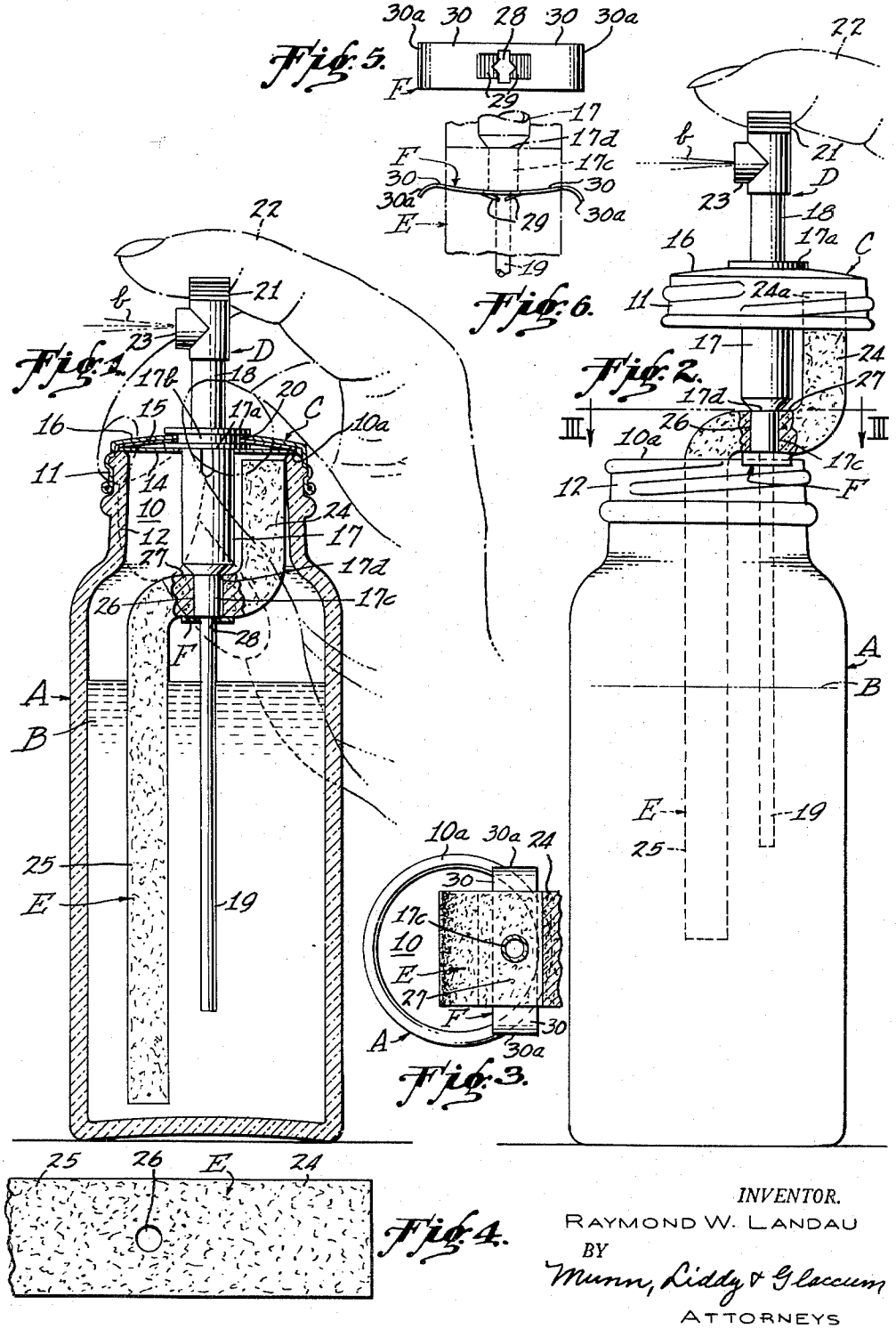
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DISPENSER FOR DEODORANTS

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DISPENSER FOR DEODORANTS

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4 Claims. (Cl. 299—20)

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The present invention relates to improvements in a dispenser for deodorant. It consists of the combinations, constructions and arrangement of parts, as hereinafter described and claimed.

