annular drip chamber below the wicks, a compartment below the shelf having a foraminated side wall a sponge filling in said drip chamber, and a sponge filling in the compartment below, substantially as described.

2. In a disinfecting device, the combination with a cylindrical casing having its wall numerously perforated a reticulated cover thereon, hanger loops on the casing, a discharge pipe at the base of the casing, an annular perforated bracket shelf within the casing near its bottom, and a sponge filling within the compartment formed by the shelf, of a cylindrical liquid holder in the casing, an annular drip chamber concentric with the base of the holder, feeding wicks engaging perforations in caps over filler apertures in the top wall of the holder, sponge filling in the drip chamber below the outer ends of the wicks, and means to hang the device on a stable support, substantially as described.

3. In a disinfecting device, the combination with a foraminated casing provided with an outlet at the bottom, and an internal shelf above the bottom, forming a chamber, and having openings, of a removable holder for the disinfectant, said holder being seated on the shelf and having an exterior trough-like drip-receiver, the bottom of which is formed with openings leading outward from said receiver to the shelf openings, and capillary wicks arranged substantially as shown and described.

4. A disinfecting device, comprising a case, having a drip spout near the bottom, the case above said drip spout being foraminated, a holder for liquid disinfectants within the case, capillary wicks arranged substantially as described, and an absorbent in the bottom of the case, adapted to receive the drip from the wicks, substantially as described.

SALOMON TAUSSIG.
EMIL TAUSSIG.

Witnesses:
THOS. SHULTZ,
WALLACE ROSENHEIM.