Aug. 18, 1931. J. ROBINSON 1,819,123

ELECTRICAL VAPORIZER

Original Filed May 26, 1927

Fig. 1.

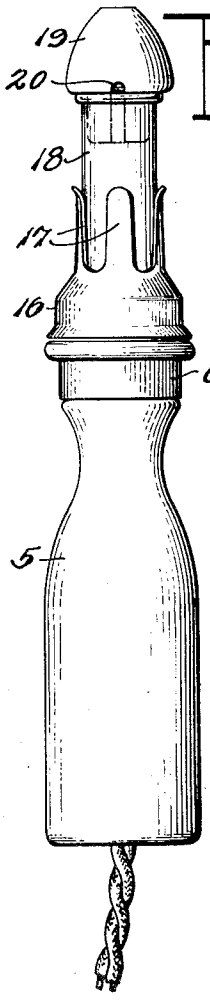


Fig. 2.

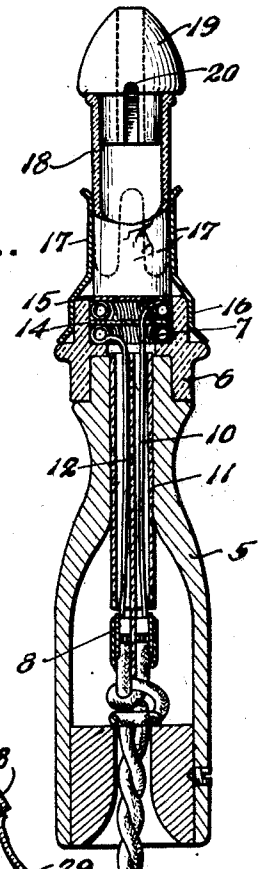
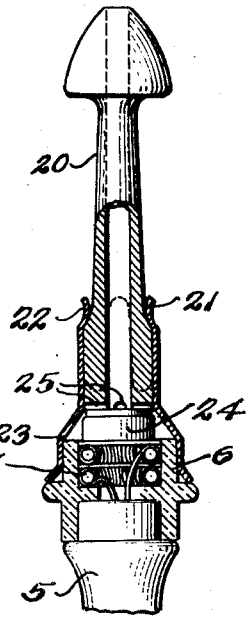


Fig. 3.



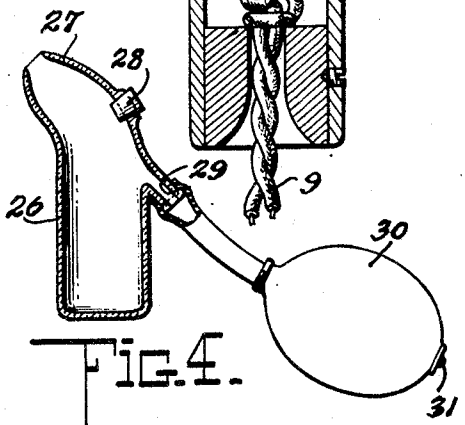


Fig. 4.

INVENTOR
Joseph Robinson

BY Robb & Robb
ATTORNEYS

Patented Aug. 18, 1931 1,819,123

UNITED STATES PATENT OFFICE

JOSEPH ROBINSON, OF NEW YORK, N. Y., ASSIGNOR OF ONE-FOURTH TO ROY M. WOLVIN, OF NEW YORK, N. Y.

ELECTRICAL VAPORIZER

Refiled for application Serial No. 194,437, filed May 26, 1927. This application filed July 30, 1929. Serial No. 382,209.

This application is substituted for abandoned application Ser. No. 194,437, filed May 26th, 1927, and the invention relates to electrical vaporizers of the hand type for generating vapors for the treatment especially of head afflictions, and among the objects is to provide a simple device of this character in which individual vials or containers of substantially commercial form can be interchangeably used with the heating means of my invention, thus providing for the convenient carrying and use of any number of vials or containers each containing a different medicant content. In one embodiment of my invention I employ means for forcing out of the container the vapors generated, this provision being useful in the treatment of colds and other head afflictions in children too young to respond to the method of lifting vapors by inhalation. This provision also well adapts my invention to the treatment of ear troubles in which the application of a warm or hot vapor is effective.

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;

Figure 3 is a modification illustrating a different form of the container and nozzle ordinarily used; and

Figure 4 is an illustration of the container provided with means for forcing exit of the vapors generated.

