

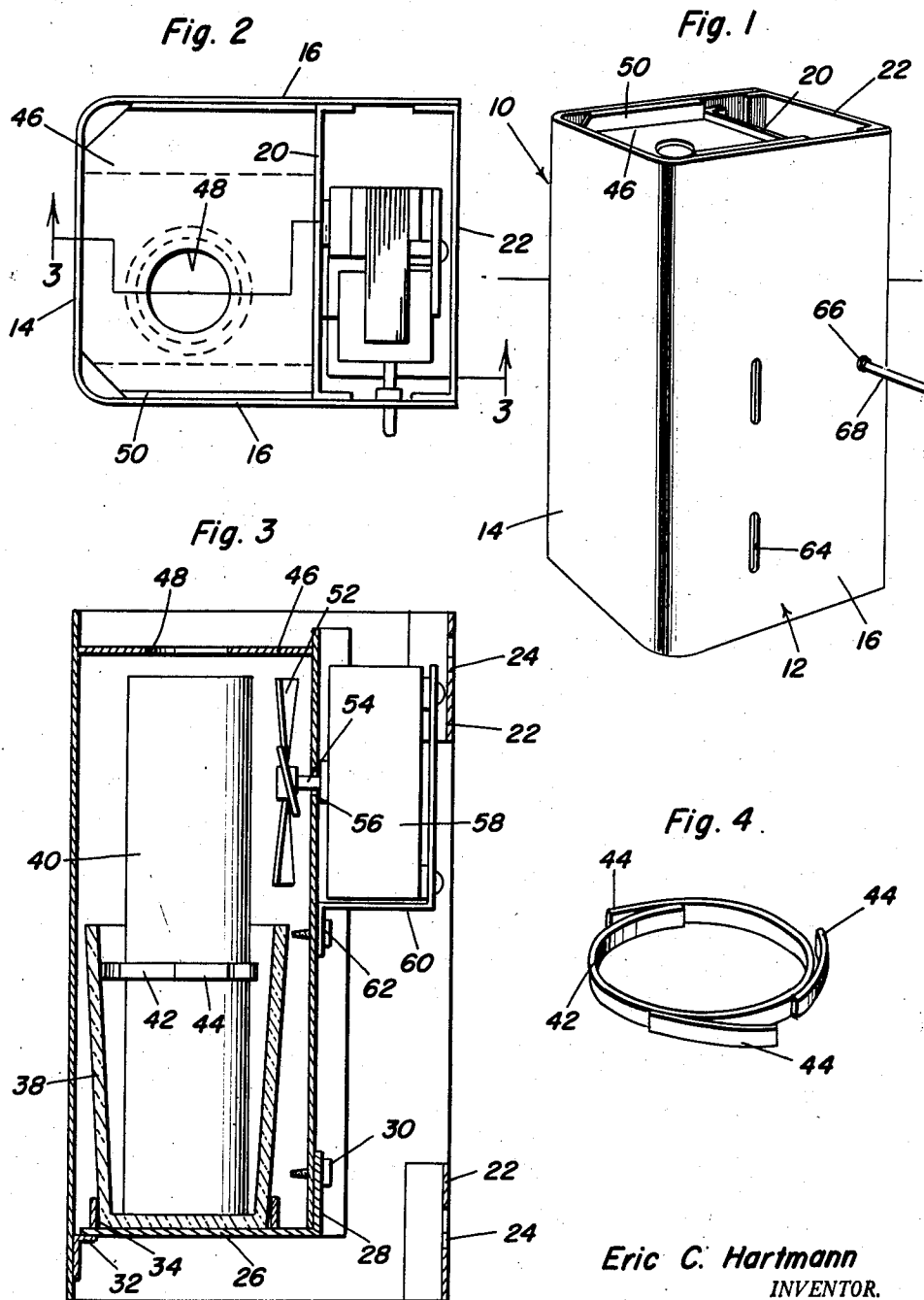
April 1, 1958

E. C. HARTMANN
ODORANT DISPENSER

2,828,953

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2 Sheets-Sheet 1



Eric C. Hartmann
INVENTOR.

