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S. P. BOYDJIEFF
AIR PERFUMING DEVICE

2,614,820

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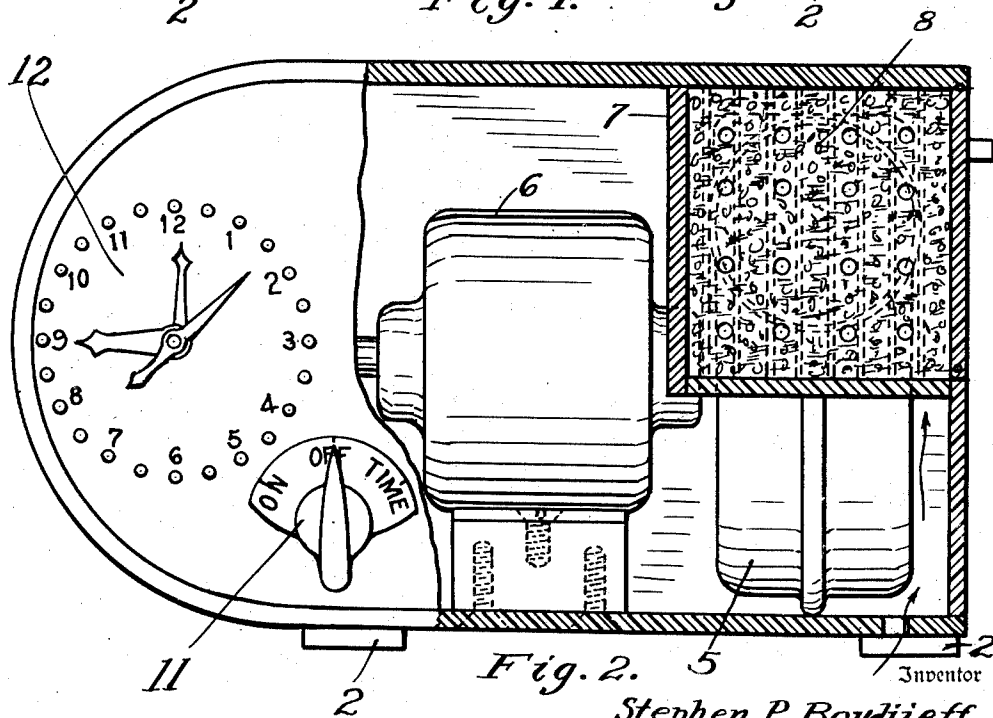
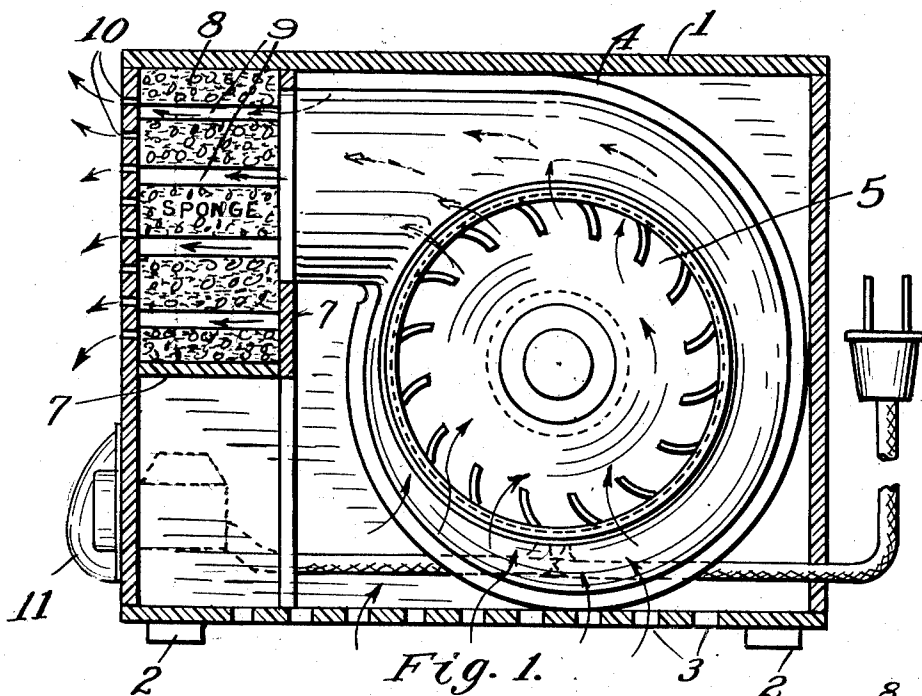


Fig. 2.

