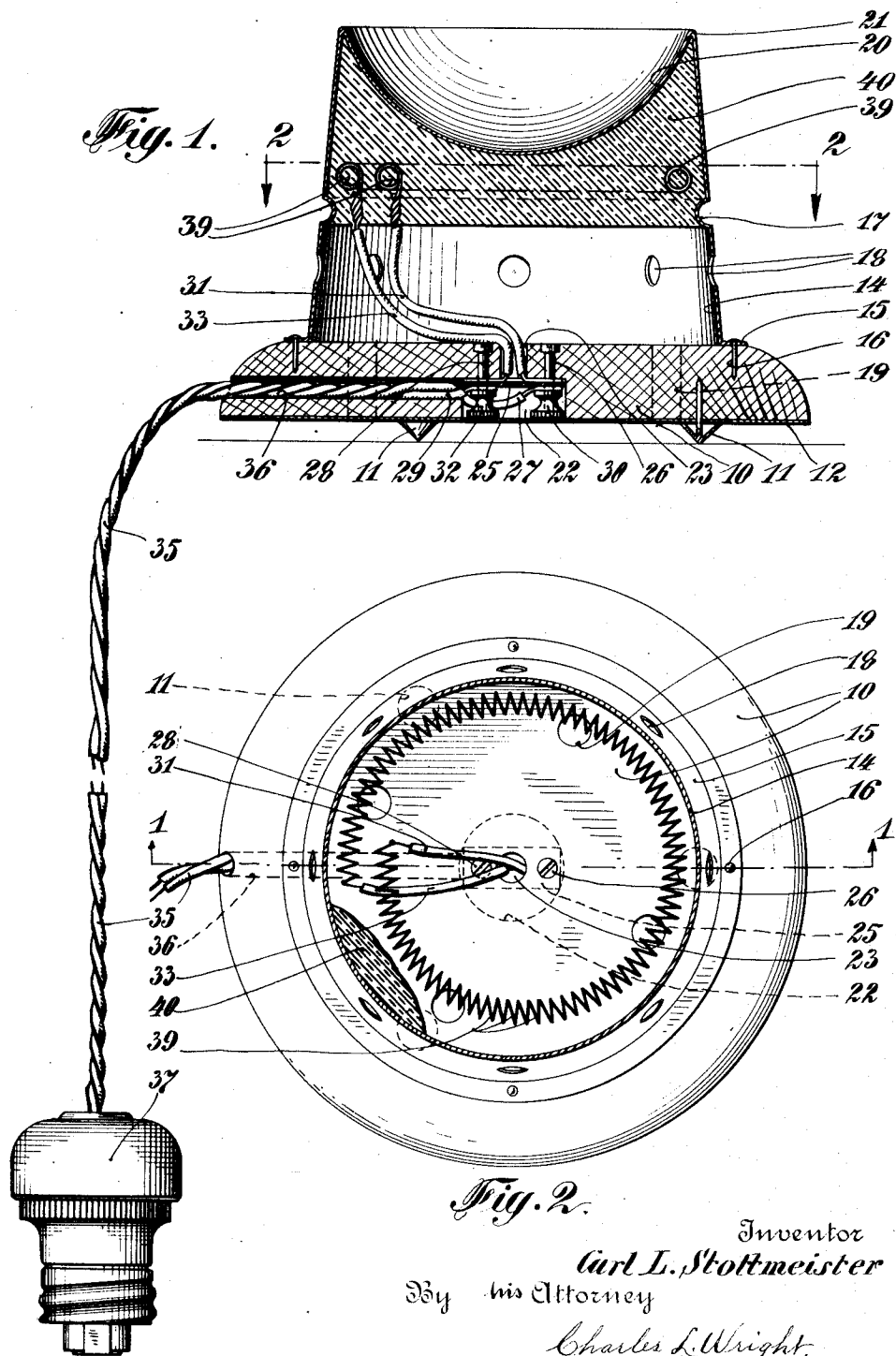


C. L. STOTTMEISTER.
EVAPORIZER.
APPLICATION FILED DEC. 18, 1919.

1,359,000.

Patented Nov. 16, 1920.



UNITED STATES PATENT OFFICE.

CARL L. STOTTMEISTER, OF NEW YORK, N. Y.

EVAPORIZER.

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Specification of Letters Patent. Patented Nov. 16, 1920.

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To all whom it may concern:

Be it known that I, CARL L. STOTTMEISTER, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Evaporizers, of which the following is a specification.

This invention has as its main object to provide an evaporizer, in which various substances, in liquid, powder or solid form are subjected directly to the effects of heat within a receptacle forming an integral part of the heating apparatus, so that the emanations are immediately available and easily accessible.

A further object is to provide a portable electric heater, having a relatively cool base and a cup-like metallic receptacle in its upper body, particularly adapted to atomize liquids and produce aromas, fumes or exhalations from various aromatic medicaments and substances possessing healing and curative properties for diseases of the respiratory organs, in the nose, mouth and throat, such as catarrh, asthma, hay-fever, rose-cold, cold in the head, sore throat, bronchial affections, headaches, etc.

Another object is to provide such devices in forms cheap to construct, economical to operate, and peculiarly convenient to handle and use.