My invention comprises a suitable elongated handle 5 on the upper end of which is suitably mounted a hollow base 6 made of any desired material but preferably such as may be economically moulded and which has high heat resisting and low heat conducting capacity. I mount in the hollow of the base a suitable coil or heating element 7, the coil illustrated being spiral shaped. The coil is suitably connected as at 8 to the electric cord 9, the ends 10 of the wire forming the coil being run through an insulation sleeve 11 and separated therein by an insulation plate 12. Between the coils of the heating element 7 I provide a suitable insulation means 14, and at the top of the element I provide a thin metallic lid or disc 15 which closes the upper end of the opening in the base 6. This arrangement produces what I term my heating means. The base 6 is round in cross section and over its upper end I slip a clutch or supporting member 16 made of any suitable material, preferably mild steel, and comprising a plurality of vertically extending fingers 17. This supporting member receives and the fingers clutch or grip a suitable vial or container 18, preferably made of glass, in which is mounted a perforated nozzle 19 through which the vapors generated are drawn on inhalation, there being provided in the sides of the nozzle 19 vents 20 through which air passes into the vial to lift the vapors out during the act of inhalation. The nozzle is of course shaped for convenient application to the nasal passages. A plurality of vials of different heights and containing different kinds and quantities of compounds may be conveniently used with my invention, the contents of the particular vial used being heated to the point of vaporization by the heating element or means described, with which means the bottom of the vial 18 contacts.

In Figure 3 is illustrated a modification of my invention consisting in providing the nozzle with an elongated perforated shank 20, having at 21 a shoulder or indentation. In this modified form of my invention the upper ends of the fingers 17 are turned inwardly slightly to embrace the shoulder 21, thus securing the nozzle in position against accidental dislodgment from the supporting member or clutch 23. In this form of my invention I use, in lieu of the vial 18, a small can or container 24, preferably made of light weight metal such as tin, which contains the compound to be vaporized. Normally the container is provided with a suitable lid. The object of this arrangement is to provide for the convenient carrying of the compound and to heat the same in relatively small quantities instead of the substantial amount heated with each use of my invention shown and described in my copending application Serial Number 188,559, filed May 3, 1927 for improvements in electrical vaporizers. When the container 24 is set on the heating

element, see Figure 3, the lid is of course first removed and the shank 20 of the nozzle is set into the clamp or clutch 23, in which position it closes the container. Vents 25 are provided in the bottom of the shank to permit the entrance of currents of air to lift the hot vapors upwardly through the nozzle on inhalation. The vents may of course be formed in the top of the container 24 if preferred.

The container or vial 26 shown in Figure 4 is a modification of the vial shown in Figures 1 and 2 and consists in providing the same with a suitably shaped nozzle 27, having a filler opening closed by a cap or cork 28. In line with the opening in the nozzle 27 I provide on the nozzle a perforated shank 29, to which a suitable air bulb 30 is connected, the bulb being provided with an air intake valve 31 which opens for the intake of air and closes when the air is forced out of the bulb by pressing the latter. This arrangement provides for the effective application of the hot vapors to nasal passages where inhalation therethrough cannot, by reason of the youth of the patient, or for other cause, be had. This construction also provides for the effective application of the hot vapors to afflicted parts of the ear, and it is not herein specifically claimed, but the right is reserved to so claim it in a subsequent application divisional hereof.

What I claim is:

1. In a device of the class described, a heating unit having a handle receiving means at one side and a socket at the other side, a heating element disposed in the socket, a handle cooperating with said handle receiving means, and a gripping attachment mounted on said unit to grippingly hold an object over the heating element.

2. In a device of the class described, a heating unit comprising an annular member formed of heat resistant material with a handle receiving recess at one side and a coil receiving seat at the other side, a heating coil on said seat, a handle disposed in said handle receiving recess, and a holder attachment coacting with said annular member and comprising gripping fingers for holding an object in superposed relation to the heating coil.

3. A vaporizer appliance of the class described comprising a heating unit composed of a ring-like member formed with a coil receiving recess, a heating coil disposed in said recess, and a holder attachment removably disposed on said ring-like member and having gripping means extending vertically therefrom to embrace an object disposed on said heating coil.

In testimony whereof I affix my signature.

JOSEPH ROBINSON.