

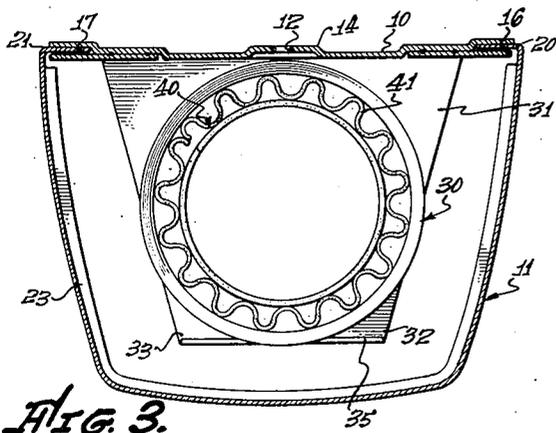
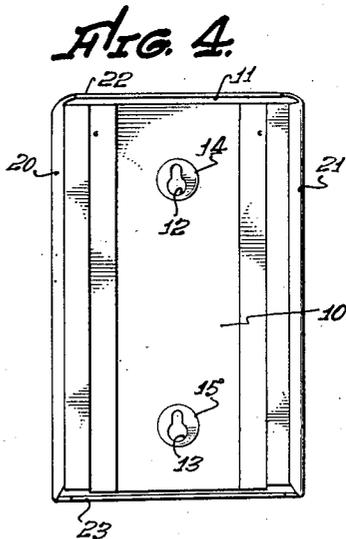
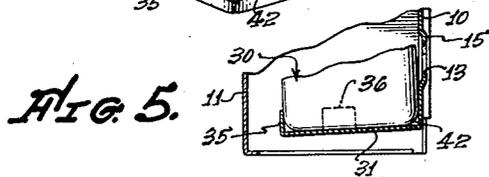
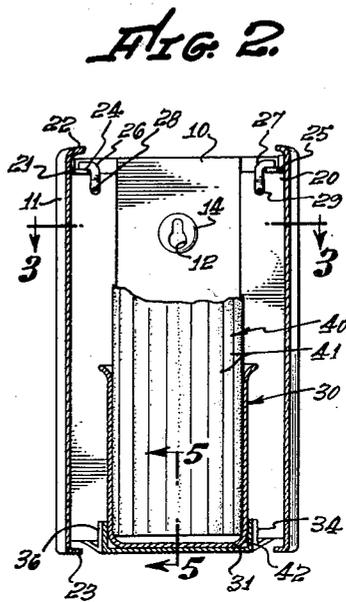
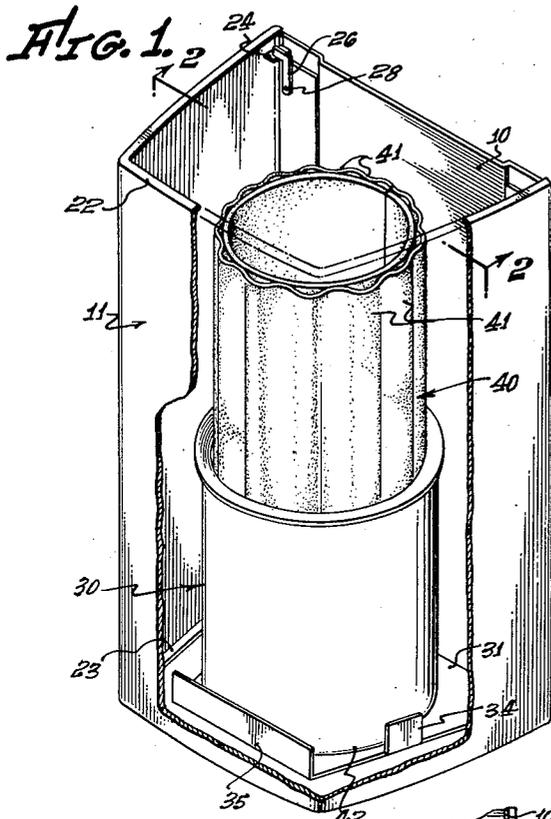
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2,802,695

ODORANT DISPENSER

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2,802,695

ODORANT DISPENSER

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3 Claims. (Cl. 299—24)

This invention relates to odorant dispensers and, more particularly, to a dispenser especially adapted for use with liquid odorants.

An object of the invention is to provide an odorant dispenser for use in public washrooms, or the like, wherein it is desirable to impart a relatively strong, pleasing odor to the atmosphere.

