

Z. G. SHOLES.
VAPORIZER.
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929,254.

Patented July 27, 1909.

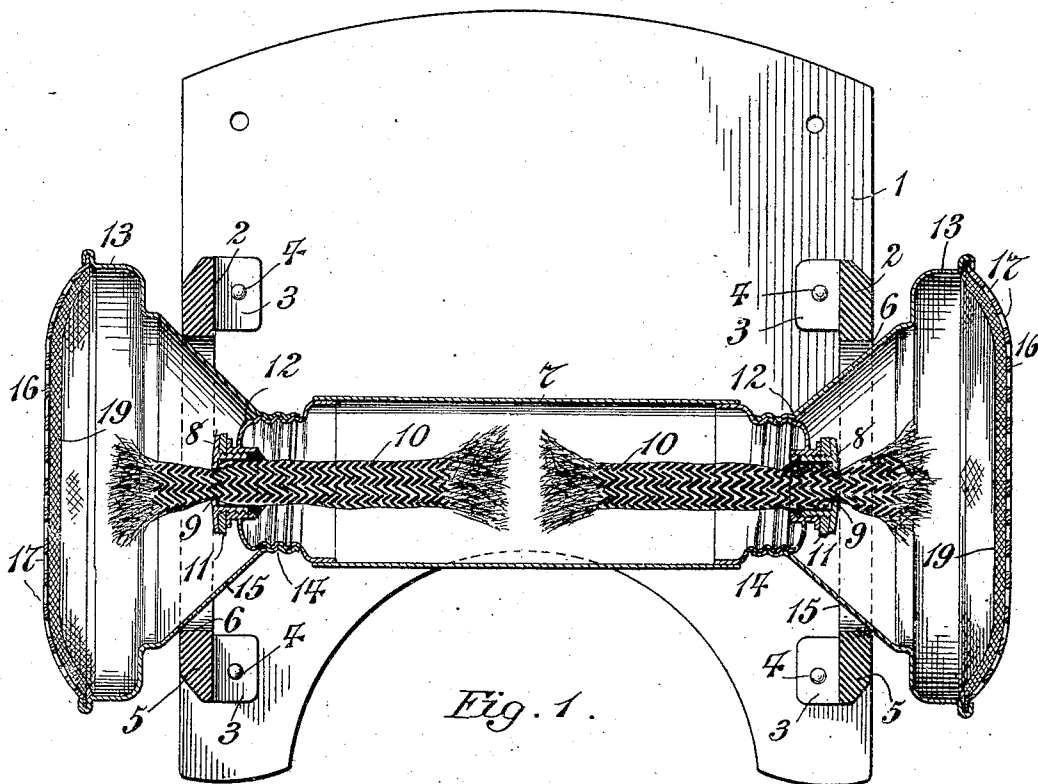
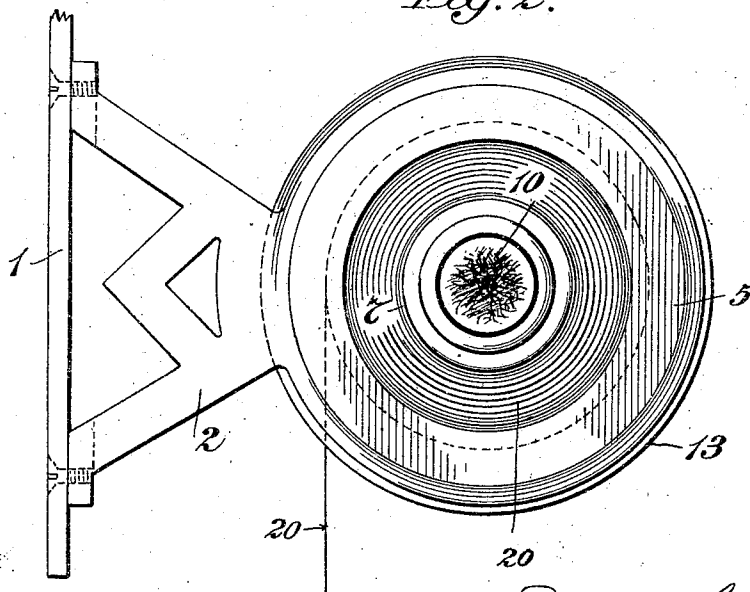


Fig. 1.

