

No. 809,014.

PATENTED JAN. 2, 1906.

W. H. ROSE,
DROPPER FOR DISINFECTING APPARATUS.
APPLICATION FILED MAY 18, 1905.

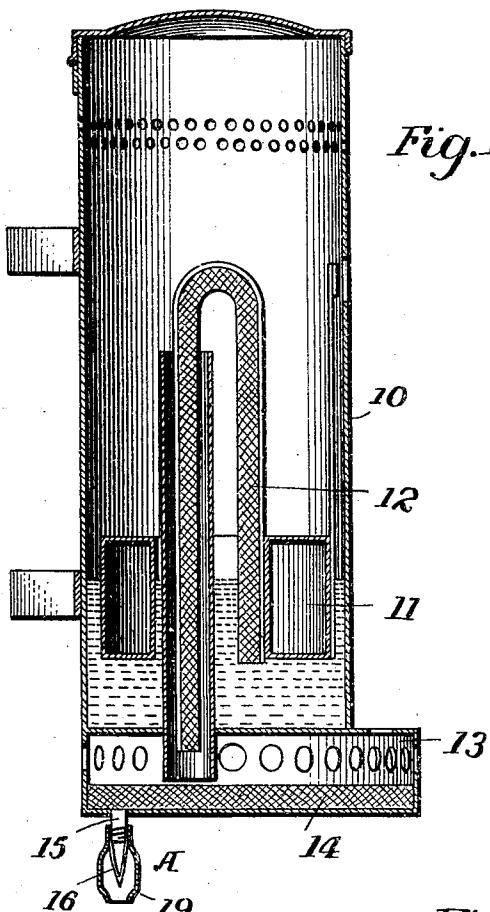


Fig. 1.

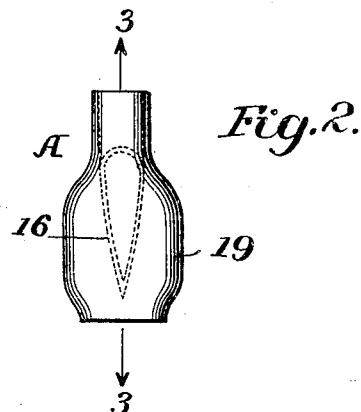


Fig. 2.

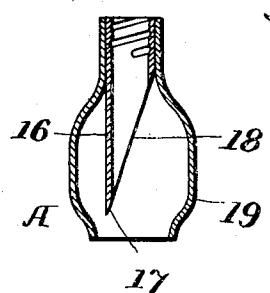
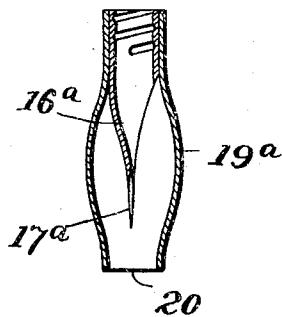


Fig. 3.

Fig. 4



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DROPPER FOR DISINFECTING APPARATUS.

No. 809,014.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed May 18, 1905. Serial No. 261,052.

To all whom it may concern:

Be it known that I, WILLIAM H. ROSE, a citizen of the United States, and a resident of Baltimore, Maryland, have invented certain new and useful Improvements in Droppers for Disinfecting Apparatus, of which the following is a specification.

This invention relates to improvements in disinfecting devices of that class in which a disinfecting fluid is gradually discharged from a tank or container and permitted to drop into or upon the article to be disinfected.

The object of the present invention is to subdivide the discharge from such a disinfecting apparatus into small drops, so that with a given flow of fluid the interval of time between the drops shall be shorter and the application of the disinfectant more nearly continuous than heretofore with apparatus of this kind.

The invention will be described in connection with the accompanying drawings, in which—

Figure 1 is a central sectional view of a disinfecting apparatus. Fig. 2 is a side view of the dropping device. Fig. 3 is a sectional view of the dropping device upon the line 3-3 of Fig. 2; and Fig. 4 is a view similar to Fig. 3, showing a slight modification.

My present invention can be used in connection with any disinfecting apparatus of the type in which the fluid is discharged in drops.

In Fig. 1 of the drawings I have illustrated one form of disinfecting apparatus which was patented to me January 16, 1900, in Letters Patent No. 641,548. For a detail description of this apparatus reference is made to said patent.

The apparatus illustrated comprises a fluid tank or receptacle 10, in which there is a float 11, carrying a wick 12, which is U-shaped and adapted to siphon the fluid from the tank and discharge it into a receptacle 13 beneath the tank. The receptacle 13 is perforated to permit a portion of the disinfecting fluid to evaporate, and it is provided with an absorbent pad 14, which holds a considerable amount of the fluid and presents a broad surface for evaporation. The excess of fluid is discharged drop by drop from a pipe or opening 15 in the bottom of the compartment 13.

My present invention relates to a dropping device which may, for instance, be attached to the discharge-tube 15 of the apparatus shown in Fig. 1. This device A preferably consists of a tube 16, having a considerable opening 55 therein, which is not liable to be choked by sediment, and terminating in a depending

point 17, upon which the fluid gathers and from which it is dropped. As shown in Figs. 1, 2, and 3, the point 17 is formed by cutting the tube upon a diagonal plane at an acute angle to its axis, as indicated at 18. The extreme point 17 may be trimmed or shaped until it is sharper than would result from shearing on the plane 18.

I preferably surround the dropping-point 17 by a casing 19, connected to the tube at its upper end and having an open mouth somewhat below the point. The function of this casing is to protect the point from injury and also to facilitate its operation by preventing air-currents from evaporating the fluid or causing it to flow irregularly.

In Fig. 4 I have shown a slight modification in which the point 17^a is brought into line with the axis of the dropping-tube 16^a. This permits of the use of a narrower and more graceful casing 19^a, having a correspondingly small opening 20 in its lower end. The tip or point 17^a is preferably arranged centrally above the mouth 20. This construction prevents sticks or other obstructions from being passed up into the dropping-tube 16^a. As shown in this figure, the point 17^a is a separate piece connected to the tube 16^a. A strong and sharp point, such as a needle-point, may thus be used for the purpose of finely subdividing the fluid without unduly weakening the construction. By means of the sharp or attenuated point with which the dropping-tube is provided the fluid is discharged in comparatively frequent and relatively small drops, whereas in apparatus constructed as shown, for instance, in my prior patent the fluid is discharged in large drops and at relatively long intervals.

It will be evident that my invention may be embodied in various forms and applied to various kinds of disinfecting apparatus.

Without limiting myself to the precise construction and arrangement illustrated and described, I claim—

1. The combination, in a disinfecting apparatus, with a fluid-tank and means for maintaining a slow discharge of fluid therefrom, of a dropping device comprising an open discharge-tube and a relatively slender solid point depending therefrom and from which the fluid drops.

2. The combination, in a disinfecting apparatus, with a fluid-tank and means for maintaining a slow discharge of fluid therefrom, of a dropping device connected with the dis-

charge-opening of said apparatus and comprising a slender solid depending point from which the fluid drops.

3. The combination, in a disinfecting apparatus, with a fluid-tank and means for maintaining a slow discharge of fluid therefrom, of a dropping device connected with the discharge-opening of said apparatus and comprising a slender solid depending point from

which the fluid drops, and a casing surrounding said point, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. ROSE.

Witnesses:

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