

P. J. WALSH.
DISINFECTING APPARATUS.
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940,097.

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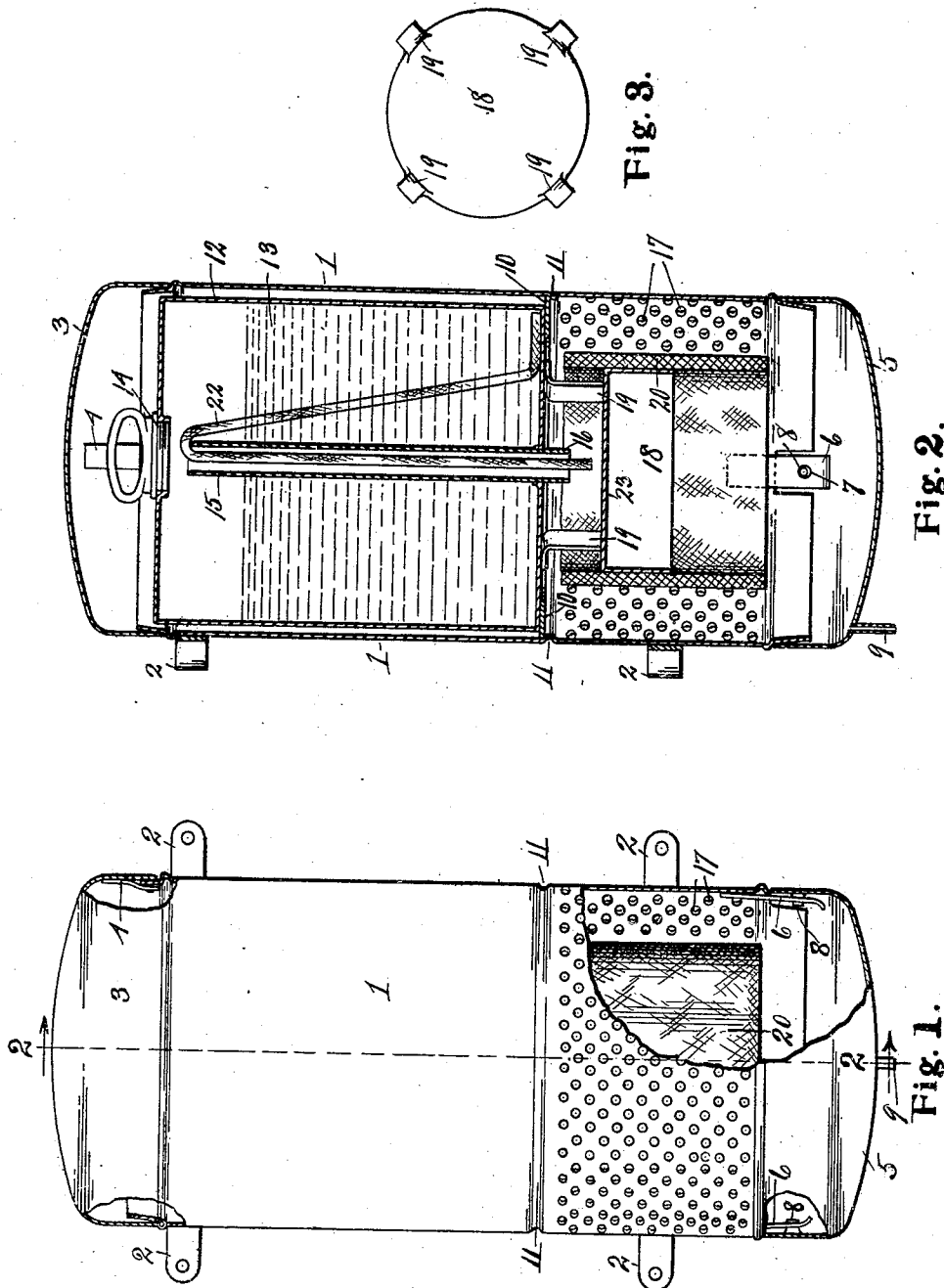


Fig. 2.

Fig. 1.

Witnesses

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DISINFECTING APPARATUS.

940,097.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, PATRICK J. WALSH, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Disinfecting Apparatus; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a disinfecting apparatus, and consists in the construction and arrangement of parts hereinafter more fully set forth and pointed out particularly in the claims.

The object of the invention is to provide a simple and efficient device wherein the fluid disinfectant may be contained and gradually fed to an absorbent wick from which said fluid is evaporated into the atmospheric air, provision being made for rendering the fluid reservoir and the absorbent wick readily removable from the exterior case for the purpose of refilling said reservoir, renewing said wick, or cleaning the interior of the retaining case, the arrangement being such as to enable the removal and replacement of said parts without taking down the exterior case in which said parts are contained, and which is usually fixed to a wall or other permanent support. The above object is attained by the structure illustrated in the accompanying drawings, in which:—

Figure 1 is an elevation of an apparatus involving my invention, portions of which are broken away to show the construction and arrangement of parts. Fig. 2 is a central longitudinal section through the apparatus. Fig. 3 is a plan view of the cylindrical holder upon which the absorbent wick is mounted.