Fig. 2.



Witnesses:
Edward Dowland.
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By his Attorneys
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UNITED STATES PATENT OFFICE.

ZALMON G. SHOLES, OF NEW YORK, N. Y., ASSIGNOR TO WEST DISINFECTING COMPANY, A CORPORATION OF NEW YORK.

VAPORIZER.

No. 929,254.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed August 4, 1908. Serial No. 446,867.

To all whom it may concern:

Be it known that I, ZALMON G. SHOLES, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented a new and useful Improvement in Vaporizers, of which the following is a specification.

My invention relates to an apparatus for disseminating a disinfecting or deodorizing vapor.

It has for its particular object to provide a means for causing the vapor to be exuded from time to time in order that the vapor may be distributed throughout the surrounding atmosphere at all times.

It also has for a particular object to combine a device such as above referred to with a means for supporting paper and when the paper is unrolled in its use it will cause a distribution of the disinfected material and of the disinfectant vapor.

The invention consists in providing means for containing a disinfecting material and for supporting a means for causing the said material to become vaporized.

The invention also consists in a can having wicks adapted to support a means for causing the contents of the can to become agitated.

The invention also consists in providing a wick for feeding a liquid from one receptacle into another and a pad for causing the said material to become vaporized and to pass from the second named receptacle into the surrounding atmosphere.

The invention also consists in a means for causing the evaporation of the disinfecting material and for supporting a roll of paper which co-acts with the said means to cause the evaporation and distribution of the said material.

The invention consists in other features which appear in the drawings or which are described in the following description and which are set forth in the claims, it being understood that the drawing and description disclose merely one embodiment of my invention.

In the accompanying drawings, Figure 1 illustrates one embodiment of my invention and Fig. 2 is a side elevation of the same with one flaring end or head removed.

At 1 is shown a base board which is ordinarily supported in a vertical position. This may be attached to a wall or other

permanent fixture as by screws or by any other well known means. The base board 1 merely constitutes a convenient means for supporting the device illustrated.

At 2, 2, are supporting brackets which are attached to the supporting panel or base 1 by means of the inwardly extending ears 3, 3, and the screws or pins 4, 4. The brackets 2, 2, are provided with rings 5, 5, having square or angular interior edges 6, 6. The brackets 2, 2, support the receptacle for containing the volatile disinfectant. The receptacle is so made that it may be supported in the rings 5, 5, and may be turned therein, in the manner hereinafter described.

The receptacle for containing the disinfectant consists of a cylinder 7 having at each end screw threaded caps 8, 8, which are adapted to be screwed in to the ends of the cylinder 7. The caps 8 are centrally bored or are made hollow. A hole is formed at 9 having a diameter smaller than the bore through which the wick 10 may be drawn or forced but which is so small as to somewhat tightly squeeze the wick and thus hold the wick in position and yet which will at the same time allow the wick to transfer by capillary action a fluid or disinfectant that may be placed in the cylinder 7. This construction will also prevent the material from freely passing out of the cylinder 7 when held in a horizontal position. The cap 8 when closed is screwed against the washer 11 which prevents any leakage of the material. Each cap 8 is filled with litharge around the wick. The outer ends or heads 12, 12, are provided with screw threads.