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UNITED STATES PATENT OFFICE

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AIR PERFUMING DEVICE

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1 Claim. (Cl. 261—26)

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This invention relates to air-conditioning apparatus; more particularly, to a portable vapor projecting device especially useful for sweetening or perfuming air in a room. However, the device is not limited to such use, and may also be employed for deodorizing or disinfecting a room, or for killing mosquitoes, flies, etc., depending upon the type of material or liquid which is to be vaporized.

An object of the invention is to provide a vaporizing device which is readily portable and which is adapted for automatic operation so that vapor may be projected at controlled time intervals and thereby maintain a predetermined and uniform vaporized condition of the air, and in the case wherein perfume is used, to maintain an odor of a predetermined strength or concentration.

Other objects and advantages of the present invention will become apparent from a study of the specification, taken with the accompanying drawing wherein:

Fig. 1 is a side elevational view in cross-section of the air conditioning or vapor projecting device employing the principles of my invention, and

Fig. 2 is a front elevational view, shown partly broken away, of the structure shown in Fig. 1.

Referring more particularly to the figures, numeral 1 denotes a housing or casing of any suitable material, preferably a vinyl plastic material. Housing 1 is provided with legs or supports 2. The floor or bottom panel of the housing has a plurality of air inlet apertures 3 for allowing air to be drawn inwardly into a blower housing 4. Such housing encloses a blower 5 having fan or impeller blades of well known construction. The blower is driven by an electric motor 6. The outlet of the housing extends into an aperture in a box-like compartment 7.

Inside the compartment 7 is a sponge 8 having a plurality of slots 9 extending therethrough in the general direction of the air being blown from the blower in order to reduce air resistance. The path of the incoming and outgoing air is shown by arrows. The compartment is accessible by means of a door for allowing replacement or refilling of the sponge with vaporizable liquid. The front panel of the housing 1 has a plurality of outlet openings 10 through which the vapor saturated air is blown outwardly into the surrounding atmosphere. The sponge is saturated or partly saturated with liquid perfume if it is desired to give the air a sweetened or fragrant aroma. Or perhaps a liquid deodorant, anti-septic or insect killing material, such as D. D. T.

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may be used if the purpose is to purify the air or kill flies, moths, etc. Or medicinal liquids may be used for charging the air with medicinal vapors to give a patient relief from bronchial, nasal or other respiratory ills. If desired, however, the sponge may be replaced by a block of solid camphor or similar material in case it is desired to use the device for killing moths or other insects. A principal use of the device, however, is for sweetening or perfuming air in a room by diffusing perfume vapor, which not only kills offensive odors, but provides very pleasant aromas.

On the front panel of the housing is provided an electric switch 11, preferably having three positions: "on," "off," and "time." Also, on the front panel is provided an electric clock and timer controlling device, indicated generally by numeral 12, and of any well known construction, such as those used on the so-called "wake up" alarms on radios.

In the operation of the device, when it is desired to start the blower, switch 11 is turned to the "on" position which will effect continuous drive of the motor and continuous blowing of air through the saturated sponge so as to project vaporized or sweetened air into the room. Of course, turning the switch 11 to the "off" position will cause stoppage of the motor. However, when it is desired to run the blower at timed regular intervals such as may be controlled by clock 12, switch 11 is moved to the "time" position.

If desired, the sponge may rest in a reservoir (not shown) partly filled with liquid to be vaporized so as to maintain the sponge in a saturated condition at all times.

Thus it will be seen that I have provided a very compact and portable, as well as efficient, vapor projecting or air-conditioning device suitable for sweetening air in a room by perfumes, or for other uses, such as for deodorizing the air, killing insects, such as moths, flies, etc.

While I have illustrated and described a certain specific embodiment of my invention, it will be apparent that this is by way of illustration only, and that various changes and modifications may be made within the contemplation of my invention and within the scope of the following claim.

I claim:

Apparatus for diffusing perfumed vapor and the like in a room, comprising a casing having bottom, front and rear panels, a plurality of air outlet openings in the front panel and a plu-

rality of air inlet openings in the bottom panel,
 a horizontally mounted blower in the casing for
 drawing air through said inlet openings and dis-
 charging air through said outlet openings, a
 compartment adjacent said panel outlet openings
 and within said casing including a door for gain-
 ing access thereto, a sponge contained within
 said compartment, said sponge having a plu-
 rality of slots each extending in horizontal par-
 allel relationship and along the direction of air
 flow emanating from the outlet of said blower
 and providing intercommunication between said
 blower outlet and said outlet openings in the
 front panel, said sponge being saturable with a
 liquid the vapor of which it is desired to diffuse,
 an electrical system including a motor for driv-
 ing said blower and a timer switch for control-
 ling the operation of said motor for permitting
 operation of said blower at predetermined timed
 intervals so as to make it possible to blow per-
 fumed vapors and the like intermittently and

thereby maintain a predetermined vapor con-
 centration in the surrounding air.

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