These objects are attained by the novel construction, combination and arrangement of parts hereinafter described and shown in the accompanying drawings, forming a material part of this disclosure, and in which:—

Figure 1 is a vertical sectional view of an apparatus made in accordance with the invention, the section being taken on line 1—1 of Fig. 2.

Fig. 2 is partial plan and transverse sectional view, taken approximately on line 2—2 of Fig. 1, with most of the insulation removed in order to show the construction.

Referring to the drawings in detail, the numeral 10 designates a circular base plate, preferably made of wood or other non-conducting material, the same having a curved upper marginal edge and resting upon feet 11, three being indicated, disposed at equally spaced intervals, and used to assist in securing a circular sheet or disk 12 of paper, felt or the like, forming a cover for the lower surface of the base 10.

A hollow metallic body 14, in the shape of a conic frustum, is formed with an out-turned flange 15 at its larger, lower end, the same resting centrally upon the base 10, to which it is secured by headed pins or nails 16.

Midway in the height of the body 14 is an annular recess 17, formed by impressing, spinning or molding, for a purpose farther on explained.

Formed through the wall of the body 14, below the recess 17, are a plurality of openings 18, the same acting as ventilators for the chamber in the lower part of the body, into which atmospheric air may enter through the openings 19, passing through the base 10.

A concave, cup-like depression 20 surmounts the body, with which it is integrally formed, as best shown in Fig. 1, by pressing or drawing the material so as to form an annular smoothly finished edge 21 parallel with the base 10.

In the lower surface of the base 10 is a central circular cavity 22, a smaller opening 23 passing completely through to the chamber within the body 14.

An insulating strip 25 is held in the bottom of the cavity by binding screws 26 and 28, provided with clamp nuts 30 and 32, normally covered by the disk 12.

These screws engage the insulated wires 27 and 29, twisted into a standard type of cable 35, and passing out through a transverse passage 36 formed in the base 10, eventually leading to a plug 37 of conventional type adapted to engage with a socket so as to connect with an electrical current.

While not shown, it will be apparent that a switch may be interposed in the cable 35 for controlling the circuit independent of the plug, if desired.

Engaged by the binding screws 26 and 28, on the inner side of the insulating strip 25, are other short insulated wires 31 and 33, their opposite ends being in electrical engagement with the corresponding ends of a helically wound heating coil 39, made of wire having a high electrical resistance, as nickel, platinum or nichrome, and arranged in a circle interjacent of the body 14, above the recess 17.

The inner surface of the material at the recess acts in the manner of a bead or internal band, forming a support for the non-conducting material 40 with which, when in

a plastic state the entire inner, upper part of the body is filled, and in which the heating coil 39 is embedded.

In operation, the electrical connections 5 having been made, it will be obvious that the resistance coil 39 will quickly become heated by the passage of current there-through, and due to the diffusing properties of the filler 40, the cup 20 can be rapidly 10 raised to a high temperature and maintained as long as desired.

Thus the filler 40 acts to spread or convey the heat to the wall of the cup and also prevent injury or displacement of the coil, 15 and incidentally, forms a roof for the chamber below it, which is maintained relatively cool due to the circulation of air through the openings 19 and 18 substantially no heat from the coil being transmitted to the 20 base 10.

From the foregoing it will be seen that the cup 20 is suited to receive gums, seeds, barks etc. which may be caused to smolder or slowly incinerate, in the manner of incense, giving off any fragrance, aroma or 25 other volatile properties possessed, the same effects occurring with other substances in lump, granular or powdered form, while liquids and oils become atomized and rise 30 in a warm vapor, soothing and agreeable to inhale.

Having thus described my invention, including the manner of its construction, application and use, what I claim as new and 35 desire to secure by Letters Patent, is:—

1. An evaporizer comprising a non-conducting base, a hollow frustum casing secured thereto, an integral cup formed with said casing at its top, a non-conducting 40 filler in said casing surrounding said cup, said filler having a level surface spaced parallel from said base forming a chamber therebetween, an annular indentation formed in said casing for holding said filler in 45 position, a resistance coil completely em-

bedded in said filler, and electrical connections to said coil.

2. An evaporizer comprising a non-conducting base, a hollow frustum body secured thereto, a cup formed integrally with 50 said body at its top, a non-conducting filler in said body surrounding said cup, a resistance coil completely embedded in said filler when in a plastic state, electrical connections to said coil, means formed in said body for 55 holding said filler in position, and means adapted to cause an air circulation in said body below said filler.

3. A portable evaporizer comprising a non-conducting base having feet, a hollow 60 metallic body fixed on said base, a concave receptacle integral with said body extending into the top thereof, a non-conducting filler in the upper part of said body surrounding said cup, a resistance coil embedded in said 65 filler, means for supporting said filler and coil formed with said body, means formed in said base and body adapted to cause air to circulate in said body below said filler and above said base, and electric connec- 70 tions to said resistance coil.

4. A portable evaporator comprising a non-conducting base having feet, a hollow 75 metallic body fixed on said base, a concave receptacle integral with said body extending into the top thereof, a non-conducting filler secured circumjacent to said receptacle, a heating coil set bodily and entirely in said filler, means for ventilating said body, binding screws in said base, connec- 80 tions engageable with a source of electrical energy clamped by said binding screws, other connections between said binding screws and the terminals of said heating coil, and a cover plate extending over said 85 binding screws below said base.

In testimony whereof I have signed my name to this specification.

CARL L. STOTTMEISTER.