A means for causing the disinfecting material to become more readily transformed into a vapor is attached to the ends or heads 12, 12 of the cylinder 7. This means consists of flaring shells 13, 13. The shells constitute a vapor disseminator as well as bearings for supporting the cylinder 7 and for supporting a means for causing the rotation of the cylinder and shells. The shells 13, 13, are attached to the heads 12 by the screw threads 14, 14. The shells 13, 13, pass through the rings 5, 5 and bear against the angular edges 6, 6, at the flaring portions 15, 15, of the shells. The wicks 10, 10 extend well outward into the shells 13, 13 and the fluid being transferred from the cylinder 7 by means of the wicks drops down into the lower part of the shells 13. As the cyl-

inder and shells are turned the disinfecting material is agitated and the capillary action is assisted and the material is transferred from one chamber into the other through the plugs.

The shells 13, 13 are provided with caps 16, 16. The caps 16, 16 have a large number of small holes 17, 17. Pads 19, 19 are placed on the inner surface of the caps 16, 16. The pads are made of a fibrous material or any material adapted to take up the disinfecting material.

The disinfecting material having been carried from the shell 7 and allowed to drop into the shells 13 is distributed around the edges of the pad 19 as the shells 13, 13 are turned and by capillary action and also by gravity the disinfecting material distributes itself over practically the entire area of the pad. This gives to the disinfectant a large area of vaporization.

The shell and the rings are so made that a roll of paper 20 may be placed thereon. As the paper is used it intermittently causes the rotation of the shells and cylinder and the consequent evaporation of the disinfectant.

It will be seen that it is one advantage of the form of disseminator shown that, by reason of the bearings which embrace the cylindrical container or reservoir being inside of the flaring chambers 12, these latter tend to hold the brackets 2 together, and thus prevent springing apart of the brackets accidentally, as by a blow, and consequent dropping of the paper roll and its support. At the same time the paper roll is very easily removed, without springing the brackets, by merely unscrewing one of the flaring heads.

What I claim as new and desire to secure by Letters Patent is as follows:

1. A vaporizer comprising a closed cylindrical reservoir adapted to hold liquid and having closing caps at its two ends; in combination with a disseminating chamber at each end of said reservoir having a perforated wall, and a wick extending through each cap from the interior of said reservoir to each disseminating chamber, substantially as described.

2. A vaporizer comprising a closed cylindrical reservoir adapted to hold liquid and

having closing caps at its two ends, said reservoir being adapted to serve as the axis of a roll of paper and to be rotated by the unwinding thereof; in combination with a disseminating chamber at each end of said reservoir having a perforated wall, and a wick extending through each cap from the interior of said reservoir to each disseminating chamber, substantially as described.

3. A vaporizer comprising a closed cylindrical reservoir adapted to hold liquid, brackets embracing the ends thereof, a flaring disseminating chamber at each end of said reservoir extending outside of said brackets, and a wick adapted to convey liquid from each end of said reservoir into one of said flaring chambers, substantially as described.

4. A vaporizer comprising a closed cylindrical reservoir adapted to hold liquid, brackets embracing the ends thereof so loosely as to permit the reservoir to be rotated easily, a flaring disseminating chamber at each end of said reservoir extending outside of said brackets, and a wick adapted to convey liquid from each end of said reservoir into one of said flaring chambers, substantially as described.

5. A vaporizer comprising a closed cylindrical reservoir adapted to hold liquid and to serve as the axis of a roll of paper and to be rotated thereby, a flaring chamber at each end of said reservoir having a perforated wall at the outer end, a pad within each chamber, and a wick adapted to convey liquid from said reservoir to said pad, substantially as described.

6. A vaporizer comprising a closed cylindrical reservoir adapted to hold liquid and to serve as the axis of a roll of paper and to be rotated thereby, a flaring chamber at each end of said reservoir having a perforated wall, a pad within each chamber extending over said perforated wall, and a wick adapted to convey liquid from said reservoir to said pad, substantially as described.

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

ZALMON G. SHOLES.

Witnesses:

F. F. CRAMPTON,
M. A. BUTLER.