Referring to the characters of reference, 1 designates the case which is preferably cylindrical in form and is provided with the apertured brackets 2 through the medium of which said case may be secured to a wall or other support for the purpose of stationing the apparatus at the place it is desired to disinfect. The case is provided with a hinged top 3 which is normally held closed by a spring catch 4. The bottom 5 of the

case embraces the lower end thereof and is removably secured thereto by means of the spring arms 6 attached to the inner wall of the case, and which are apertured, as shown at 7 in Fig. 2, to receive the lugs 8 projecting from the inner wall of the bottom 5. By springing said arms from engagement with said lugs, the bottom may be readily removed. Leading from said bottom is a drip tube 9 to provide for the escape of any overflow of the disinfectant fluid.

Centrally disposed within the case is a supporting ring 10 which rests upon a bead 11 extending inwardly from the annular wall of said case. Supported upon the ring 10 in a manner to enable it to be withdrawn from the case is a reservoir 12 for the disinfectant fluid 13. In the top of said reservoir is an aperture closed by a screw cap 14. By removing said cap, the reservoir may be filled through said aperture. Extending vertically within said reservoir is a tube 15, the lower end of said tube projecting through the bottom of said reservoir, as shown at 16. The bottom portion of the wall of the case is perforated, as shown at 17, and within said bottom portion is located a wick-holding cylinder 18 which is suspended from the bottom of the reservoir by means of the four hangers 19. Mounted upon the cylinder 18 is a tubular wick 20 of absorbent material which is maintained in place thereon by frictional contact of said wick with the exterior wall of said cylinder. The upper portion of the wick when in place on said cylindrical holder extends above the top thereof, as shown.

Passing vertically through the tube 15 is a round wick 22, said wick bending over the top of said tube and extending downwardly through the fluid to the bottom of the reservoir 12. This wick 22 by capillary action draws the fluid from the reservoir and causes it to drip upon the top 23 of the cylinder 18 on which the fluid spreads to the absorbent material 20 surrounding said cylinder which takes up said fluid and from the outer surface of which said fluid is evaporated and passes through the perforations 17 in the case into the surrounding air, as will be well understood in the art.

By means of this construction when it is necessary to refill the reservoir, said reservoir may be readily removed from the case by opening the top 3 and withdrawing it therefrom, enabling the disinfectant fluid to

be poured into said reservoir without the liability of spilling said fluid on the wall or support upon which the case is mounted. When the reservoir is withdrawn from the case, all of the interior parts of the apparatus are removed therewith, enabling the apparatus to be thoroughly cleaned and a new absorbent wick to be placed upon the holding cylinder 18, should it be necessary. In devices of this kind, where the reservoir is permanently located within the case, it can not be refilled without great inconvenience and danger of spilling the fluid, unless the device is removed from the wall, nor can it be cleaned without removing it from its support. By means of applicant's construction the inner parts of the apparatus may be readily withdrawn and the whole interior of the case may be rendered accessible through either end thereof, by removing the bottom or raising the cap.

Having thus fully set forth my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A disinfecting apparatus, comprising a case adapted to be fixed to a support, a reservoir removably seated in said case, an absorbent wick-holder removably located within said case below said reservoir and having a flat top, a wick upon said holder projecting above the flat top thereof, and means for discharging continuously a small quantity of fluid from said reservoir centrally onto the flat top of said wick holder.

2. A disinfecting apparatus comprising an exterior case adapted to be secured to a support, a reservoir removably seated in said case, an absorbent wick holder within the case below said reservoir, a wick upon and surrounding said holder, the top of said holder being flat, and means for discharging

a small quantity of fluid from the reservoir onto the flat top of said holder to flow through said wick.

3. A disinfecting apparatus, comprising a reservoir, a wick holder suspended from said reservoir, said reservoir and wick holder being removably seated in a case, an absorbent wick upon said holder, a vertical tube in said reservoir passing through the bottom thereof, a feeding wick having one portion thereof passing through said tube and the other portion lying in the fluid of said reservoir.

4. A disinfecting apparatus, comprising a case, a reservoir removably seated in said case, a wick holder depending from the bottom of said reservoir and permanently attached thereto, means for removably supporting the reservoir within said case, an absorbent wick upon the wick holder, a tube in the reservoir passing through the bottom thereof, a feeding wick having one portion lying within said tube, and the other portion extending into the fluid within the reservoir.

5. A disinfecting apparatus, comprising a fixed case, a reservoir removably mounted in said case, a wick holder attached to said reservoir and removable therewith, an absorbent wick upon said holder, a vertical tube within the reservoir passing through the bottom thereof over the top of the wick holder, a feeding wick having a portion thereof passing through said tube, and the remaining portion immersed in the fluid of said reservoir.

In testimony whereof, I sign this specification in the presence of two witnesses.

PATRICK J. WALSH.

Witnesses:

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