July 16, 1940. L. JAROLL 2,208,130

ELECTRIC VAPORIZER

Filed Aug. 26, 1937

Fig. 1.

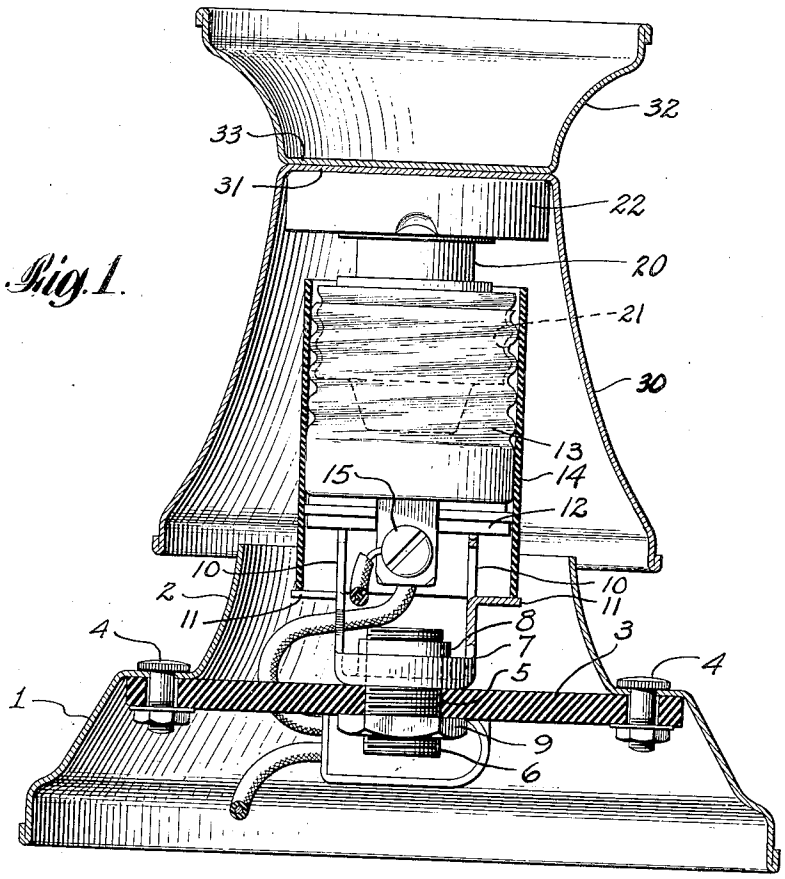
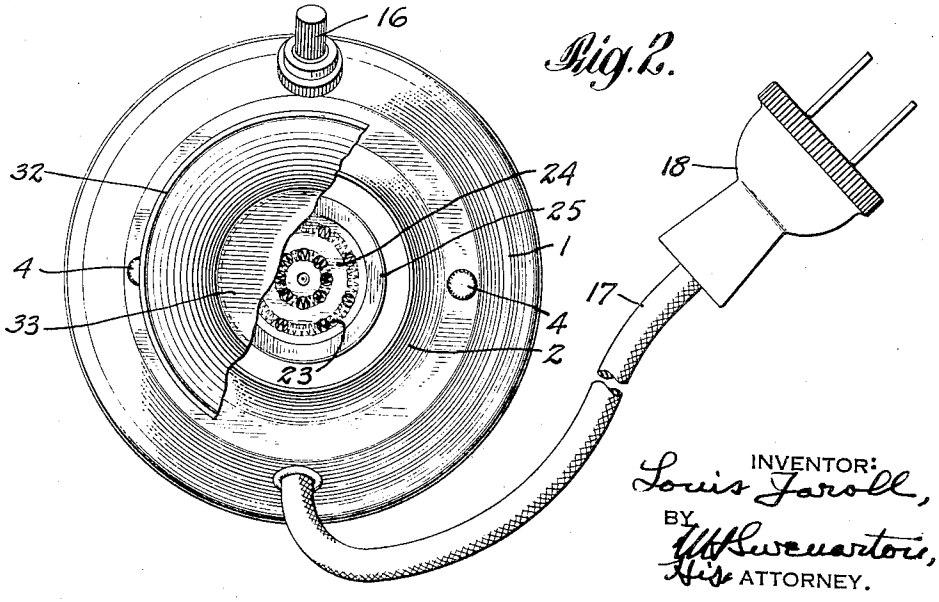


Fig. 2.



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ELECTRIC VAPORIZER

Louis Jaroll, New York, N. Y.

Application August 26, 1937, Serial No. 161,070

1 Claim. (Cl. 219—38)

This invention relates to portable electric vaporizers and has for its principal objects the provision of a simple, cheap and efficient construction which is compact, of attractive appearance and safe to handle when in operation. Other objects of the invention are hereinafter set forth.