BY *Almonce W. Brown*
and *Harvey R. Jacobson*
Attorneys

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Fig. 5

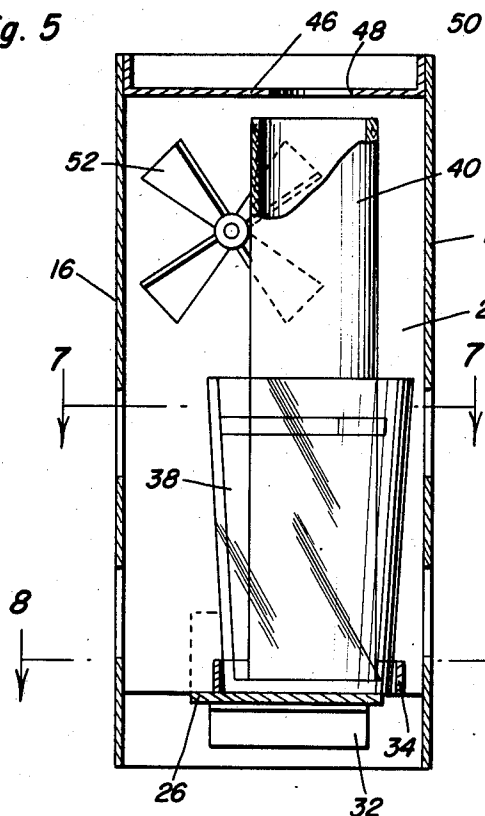


Fig. 6

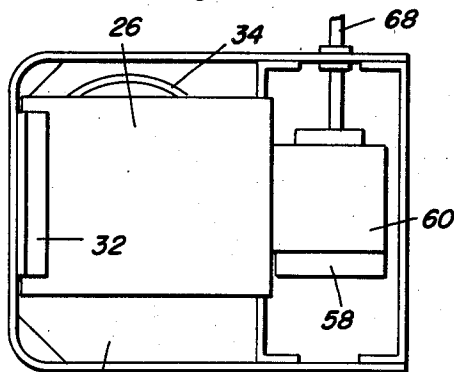


Fig. 8

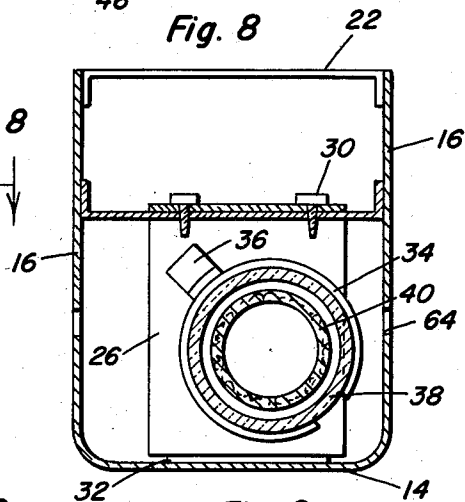


Fig. 7

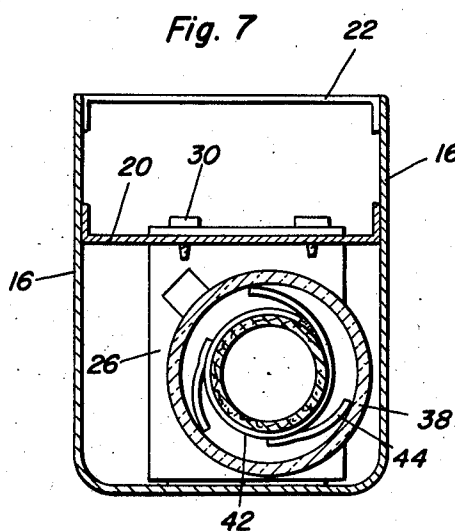
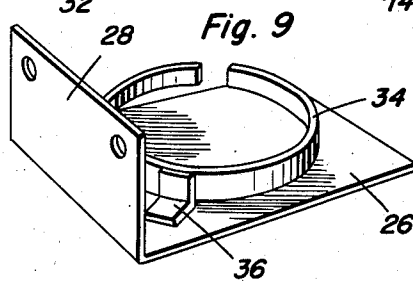


Fig. 9



Eric C. Hartmann
INVENTOR.

