C. HAMMESFAHR.

DEODORIZING AND DISINFECTING DEVICE.

APPLICATION FILED AUG. 28, 1912.

1,091,929. Patented Mar. 31, 1914.

Fig. 1.

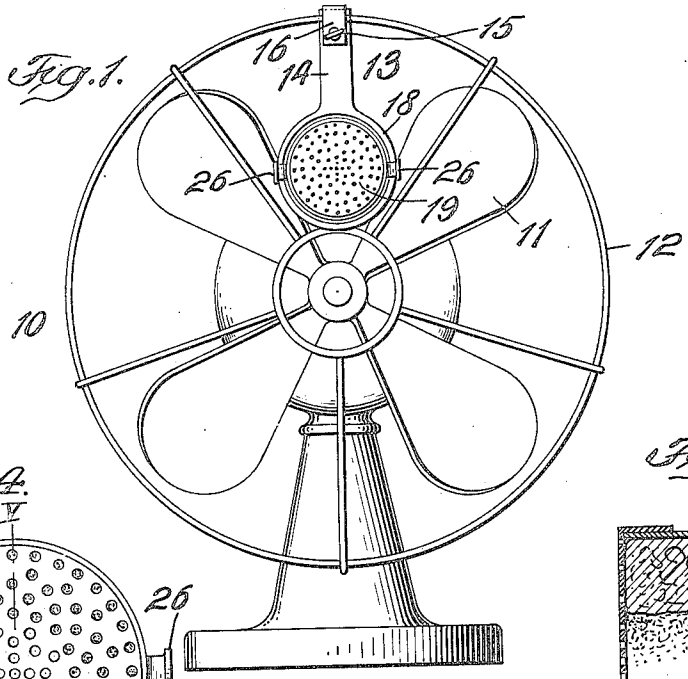


Fig. 4.

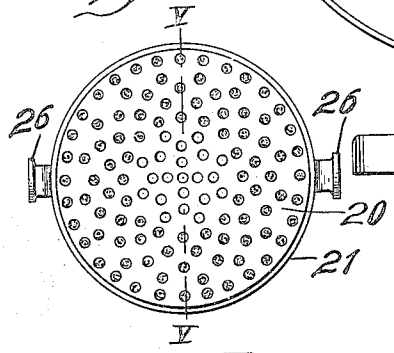


Fig. 5.

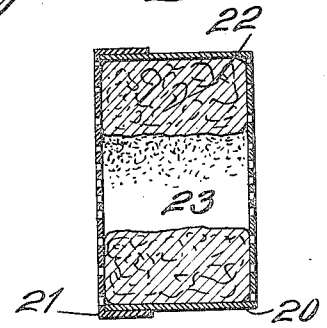


Fig. 2.

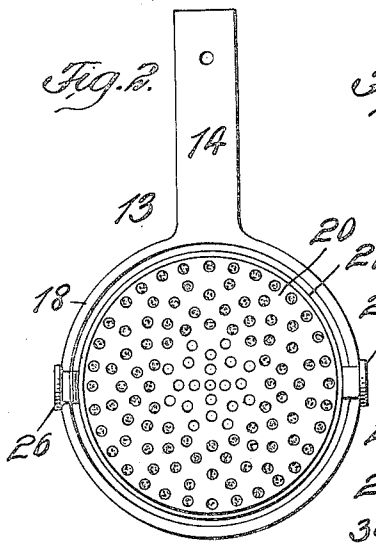


Fig. 3.

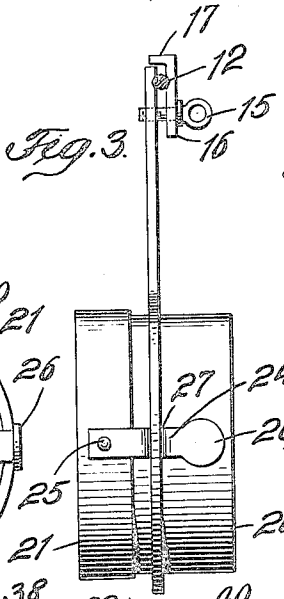


Fig. 6.

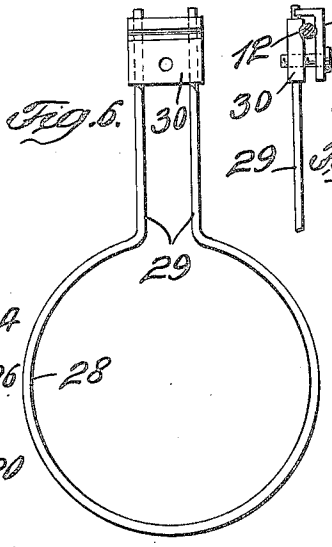
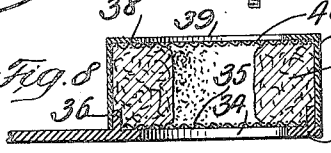


Fig. 7.

Fig. 8.



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UNITED STATES PATENT OFFICE.

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DEODORIZING AND DISINFECTING DEVICE.

1,091,929. Specification of Letters Patent. Patented Mar. 31, 1914.

Application filed August 28, 1912. Serial No. 717,508.

To all whom it may concern:

Be it known that I, CHARLES HAMMESFAHR, a citizen of the United States, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Deodorizing and Disinfecting Devices, of which the following is a full, clear, and exact description.

This invention relates more particularly to a device which is adapted to be attached to an electric fan in such a way that a part of the air from the fan may be caused to pass through the device and become saturated with a chemical or other element arranged in the device for the purpose of being diffused within a room.

