E. J. BIEDER.

DIFFUSING DEVICE FOR DISINFECTANTS, DEODORANTS, OR OTHER FUMES.

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1,246,529.

Patented Nov. 13, 1917.

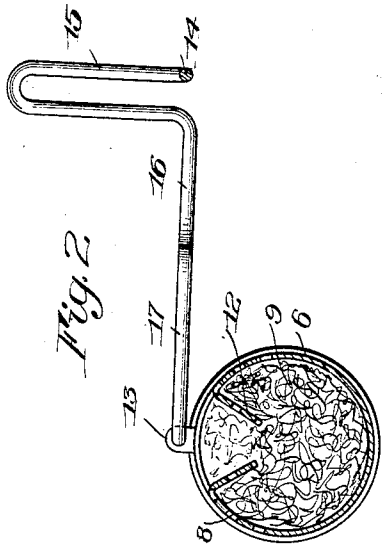


Fig. 2

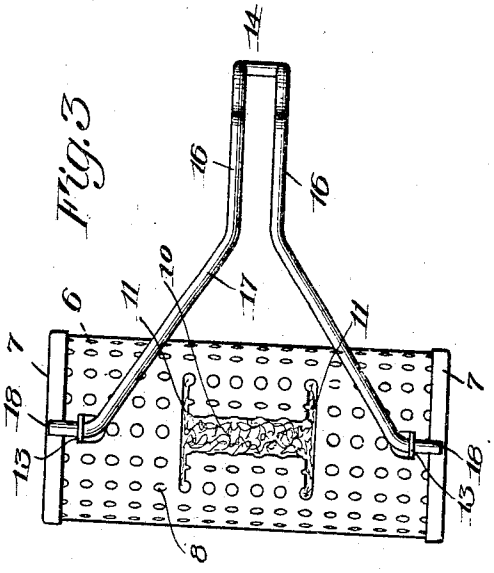


Fig. 3

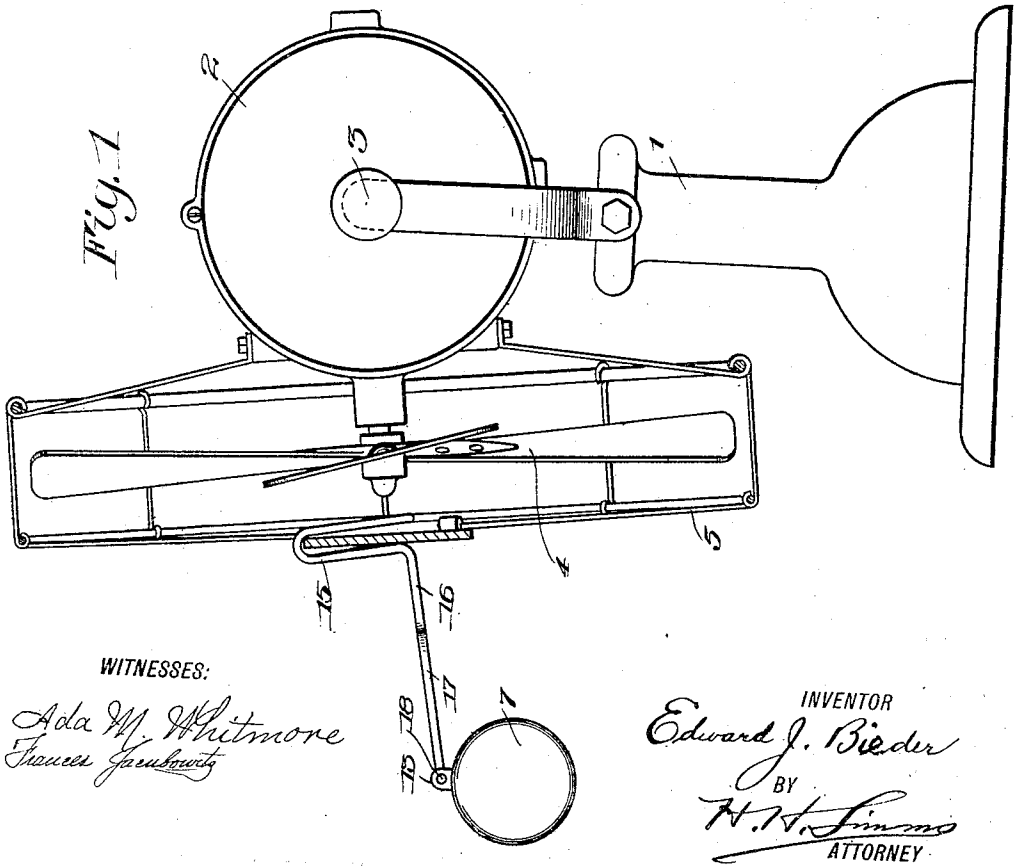


Fig. 1

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DIFFUSING DEVICE FOR DISINFECTANTS, DEODORANTS, OR OTHER FUMES.