BY *Almonce A. O'Brien*
and *Harvey B. Jacobson*
Attorneys

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2,828,953

ODORANT DISPENSER

Eric C. Hartmann, North Miami, Fla., assignor to Dade Disinfecting Company, Inc., Miami, Fla., a corporation of Florida

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1 Claim. (Cl. 261—30)

This invention generally relates to an odorant dispenser, and more specifically provides an improved and novel construction of that type of device generally illustrated in my Patent No. 2,698,767, issued January 4, 1955.

An object of the present invention is to provide an odorant dispenser having means thereon for circulating air about an absorbent wick member.

Another object of the present invention is to provide an odorant dispenser including a receptacle having a wick extending therefrom together with means for centering the wick within the receptacle.

Still another important object of the present invention is to provide an odorant dispenser which is simple in construction, easy to assemble, easy to refill with liquid odorant, inexpensive in manufacture, and well adapted for its intended purposes.

Yet another important feature of the present invention is to provide an odorant dispenser including a vertically elongated wick mounted in a vertical tubular housing wherein liquid odorant may be elevated into the path of movement of air caused by a fan by capillary action thereby efficiently and effectively distributing the odorant into the air for ridding the air of unpleasant odors.

Another important feature of the present invention is to provide a positive separation between the electric motor, which operates the aforesaid fan, from the odorant fluid, to eliminate shorting out the electric motor and to prevent a potential fire hazard.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the odorant dispenser of the present invention;

Figure 2 is a top plan view of the construction of Figure 1;

Figure 3 is a longitudinal, vertical sectional view taken substantially upon a plane passing along section line 3—3 of Figure 2 illustrating the details of construction thereof;

Figure 4 is a perspective view of the wick locating means for engaging the interior of the receptacle;

Figure 5 is a transverse, vertical sectional view illustrating the relationship of the elements of the present invention;

Figure 6 is a bottom plan view of the odorant dispenser;

Figure 7 is a plan sectional view taken substantially upon a plane passing along section line 7—7 of Figure 5 showing the wick centering means;

Figure 8 is a plan sectional view taken substantially upon a plane passing along section line 8—8 of Figure 5 illustrating the receptacle holding means and the construction of the shelf; and

Figure 9 is a perspective view of the shelf construction utilized in the odorant dispenser.

Referring now specifically to the drawings, it will be

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seen that the numeral 10 generally designates the odorant dispenser of the present invention including a tubular housing generally designated by the numeral 12 including a front wall 14, side walls 16, a rear wall 20 and vertically spaced mounting brackets 22 attached to the side walls 16 and extending therebetween in rearward spaced relation to the rear wall 20. Keyhole slots 24 are provided in the brackets 22 for attachment to headed fasteners in a supporting wall (not shown).

The tubular housing 12 is open at both ends and is supported in vertical relation.

Secured to the rear wall 20 adjacent the bottom thereof is a horizontally disposed shelf 26 having an upstanding flange 28 attached to the outer surface of the rear wall 20 by screw threaded fasteners 30. The shelf 26 is of less cross-sectional area than that area defined by the front wall 14, side walls 16 and the rear wall 20. The forward end of the shelf 26 is supported on a horizontally disposed ledge 32 secured to the inner surface of the front wall 14 wherein the shelf 26 may be removed by removing the screw threaded fasteners 30.

Disposed on the upper surface of the shelf member 26 is a split ring of resilient material 34 secured to the upper surface of the shelf 26 by a bracket 36 wherein the split ring 34 frictionally and resiliently engages the bottom of a receptacle 38 which tapers upwardly and outwardly for holding liquid odorant. The receptacle 38 may be of any suitable construction, but is preferably constructed of glass wherein the annular split ring 34 of resilient material will engage the outer surface of the receptacle 38 for holding the receptacle 38 in position on the upper surface of the shelf 26.

Disposed within the receptacle 38 and extending upwardly therefrom is a tubular wick member 40 of absorbent material, such as asbestos or the like. Normally, the wick 40 is disposed within liquid odorant positioned in the receptacle 38 wherein the liquid odorant will be elevated by capillary action for increasing the area exposed to circulating air thereby dispensing the odorant to the air.

