

May 26, 1931.

J. ROBINSON
ELECTRICAL VAPORIZER
Filed May 25, 1927

1,806,646

Fig. 1.

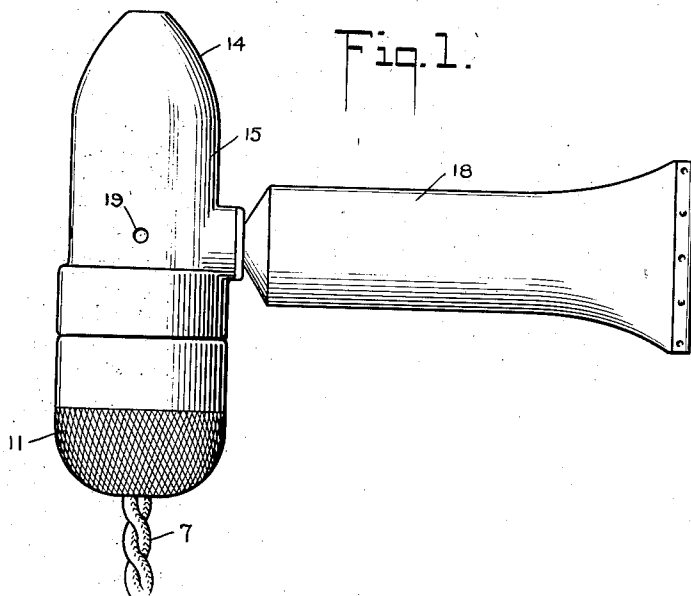


Fig. 2.

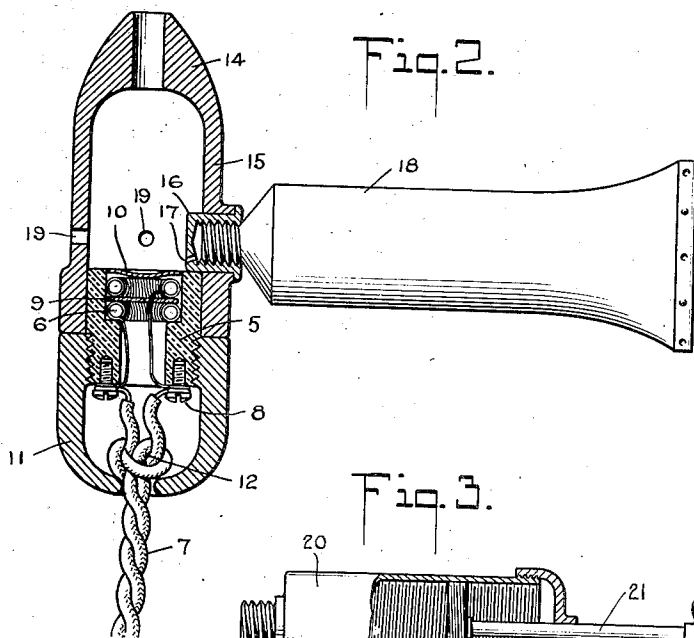
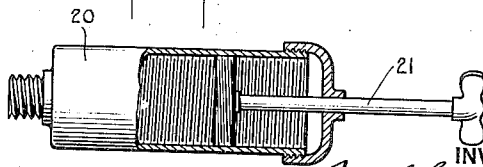


Fig. 3.



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ELECTRICAL VAPORIZER

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My invention relates to electrical vaporizers of the hand type for generating vapors for inhalation, and among the objects is to provide a simple inexpensive device of this character in which provision is made for the heating of only that amount of compound which it is desired to consume with each separate use of the instrument. In this way I avoid the necessity of heating a substantial amount of compound in order to secure the relatively small quantity of hot vapors required for a successful treatment.

My invention is illustrated in the accompanying drawings in which Figure 1 is a side elevation of my improvement,

Figure 2 is a vertical sectional view thereof, and

Figure 3 is a sectional view of a modification of the supply container of my invention.