It is a common practice to employ a wick for conveying deodorant by capillary attraction from a container, and allowing the deodorant to evaporate from an exposed part of the wick into the atmosphere for the purpose of reducing and killing obnoxious odors. Such dispensers are often used in kitchens, bath rooms, the room of a patient, or the like.

However, dispensing of deodorant by the evaporation method often is insufficient to overcome prevailing odors, mainly due to the limited capacity of the wick and the relatively small area of the latter exposed to the atmosphere.

Accordingly, I propose to provide a dispenser having a wick arranged to convey deodorant into the atmosphere in sufficient quantity to overcome a normal amount of odor; and further provide an atomizer allowing additional deodorant to be sprayed into the atmosphere for killing excess odors. Further, the atomizer may be employed for rapidly reducing or killing high concentration of odors; and thereafter, the wick utilized for overcoming normal amount of odor. The wick and atomizer can be used independently of one another, according to prevailing conditions of odors, or both may be employed simultaneously.

Other objects and advantages will appear as the specification continues. The novel features of my invention will be set forth in the claims hereunto appended.

For a better understanding of the invention, reference should be had to the accompanying drawing, forming part of this application, in which:

Figure 1 is a vertical sectional view taken through my dispenser with the container closed, parts being shown in elevation;

Figure 2 is a side elevation thereof, partly in section, and disclosing the wick exposed to the atmosphere and the atomizer being actuated for spraying deodorant;

Figure 3 is a horizontal sectional view taken along the line III—III of Figure 2;

Figure 4 is a fragmentary face view of the wick;

Figures 5 and 6 are top plan and side elevational views, respectively, of a clamp that I employ.

While I have shown only the preferred form of my invention, it should be understood that various changes, or modifications, may be made

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within the scope of the annexed claims without departing from the spirit thereof.

In carrying out my invention, I provide a container indicated generally at A for holding a deodorant B. The container includes a mouth 10 defining a rim 10*a*. It will be noted that a cap C is provided for forming a closure over the mouth of the container. The cap has a depending marginal flange 11 adapted to be threaded upon the neck 12 of the container, or otherwise secured thereto. Gaskets 14 and 15 are interposed between the rim 10*a* of the container and the disc 16 of the cap.

For the purpose of spraying deodorant into the atmosphere, I make use of a pump unit indicated generally at D. This unit may be made of any desired construction, for example, the unit disclosed in United States Letters Patent No. 2,362,080, granted November 7, 1944. The pump unit includes a barrel 17 having a reciprocating plunger 18 mounted therein. A tube 19 extends downwardly from the pump barrel into the deodorant B.

The pump unit D is carried by the cap C and has its barrel 17 extending through an opening 20 in the cap disc 16. Annular flanges 17*a* project from the barrel 17, with the gasket 15 and disc 16 fitting into a circumferential groove 17*b* provided between the flanges 17*a* (see Figure 1).

The upper end of the plunger 18 is fashioned with a saddle 21 adapted to receive a person's finger 22 for depressing the plunger of the pump unit. A coil spring (not shown) is mounted in the barrel 17 for yieldingly urging the plunger upwardly. An atomizer 23 surmounts the plunger and is adapted to deliver a finely-divided spray *b* of deodorant into the atmosphere each time the plunger is depressed. Thus, a person can operate the pump unit for discharging deodorant for rapidly overcoming a large concentration of obnoxious odors.

A wick E is employed for conveying the deodorant B by capillary attraction for evaporation into the atmosphere from an upper section 24 when the cap C is moved into raised position above the container A (see Figure 2). The lower end 25 of the wick extends into the deodorant in the container. This wick is anchored to the barrel 17, and thus the upper section 24 will be exposed to the atmosphere when the cap C is unthreaded and moved into raised position above the rim 10*a* (see Figure 2). The amount of deodorant evaporating from the upper exposed section 24 of the wick will be sufficient for killing the normal amount of odor prevailing in a room.

