

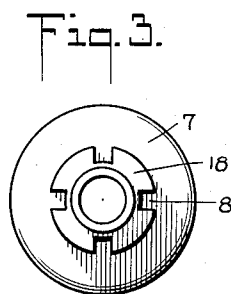
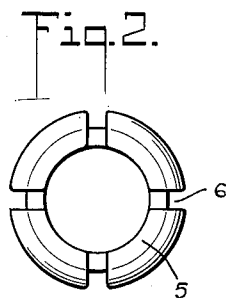
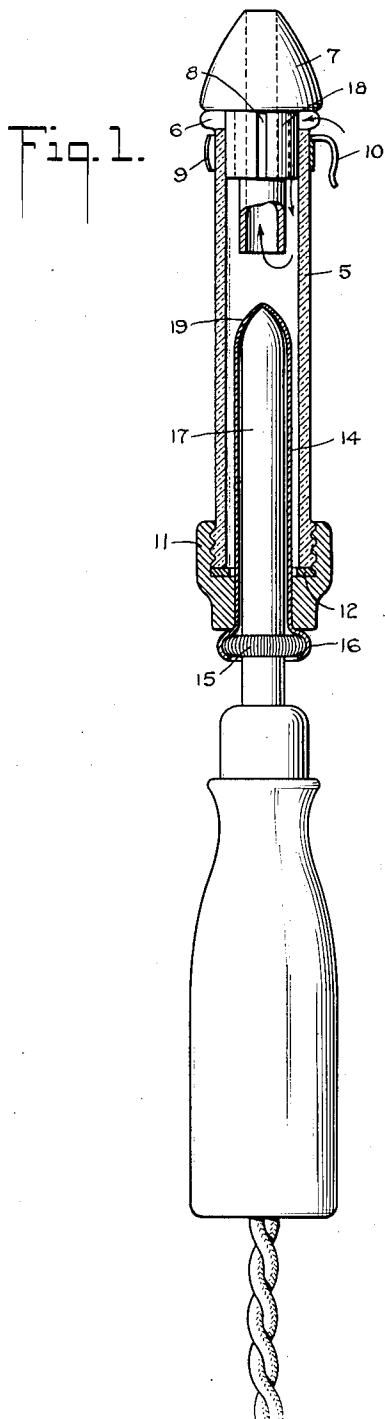
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J. ROBINSON

1,911,468

ELECTRICAL VAPORIZER

Original Filed May 24, 1927



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ELECTRICAL VAPORIZER

Application filed May 24, 1927, Serial No. 193,922. Renewed October 7, 1932.

My invention relates to electrical vaporizers of the hand type for generating vapors for inhalation, and the object is to improve the construction disclosed in my co-pending application, filed May 3, 1927 which has matured into Patent No. 1,775,947, issued September 16, 1930. In that construction the container containing the compound to be heated to generate vapors is rigid with the heating element and cannot be conveniently detached therefrom. The interchangeable use, with a single heating element, of several containers containing different compounds, is therefore not practicable with that construction. With my present improvement this object is carried out in a simple and effective manner, and the nozzle through which the vapors are drawn is improved so as to permit the interchangeable use of different nozzles, as for instance, one for each member of the family. This improvement in the nozzle is accompanied by the formation of vents in the upper end of the container in a simple convenient way which permits the free passage of currents of air into the container and downwardly into contact with the heated compound and thence upwardly through the nozzle carrying with them the hot healing vapors.

In the drawing Figure 1 is a sectional side elevation of my improvement.

Figure 2 is a plan view of the container showing the air vents therein, and

Fig. 3 is a bottom plan view of the nozzle.