In carrying out my invention I provide a stove or heating element comprising a perforated base 5 in which is mounted a suitable resistance coil or heating member 6 connected with the electric cord 7 in any desired manner as by means of the terminals 8. The heating element shown is placed in the base 5 in a spiral manner, suitable insulation means, such as a washer 9, being provided to prevent short circuiting. This heating coil is of wire size and kind best suited for the purpose, and may be insulated inside and out against both short circuiting and excessive heating, if desired. A lid or plate 10 of thin material, preferably steel, is pressed into the top of the base 5 sufficiently tight to prevent the compound to be heated from seeping down into the coil 6. The preferred construction and arrangement of these elements 5, 6, and 10 is such as will produce a "hot spot" type of heater, by which is meant a heater that will quickly present a hot spot on which to vaporize the compounds used. This type of heater is sometimes referred to as the concentrated type. A suitable protecting cap 11 is screwed onto the lower end of the base 5, and through the medium of the knot 12 serves to anchor the chord 7 in such a manner that any strain thereon will not injure the terminal connections 8. The nozzle 14,

through which the vapors generated are drawn on inhalation, is provided with an elongated hollow shank or member 15, round in cross section, which fits snugly or removably over the base 5, as shown best in Figure 2. A metallic bushing 16 is rigidly mounted in a wall of the chamber 15 and about even with the top of the base 5. The inner end of the bushing is closed except for a small pin hole 17 which lies close to the top of the lid of plate 10 and is formed in the bushing at an angle pointing downwardly towards the plate. Into the bushing I screw a pliable tube 18 of conventional or other suitable design containing the compound which it is desired to vaporize. In Figure 3 I show a modification of this container, consisting of a cylinder 20, in which the compound is placed, and a suitable piston or plunger 21 for forcing the compound out of the cylinder. In the case of the tube 18 the means for forcing the compound out of it is, of course, the pliable walls of the tube which yield through pressure.

In operation the electric current is turned into my invention and when the plate 10 is hot, which requires only a brief time, the nozzle 14 is placed in the nasal passage and the pliable tube 18 is pressed to force the required small amount of the compound through the pin hole 17 onto the stove or plate 10. Upon striking the plate the compound, being in small quantity, vaporizes almost instantly, the vapors being carried upwardly through the nozzle 14 by the drafts of air which enter the vents 19 of the heating chamber or shank 15 on inhalation. Different nozzles 14 carrying tubes 18 having different compounds may be interchangeably used with my invention; it being only necessary to mount on the base 5 the nozzle that is attached to the tube containing the compound which it is desired to use.

The various parts of my invention may, of course, be made of any suitable material, but for the parts 5, 11, and 14 it is advisable to use material of good heat resisting qualities. Inasmuch as the stove or heating element, comprising the parts 5, 6 and 10, is preferably such as to concentrate the heat to the

point desired, and the instrument is used only for a brief period, overheating of the cap 11 or cap 18 (used also as handles) has not been experienced, but some may desire to insert a ring of asbestos in the bottom of the shank 14 and in contact with the base 5 as a precaution against overheating. The chamber 15 is of course heated by the heating element 6, thus keeping the vapors hot on their way up through the chamber, and this heating may be increased by using an elongated heating element such as shown in my U. S. Patent No. 1,775,947 for improvements in electric vaporizers.

What I claim is:

1. A device for generating vapors for inhalation, comprising in combination, a nozzle through which the vapors pass, said nozzle being provided with a chamber, an electric heating element extending into said chamber, a container having communication with said chamber and containing a compound, and means for delivering from the container to said chamber and into contact with said heating element a predetermined amount of said compound, said chamber being provided with vents through which drafts of air enter to carry the vapors of said compound upwardly through said nozzle on inhalation.
2. A device for generating vapors for inhalation, comprising in combination, a base, an electric heating element mounted in said base approximately flush with the upper end of the latter, an electric cord, means securely anchoring said cord to said base in operative relation to said heating element, a hollow member terminating at one end in a nozzle and at the other end in a seat for receiving said base, a container attached to the wall of said member and adapted to deliver a quantity of said compound into the member and into contact with said heating element, and means for controlling the amount of compound so delivered.
3. A vaporizer device comprising a hollow body member having a vaporizing chamber provided with a vapor outlet, a hot plate at the base of said chamber beneath the outlet, and means disposed at the edge of said plate for supplying a substance to be vaporized directly thereonto and permitting free movement of the vapors as generated upwardly to the outlet aforesaid.
4. A vaporizer device comprising a heating unit including a hot plate, a shell snugly and removably fitting over said unit and having a vapor outlet, and a connector piece carried by said shell and arranged at one side of the hot plate, said connector piece being adapted to receive a supply container for a substance to be vaporized.
5. A vaporizer device comprising a hollow body composed of a base section, and a separable top section, the latter providing a vaporizing chamber, a heating unit disposed within the body and connected with the base section, said top section having a vapor outlet at the end of the chamber and a lateral opening at the bottom of the chamber, and means for introducing regulatable quantities of a substance to be vaporized through said lateral opening onto the heating unit.

In testimony whereof I hereunto affix my signature.

JOSEPH ROBINSON.