Another object of the invention is to provide an odorant dispenser which is simple in design and one that may be easily maintained and quickly refilled.

A further object of the invention is to provide an odorant dispenser which is also adapted to the use of liquid or solid odorants.

A further object of the invention is to provide an odorant dispenser having a liquid odorant absorbing wick for transporting liquid odorant from a container into the path of air currents moving through the dispenser. Another object of the invention is to provide such a wick having a fluted or corrugated surface whereby a greater amount of odorant may be imparted to the air currents.

An object of the invention is to provide an odorant dispenser having a container for liquid odorant that also shapes the wick and includes means for spacing the wick from the bottom of the cup whereby liquid odorant may flow under the wick and wet all the lower surfaces thereof.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawings merely show and the description merely describes a preferred embodiment of the present invention which is given by way of illustration or example only.

In the drawings:

Fig. 1 is an isometric view of an embodiment of the invention having a portion of the outer shell broken away;

Fig. 2 is a sectional view along the line 2—2 of Fig. 1 with a portion of the wick removed;

Fig. 3 is a sectional view along the line 3—3 of Fig. 2;

Fig. 4 is a back elevational view of the embodiment of Fig. 1; and

Fig. 5 is a partial sectional view along the line 5—5 of Fig. 2.

The preferred embodiment of the invention includes a hollow shell having upper and lower openings therein, a liquid container or cup positioned inside the hollow shell and a wick of liquid absorbing material mounted in the cup and extending upward therefrom. The shell may be a unitary piece or it may be made in two pieces including a back plate 10 and a housing 11. The dispenser may be adapted to be mounted on a wall or door and this may be accomplished by providing suitable openings 12, 13 in the plate 10 through which a nail, a screw, or the like, will pass. As illustrated in Fig. 3, the plate 10 is made from sheet metal and portions 14, 15 thereof are dimpled providing locations for the openings 12, 13.

When the outer shell of the dispenser is made in two

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pieces, suitable means may be provided for assembling the two pieces so that they may be easily and quickly disassembled. In the embodiment illustrated, the plate 10 is provided with vertical grooves 16, 17 at each side thereof. The housing 11 may be made of sheet metal and, as illustrated in Fig. 3, is substantially U-shaped in horizontal section. Inwardly turned flanges 20, 21 are provided at each end of the U-shaped section to mate with the grooves 16, 17 of the back plate 10. Ridges 22, 23 are provided around the upper and lower edges of the housing 11, giving added strength to the housing and defining the upper and lower openings of the housing.

The housing 11 is assembled to the plate 10 by engaging the flanges 20, 21 in the grooves 16, 17 and sliding the housing downward into the position shown in Fig. 1. Portions of the flanges 20 and 21 are bent over to form tabs 24, 25 which engage the back plate 10 and serve to position the housing 11 with respect to the plate 10. Latches 26, 27 are pivotally mounted on the plate 10 by suitable means, such as rivets 28, 29 and are positioned so that they may be pivoted to engage the tabs 24, 25 and prevent upward movement of the housing 11 with respect to the plate 10.

A liquid container or cup 30 is positioned within the shell and serves to hold the liquid odorant. The cup 30 is smaller in horizontal area than the interior of the housing 11 so that air currents may pass upward through the bottom of the housing 11 and around the cup 30.

The cup 30 may be mounted on a platform 31 which extends outward from the lower portion of the plate 10 into the area enclosed by the housing 11. It is preferred to have the platform 31 slope slightly downward as well as outward from the plate 10 so that any liquid which may spill onto the platform or which may run down the outside of the cup will drip from the corners 32, 33 of the platform rather than run down the wall against which the dispenser is mounted. The cup 30 may be removably mounted on the platform 31 and, in the embodiment illustrated, resilient flanges 34, 35, 36 are provided on the platform 31 for gripping the cup when it is placed in position on the platform. The horizontal area of the platform 31 is also made less than the area enclosed by the housing 11 so that air currents may pass upward through the housing.