For holding the wick member 40 in centered relation in the receptacle 38, an annular member 42 is provided in surrounding relation to the wick 40 wherein the annular member 42 is provided with flat spring members 44 for engagement with the inner surface of the receptacle 38. The spring members 44 extend somewhat tangentially from the surface of the annular member 42 wherein the springs 44 will frictionally and releasably retain the wick member in centered relation within the receptacle 38.

Disposed above the upper end of the wick 40 is a closure plate 46 having an enlarged aperture 48 in overlying relation to the open upper end of the wick 40. The plate 46 is provided with upstanding side flanges 50 for attachment to the inner surface of the side walls 16 of the housing 12, and the plate 46 is spaced from the upper end of the wick 40. The opening 48 permits liquid odorant to be poured into the interior of the wick 40 wherein the liquid odorant will be deposited in the receptacle 38, thereby refilling the receptacle 38 through the opening 48. Normally, air will circulate through the tubular housing 12 by normal convectional currents, but in some areas, the normal circulation of air will not be sufficient to dispense odorant to such air.

In order to assure air circulation, a fan 52 is provided within the tubular housing and includes a mounting shaft 54 which projects through an opening 56 in the rear wall 20 and extends into a suitable electric motor 58. A generally right angular bracket 60 is provided for supporting the electric motor 58 and the bracket 60 is attached to the rear surface of the back wall 20 by screw threaded fasteners 62, thereby mounting the electric motor 58 for rotating the fan 52 within the tubular hous-

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ing 12 wherein air will be circulated around the wick members 40 for evaporating the liquid odorant thereon for dispensing such odorant to the air which may pass through opening 48 and past shelf 26. Also, it will be seen that the side walls 16 are provided with openings or slots 64 for permitting passage of air, and a suitable grommet fitting 66 is provided for permitting passage of an electrical conductor 68 for energizing the electric motor 58 when desired. Also, suitable switch means may be provided for controlling operation of the electric motor and the switch, whereby the fan may be selectively controlled, if desired.

It will be seen that the present invention provides an odorant dispenser which assures adequate air circulation for evaporating liquid odorant from a wick member, thereby assuring sufficient odorant in the air to eliminate unpleasant odors as desired.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

An odorant dispenser for attachment to a vertical wall comprising an elongated vertically disposed tubular housing, a shelf of less cross-sectional area than said housing detachably secured therein adjacent the bottom of the housing for permitting vertical circulation of air in the housing, an upwardly opening receptacle removably positioned on said shelf, an absorbent member disposed in said receptacle and extending upwardly above the upper end of said receptacle, said absorbent member rest-

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ing against the bottom of the receptacle for assuring contact of the absorbent member with liquid disposed in the receptacle, fan means disposed within said housing for circulating air over the absorbent member and through said tubular housing, a plate disposed in the upper end of the tubular housing and including an aperture overlying the receptacle in spaced relation for permitting the liquid in the receptacle to be replenished, said plate being disposed in spaced relation to the upper end of the absorbent member for permitting circulation of air between the plate and absorbent member and passage of air through the aperture in the plate, said shelf having means for resiliently gripping the bottom of the receptacle mounted thereon for maintaining the receptacle in spaced relation to the tubular housing, and centering means attached to the absorbent member for spacing the absorbent member from the receptacle for assuring contact of the air with the entire exposed surface of the absorbent member and the upper surface of the liquid in the receptacle.

References Cited in the file of this patent

UNITED STATES PATENTS

25	829,707	Fries	Aug. 28, 1906
	1,534,343	Bernotow	Apr. 21, 1925
	1,834,092	Decrow	Dec. 1, 1931
	2,022,680	Loepsinger	Dec. 3, 1935
	2,614,820	Boydjjeff	Oct. 21, 1952
30	2,631,023	Bailey	Mar. 10, 1953
	2,662,609	Krohm	Dec. 15, 1953

FOREIGN PATENTS

	108,378	Australia	Aug. 24, 1939
35	466,172	France	Feb. 23, 1914