It will be noted that the barrel 17 has a lower reduced end 17*c* that is telescoped through an opening 26 provided in the wick until a horizontally-disposed section 27 of the wick rests against a shoulder 17*d* formed on the barrel just above the reduced end 17*c*. A clamp F is apertured at 28 (see Figure 5) through which the tube 19 is telescoped until the wick E is forced up against the shoulder 17*d*. This clamp has a pair of downwardly-extending and confronting spring claws 29 for gripping diametrically-opposed sides of the tube 19 to retain the wick up against the shoulder.

The clamp F has arms 30 that extend in opposite directions so as to straddle across the rim 10*a* for holding the cap C, pump unit D, wick E and tube 19 in raised position (see Figure 2). The ends 30*a* of these arms are curved downwardly for engaging over the rim 10*a*, thus retaining the several parts in raised position. The arms 30 are dimensioned for movement downwardly through the mouth 10 of the container when the cap C is threaded onto the container A (see Figure 1). The upper end 24*a* of the wick is positioned underneath the depending marginal flange 11 of the cap so as to confine this end of the wick under the cap (see Figure 2). The tube 19 is sufficiently long to extend into the deodorant when the part are supported in raised position.

Having thus described the various parts of my dispenser, the use and operation thereof is summarized briefly as follows:

Assuming that a considerable concentration of obnoxious odors prevails in a room and the cap C is threaded onto the container, a person can grasp the dispenser in the manner illustrated in Figure 1; and by actuating the plunger 18 of the pumping unit, a spray *b* of finely-divided deodorant can be discharged rapidly into the atmosphere for killing the odors.

In order to combat normal odors, the cap C is unscrewed and moved into raised position above the mouth 10 of the container. The turned-down ends 30*a* of the clamp F are engaged over the rim 10*a* so as to support the cap C, pump unit D and wick E above the container (see Figure 2). Evaporation of deodorant from the upper section 24 of the wick will kill a normal amount of odors.

However, with the parts arranged above the container, as in Figure 2, a person can operate the plunger 18 to deliver an additional amount of deodorant into the atmosphere to kill a high concentration of odors, and then leave the parts raised so as to kill a normal amount of odor by allowing evaporation of deodorant from the exposed wick.

I claim:

1. In a dispenser for deodorant; a container for holding the deodorant, the container having a mouth; a tube inserted into the mouth of the container; a wick having an opening therein through which the tube projects; a clamp anchored to the tube for holding the wick against a shoulder on the tube; the lower section of the wick extending into the deodorant; the upper section of the wick being withdrawable from the container as the tube is withdrawn, whereby said upper section will be exposed to the atmosphere for evaporation of deodorant therefrom.

2. In a dispenser for deodorant; a container for holding the deodorant, the container having a mouth defining a rim; a tube inserted into the mouth of the container; a wick having an opening therein through which the tube projects; a clamp anchored to the tube for holding the wick against a shoulder on the tube; the lower section of the wick extending into the deodorant; the upper section of the wick being withdrawable from the container as the tube is withdrawn, whereby said upper section will be exposed to the atmosphere for evaporation of deodorant therefrom; the clamp having arms engageable over the rim of the container mouth for holding the tube and wick in raised position.

3. In a dispenser for deodorant; a container for holding the deodorant, the container having a mouth defining a rim; a tube inserted into the mouth of the container; a wick having an opening therein through which the tube projects; a clamp anchored to the tube for holding the wick against a shoulder on the tube; the lower section of the wick extending into the deodorant; the upper section of the wick being withdrawable from the container as the tube is withdrawn, whereby said upper section will be exposed to the atmosphere for evaporation of deodorant therefrom; the clamp having arms engageable over the rim of the container mouth for holding the tube and wick in raised position; the ends of the arms being curved downwardly for engagement over said rim.

4. In a dispenser for deodorant; a container for holding the deodorant, the container having a mouth defining a rim; a tube disposed centrally of and inserted into the mouth of the container; a cap anchored to the tube and securable over the mouth of the container; and a wick anchored to the tube and having a lower section extending into the deodorant; the wick having an upper section movable into raised position above the rim of the mouth of the container as the tube is elevated and withdrawn from the mouth, whereby said upper wick sections will be exposed to the atmosphere for evaporation of deodorant therefrom; the cap having a depending marginal flange and the upper end of the wick being confined under said flange.

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