One of the principal objects of the invention is to provide a simple and efficient device which may be readily attached to an electric or other fan to be used for disinfecting, deodorizing or other purposes, and which device is so constructed that the character of the diffusing element may be readily changed or the fan readily arranged to be operated in the usual way without the deodorizing or disinfecting member of the device.

Another object of the invention is to provide a simple and efficient device which may be carried about and readily attached to a fan or arranged in any other convenient place.

A further object of the invention is to provide a device which is inexpensive to manufacture and which is adapted to be readily applied to a support or to be detached therefrom.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is an elevation of an electric or other fan with one form of device embodying my invention applied thereto. Fig. 2 is an enlarged front elevation of the device. Fig. 3 is a side elevation. Fig. 4 is a detail elevation of the deodorizing or disinfecting member detached from the supporting bracket. Fig. 5 is a vertical section taken on the line V—V of Fig. 4. Fig. 6 is a detail view of a different form of supporting bracket. Fig. 7 is a side elevation of the attaching part of the supporting bracket; and Fig. 8 is a fragmentary sectional view showing a different form of bracket and deodorizing and disinfecting member.

The fan 10 has the rotary blades 11 about which is a wire guard 12, which are of the usual or may be of any preferred construction.

A bracket 13 has a stem portion 14 in which is a threaded aperture adapted to be engaged by a thumb or winged bolt 15. The threaded stem of this bolt passes through an aperture in a clamp member of plate 16 and is adapted to be forced toward the stem 14 and to clamp and rigidly hold the bracket to the guard 12, as shown best in Figs. 1 and 3. The plate 16 is provided with a lip or projecting portion 17 which is adapted to engage and move over the outer edge of the stem 14 and prevent the clamping plate from rotating, thereby serving better to properly clamp and hold the bracket to said guard.

The bracket 13 has an enlarged head or part 18. This enlarged part is substantially annular and passing through said head is a box-like deodorizing or disinfecting member 19. This member 19 may be variously constructed and is adapted to be detachably held to said bracket in any suitable way. As shown, the member 19 has a body or member 20 and a cover or member 21 which is adapted to fit over the open end of the member 20. The box members 20 and 21 have their ends perforated to permit air to pass therethrough and arranged within the member 20 between said perforated ends is a fibrous body or element 22. This fibrous element may be cotton or any other suitable material and may be arranged in an annular form so as to provide a central open portion 23 for the better passage of the air therethrough, and said element may be saturated with some substance or chemical, as for example, oil of pine, perfume or some suitable substance whereby the atmosphere may be charged by the vapor mixing with the air as it passes through the perforated ends or heads of the member 19 and through or past the saturated element 22. It will be evident that as the fan rotates air will be either forced through or drawn through the member 19 and saturated with a volatile substance according to whether the device is located at the front of the fan or at the rear thereof and that the air thus saturated may be caused to circulate in the room for the purpose of disinfecting or deodoriz-

ing the same according to the material used in the device. It will be further evident that the device may be carried about by those traveling or be used in sick rooms and readily attached to a fan or other device; and further that the deodorizing or disinfecting member may be readily attached to or detached from the bracket leaving the bracket in position, thereby allowing the air to be circulated in a room without being charged by the chemical or other element or a new device with another chemical may be substituted without removing the bracket from its position.

As a simple means for detachably connecting the member 19 to the bracket, I provide two clips or clasps 24 located on diametrically opposite sides of said member. These clasps may be of spring metal and may have one end fastened as at 25 to the cover 21 of the member 19 and at its other end provided with a finger portion, as 26, whereby the device may be moved toward the member body. Each clasp or clip 24 may have a grooved part 27 which is adapted to fit the inner edge of the bracket head and hold the member 19 to said head. By pressing the finger portions 26 inward toward the body of the member 19, the said member may be readily detached from the bracket or as readily applied to said bracket.

In Figs. 6 and 7, the bracket instead of being cast or formed as shown in Figs. 1 to 3, may be made of wire bent to form a head 28 with projecting stem portions 29. These stem portions may fit into apertures in a block 30 to hold the same, and held to the block is a clamping plate 31. The clamping plate 31 is substantially the same as the clamping plate 16 of Fig. 3 and is adapted to be held against the block by a thumb bolt 32 to adapt the guard or other support 12 to be rigidly held between said plate and the block 30. The deodorizing or disinfecting member is adapted to be held to the head 28 in the same manner as it is held to the bracket 13.

Fig. 8 shows a somewhat different construction from that of the other figures. The bracket 33 may be cast and provided with an opening 34 over which may be a gauze or perforated plate 35. The bracket is provided with an annular ledge 36 about which is adapted to fit a box-like member 37. The member 37 has an inturned portion 38 providing an opening 39 which is adapted to be covered by a gauze or perforated member 40. A fibrous element 41 is arranged between the two members 35 and 40, and said element is adapted to be saturated with material and the air caused to circulate therethrough in the manner substantially as already described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. In a deodorizing device, the combination with means for creating a current of air, of a bracket adapted to be attached to said means and having an open frame, a perforated receptacle for absorbent material, and spring clips secured to the receptacle and having grooves to engage the frame of the bracket for detachably holding said receptacle to said bracket.

2. In a deodorizing device, the combination with means for creating a current of air, of a bracket adapted to be attached to said means and having an open frame, a perforated receptacle for absorbent material, and spring clips, each secured at one end to the receptacle and having finger portions at the other end and a groove in its intermediate portion to engage the frame of the bracket for detachably holding said receptacle to said bracket.

This specification signed and witnessed this 26th day of August A. D. 1912.

CHARLES HAMMESFAHR.

Witnesses:
JOHN C. MCEACHEN,
L. I. MAYER.