In the accompanying drawing in which I have illustrated a preferred embodiment of my invention

Figure 1 is a vertical section, partly in elevation, and

Fig. 2 is a plan view, partly broken away.

Referring to the drawing and the construction shown therein the reference numeral 1 designates a hollow base member preferably formed of sheet metal, the same being contracted at its upper end to form a heat-radiating deflector member 2. A transverse partition 3 of heat insulation material, as for example a phenol-formaldehyde condensation product or porcelain or the like is secured by bolts 4 to said base member. Said partition is provided with a central aperture 5 adapted to receive a union 6. A skeleton frame 7, having a hollow boss 8, is tapped to receive said union 6 whereby the same is supported on said partition 3, the same being rigidly secured thereto by the locking nut 9 which is threaded on the lower end of the union 6.

Said frame 7 is provided with opposing vertical supporting bars 10 from which opposing offset ears 11 are struck-up. Said bars are anchored at their upper ends in the porcelain base 12 of an electric socket member of standard construction, the same having a threaded metal socket 13 at its upper end.

A guard or sleeve 14, of insulation material, such as fiber or cardboard is supported on said ears 11, the same enveloping said socket member and effectively insulating the same. The socket has the usual terminals 15 (only one being shown), to which are secured in the well known manner the circuit leads in one of which is interposed a switch 16 and which leads extend through a tubular cord or covering 17 to a knife or blade plug 18.

A resistance heater element or plug, also of standard construction, such as the type used in electric cigar lighters, is mounted in the socket 13. Said element comprises a body 20 of refractory heat-insulating material having a threaded metal sleeve 21, a protective metal shell 22, laterally surrounding the upper portion of the body 20, and a coil 23 of resistance wire, mounted in a flat spiral groove formed on the top of said body and which is in circuit, through said sleeve 21 and the usual bottom contact screw (not shown), with the terminals 15 of said socket member 12. A disc 24 of mica or like insulation is interposed between said coil and the top flange 25 of the shell 22. Said disc is preferably perforated to admit of the passage of heated air currents from said coil directly to the bottom of the receptacle.

A metal deflector or hood member 30, of a generally truncated cone-like configuration and having a circular top 31 is adapted to be supported by the flange 25 of said shell 22.

A receptacle 32 for volatile liquid has the bottom 33 thereof welded, or otherwise secured, to the top 31 of the deflector 30.

To operate the vaporizer, when assembled and plugged into an electric circuit, the liquid such as perfume, disinfectant or the like is first introduced into the well or receptable 32. The switch 16 is then turned "on" to close the circuit through the heating element. If desired, the device may be equipped with a thermostatic or time switch, but otherwise it is desirable to periodically interrupt the flow of current through the heater element so that the temperature rise will not be excessive yet will be sufficient to continually vaporize the liquid in the receptacle 32. When the liquid has been completely evaporated the switch is turned "off" and the flow of current through the heater element is interrupted.

My improved vaporizer, especially if employed with a thermostatic or like time switch, is ideally adapted for use in homes, institutions, office buildings, for medication, disinfecting or deodorizing and fumigating purposes and especially for effectively disseminating perfumes, incense and the like throughout the atmosphere of a room or other chamber.

Due to the disposition of the heat-radiating deflectors with respect to the heating element and the liquid receptacle, it is possible to effectively utilize the heat from the heating element without danger of the vaporizer becoming too hot to handle when shifting the position of the vaporizer to a different location in the same or a different room or to result in the vaporizer becoming a fire hazard even should the same not be equipped with a thermostatic cut-off switch or time switch.

The construction of my vaporizer is extremely simple and owing to the fact that it utilizes standard electric plugs and sockets, any part that becomes worn out can be readily procured and replaced without necessitating the return of the

device to the manufacturers or to a repair shop.

Various changes from the preferred construction herein illustrated may be made without departing from the spirit of my invention as embraced within the scope of the appended claim.

Having thus described my invention, what I claim and desire to obtain by United States Letters Patent is:

In an electric vaporizer, the combination comprising a base member having a heat-deflecting shield at its upper end and a transverse, centrally perforated intermediate partition of insulation material, a threaded sleeve mounted in said partition, a frame carried by said sleeve, a lock nut for rigidly securing said sleeve to said partition, an electric socket mounted on said frame, an insulation sleeve enveloping said socket, supporting means carried by said frame arranged to engage the bottom of said sleeve when the same is positioned on said socket, a resistance heating-element removably mounted in said socket, a metal receptacle mounted on said resistance heating element, said receptacle having a flared, heat-deflecting shield depending therefrom, an electric circuit interconnecting said heating element and said socket when the two are in cooperative engagement and means for connecting said circuit to a source of electricity.

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