1,246,529. Specification of Letters Patent. Patented Nov. 13, 1917.

Application filed March 17, 1916. Serial No. 84,861.

To all whom it may concern:

Be it known that I, EDWARD J. BIEDER, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Diffusing Devices for Disinfectants, Deodorants, or other Fumes, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

The present invention relates to diffusing devices for disinfectants, deodorants or other fumes and more particularly to that type adapted to be associated with electric fans or other blowers, an object of this invention being to provide a container for the material to be diffused, combined with means for supporting the container from the fan in such a manner that the container always assumes an upright position irrespective of the angle at which the fan operates. Another object of the invention is to provide a container of simple and inexpensive construction adapted to facilitate the proper discharge of the fumes by the action of a fan thereon.

To these and other ends, the invention consists in certain parts and combinations of parts all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings:

Figure 1 is a view of an electric fan in side elevation with the diffuser attached to such a fan;

Fig. 2 is a central vertical section through the device; and

Fig. 3 is a plan view of the container and its supporting means.

Referring more particularly to the drawings, 1 indicates a fan base pivotally supporting a motor casing 2 at 3, the motor casing carrying the fan 4 and the guard 5 surrounding the fan so that the guard and fan may operate in different planes at angles to the horizontal, all of which is of known construction and forms no part of the present invention.

The container in which the disinfectant or deodorant is arranged is preferably in the form of a tube 6 closed at its ends by imperforate caps 7. The uppermost portion of this tube or body portion 6 is formed with a number of small perforations distributed throughout the entire length of the tube to a point slightly to one side of the horizontal diameter of the tube, that portion of the tube below said diameter being imperforate so that the liquid disinfectant or deodorant will be held within the lower portion of the tube. Within the tube, a sponge or other absorbent material is arranged, this sponge being introduced through an opening in the top of the tube formed by making two transverse slits 11 and a horizontal slit connecting said transverse slits at their centers thus forming two tongues 12 which are bent inwardly into converging relation to prevent the accidental removal of the absorbent material.

To support the container so that its perforated portion lies uppermost for any adjustment of the fan, the container is pivotally suspended preferably by striking two perforated lips 13 upwardly from the body portion 6 and connecting the suspending device to said lips. In this instance, the suspending device is formed from a single piece of wire bent at 14 substantially midway between its ends, the two arms thus formed being bent near the connecting portion 14 in a downwardly opening hook or loop 15. From said loop 15, the arms extend parallel at 16 and then diverge at 17, having their extreme ends bent outwardly in alinement at 18 to pass through the lips 13.

The hook 15 is adapted to be fitted over any convenient portion of the fan guard so that the container is pivotally supported at some distance in front of the fan guard to hang at all times with its perforations uppermost in order that the blast from the fan will pass through the perforations and carry the fumes from the container into the room in which the fan is arranged. The container may be detached from the supporting bracket by pressing the diverging portions 17 together to withdraw the ends 18 from the lugs 13.

It will be thus seen that there has been provided a diffusing device which may be readily attached to any fan guard to support the container for the deodorant or disinfectant so that the blast from the fan will pass through the container and properly distribute the fumes. The container is always arranged with its openings uppermost so that there is no liability for it to discharge its liquid contents when the fan is arranged at different angles. The device may also be

employed independently of the fan by merely reversing the position of the loop 15 so that the connecting portion 14 may hang on a nail or other device, the hook 15 then serving as an abutment for holding the arms substantially horizontal.

What I claim as my invention and desire to secure by Letters Patent is:

1. A diffuser for disinfectants and deodorants comprising a container having a bottom formed to hold a liquid and its top and sides provided with openings, and an attaching member having a hook for securing it to a fan guard and projecting outwardly with reference to said hook, the attaching member being freely pivoted to the container at its outer end so that said container will automatically assume a position with its top uppermost.

2. A diffuser for disinfectants and deodorants comprising a container having a horizontally supported tubular body portion formed with a filling opening in its top and a plurality of small openings in its uppermost portion about the filling opening, and an attaching member having means for securing it to a fan guard and projecting outwardly with reference to said securing means, the container being freely pivoted to the outer end of said attaching member to automatically assume a position with its top uppermost.

3. A container of the class described comprising a horizontally supported tube formed with an imperforate bottom to provide a liquid holding portion and with small openings in the uppermost portions thereof and two inwardly extending converging tongues formed by transverse slits and a connecting transverse slit in the tube, said tongues acting to hold an absorbent material within the container.

EDWARD J. BIEDER.

Witnesses:
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ADA M. WHITMORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."