A wick 40 composed of a liquid absorbing material is positioned within the cup 30 and extends vertically upward therefrom. A durable fibrous material, such as asbestos or the like, has been found very suitable as a wick. The wick may be provided with a vertical opening extending therethrough; such an opening provides space for the liquid odorant within the cup and also provides an easy means for filling the cup. It is preferred that the wick have flutes or corrugations 41 on its inner and/or outer surfaces in order to expose a greater amount of wick surface to the air currents. In the embodiment of the invention illustrated, the wick 40 is composed of a corrugated sheet of material which has been rolled into a tubular form. This tube is then inserted into the cup 30 and the walls of the cup serve to retain the sheet in its tubular form. This type of wick is easily transported and stored because the wick does not have to be rolled into the tubular form until it is ready to be inserted into the cup. Hence, there is no loss due to crushed or deformed wicks.

The odorant dispenser described above may be placed in service by mounting the plate 10 to a suitable wall or door. The cup 30 and the wick 40 are then placed in position on the platform 31. The housing 11 is slid downward into position around the cup and wick and the housing is locked in place by turning the latches 26, 27. The liquid odorant is then poured into the center opening of the wick 40.

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The bottom of the cup 30 is provided with a rounded edge 42, as shown in Fig. 2. Since the wick 40 fits snugly against the inner wall of the cup 30, it engages the rounded edge 42 and does not rest on the bottom of the cup. This spacing of the wick above the bottom of the cup is important because it permits the liquid odorant to flow under the entire wick rather than forcing it to move through the wick to get to the outer surface thereof. This permits a higher rate of transmission of the liquid odorant from the cup to the outer surface of the wick exposed to the passing air currents.

The odorant dispenser of the invention is also suitable for use with odorants in solid form. The wick 40 may be removed and the solid odorant may be placed in the cup 30, or, preferably, both the cup and wick can be removed and the solid block of odorant can then be mounted on the platform 31.

Since certain changes may be made in the above-described construction and different embodiments of the invention may be made without departing from the spirit or scope thereof, it is intended that all of the matter contained in the above description and shown in the accompanying drawing shall be considered as illustrative and not in a limiting sense.

I claim as my invention:

1. In an odorant dispenser, the combination of: a vertically extending plate adapted to be mounted on a wall and having vertical guide means; a removable housing slidably positioned in said guide means, said housing having openings at the top and bottom thereof; latch means coacting with said plate and said housing and locking said housing into fixed relationship with said plate; a platform extending outward and downward from the lower portion of said plate, and into the area enclosed by said housing, said platform being of less horizontal area than said housing whereby air may flow upward through said bottom opening and around said platform; a liquid-tight cup removably mounted on said platform, said platform including resilient means clamping said cup in place, said cup having a rounded bottom; and a liquid absorbing wick removably positioned in said cup and projecting upward therefrom, said wick having a vertical opening extending therethrough and having a vertically corrugated surface, said wick contacting the inner wall

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of said cup above said rounded bottom whereby said wick is spaced from said bottom permitting a liquid in said cup to flow under said wick.

2. In an odorant dispenser, the combination of: a vertically extending plate adapted to be mounted on a wall and having vertical guide means; a removable housing slidably positioned in said guide means, said housing having openings at the top and bottom thereof; a platform extending outward and downward from the lower portion of said plate and into the area enclosed by said housing, said platform being of less horizontal area than said housing whereby air may flow upward through said bottom opening and around said platform; a liquid-tight cup mounted on said platform, said cup having a rounded bottom; and a liquid absorbing wick removably positioned in said cup and projecting upward therefrom, said wick having a vertical opening extending therethrough and having a vertically corrugated surface, said wick contacting the inner wall of said cup above said rounded bottom whereby said wick is spaced from said bottom permitting a liquid in said cup to flow under said wick.

3. In an odorant dispenser, the combination of: a shell adapted to be mounted on a wall and having top and bottom openings therein; a platform extending outward and downward from a lower portion of said shell into the area enclosed by said shell, said platform being of less horizontal area than said shell whereby air may flow upward through said bottom opening and around said platform, said platform including cup means having a rounded bottom; and a liquid absorbing wick removably positioned in said cup means and projecting upward therefrom, said wick having a vertical opening extending therethrough and having a vertically corrugated surface, said wick contacting the inner surface of said cup means above said rounded bottom whereby said wick is spaced from said bottom.

References Cited in the file of this patent

UNITED STATES PATENTS

1,839,357	Thorson et al. _____	Jan. 5, 1932
2,166,969	Rooch _____	July 25, 1939
2,559,126	Lien _____	July 3, 1951
2,698,767	Hartman _____	Jan. 4, 1955
2,723,158	Molina _____	Nov. 8, 1955