My invention comprises a suitable container 5, preferably elongated and made of any desired material such as glass, having at its upper end a plurality of vents 6 formed therein, and carrying at such upper end a suitable nozzle 7 through which the vapors generated are drawn on inhalation. The nozzle is provided with vents 8 which rests in alignment with the vents 6 so that on inhalation currents of air pass through the vents 6 and downwardly along the vents 8 into contact with the compound in the container and thence upwardly through the nozzle carrying with them the hot healing vapors. A suitable snap ring or band 9 having a hook or ring 10, is placed on the container at about the point shown for the purpose of hanging up the container. At its lower end the container 5 is suitably threaded or otherwise arranged so as to be rigidly mounted in a base 11 which is threaded or otherwise arranged to receive the container. Between the lower end of the container and the base I provide a suitable gasket or sealing member 12 to insure a fluid-tight joint between these parts. The base 11 is made of any desired material, preferably such as may be economically moulded and has high heat resisting capacity. Upwardly through this base 7 I pass a thin hollow tube or sleeve 14, the connection between the base and the sleeve being fluid-tight. The lower end of the sleeve receives a resilient retaining ring or collar 15 made preferably of a small coiled spring, the lower end of the sleeve being provided with a seat or other retaining means 16 into which the collar rests. A suitable heating element 17 is provided to heat the compound in the container. This heating element is preferably of the electrical type such as described in my aforesaid patent, but it may of course be of other type and construction. Reference is made to said patent for a detailed description of this heating element.

As indicated in Figure 1, the shank 18 of the nozzle is preferably of a diameter such as will produce a slight press or shove fit in the container 5, and the container is set over or slipped onto the heating element 17 by passing the element into the sleeve 14. The inside diameter of the positioning ring 15 is slightly less than the diameter of the element 17 so that when the element is passed into the sleeve 14 the collar 15 cooperates with the tapered upper end 19 of the sleeve to properly position the container on the heating element. This positioning is desirable for the reason that the inside diameter of the sleeve 14 is preferably somewhat greater than the outside diameter of the element, the object being to permit the use of heating elements of different diameters in a single container, and it is, of course, desirable that the container be vertically positioned on the heating element regardless of which size element is used. The length of

the heating element may be such as desired, and normally it and the container are separate, they being connected only when it is desired to heat the compound. This construction permits of the use of not only different size heating elements but also different size containers each containing a different compound or ingredient.

In operation, the container 5 is filled to the desired extent with a suitable medicament or compound, or substance which it is desired to use; the nozzle 7 is then inserted, and the container is set over the heating element 17 in the position shown in Figure 1.

What I claim is:

1. A device for generating vapors for inhalation, comprising in combination, a hollow container for containing a compound, an electrical heating element complete in itself and adapted to be inserted in said container when it is desired to heat said compound to generate vapors, said element including a tube containing a suitable resistance coil and handle means for manipulating the vaporizer, and means for holding said element out of contact with said compound, said means including a removable sleeve of heat conductive material extending into said container and said compound and connected with the container.

2. A device for generating vapors for inhalation comprising in combination, a container for containing a compound, a base on which said container is mounted, an elongated hollow sleeve rigid with said base and extending into said container into contact with said compound, a heating element adapted to be inserted in said sleeve to a point within said container for heating said compound, and means for supporting the said element from said sleeve.

3. A device for generating vapors for inhalation, comprising in combination, a hollow container for containing a compound, an electric heating element adapted to be inserted in said container when it is desired to heat said compound to generate vapors, a sleeve in said container and surrounding said heating element to hold the element out of contact with said compound, and means carried by said sleeve for positioning the element in said sleeve.

4. A device for generating vapors for inhalation, comprising in combination, a container for containing a compound, a heating element, said container and heating element being readily detachable one from the other, means for retaining said compound in said container when the container is detached from said heating element, said means including a sleeve extending into said container and having a closed upper end adapted to receive a part of said heating element, and a device cooperating with the open end

of said sleeve to position said container on said heating element.

5. A device for generating vapors for inhalation, comprising in combination, a container for receiving a compound, a sleeve extending into said container, a base rigid with the sleeve and to which said container is detachably connected in a fluid-tight manner, a nozzle on said container through which the vapors of said compound pass on inhalation, a self contained heating unit adapted to be inserted in said sleeve when it is desired to heat said compound, and gripping means for holding the unit when inserted into the sleeve.

6. A portable vaporizer of the class described, comprising a medicament container, a carrier therefor, heating means detachably associated therewith and adapted to support the said container, a nozzle member removably associated with one end of said container, said container having spaced vents formed in the upper end thereof, said nozzle member having a reduced shank portion formed with longitudinal vents adapted to cooperate with the vents in said container for permitting the entrance of air into the container for admixing with the medicament vapors to be discharged through the nozzle member, and means for readily positioning and removing the heating means.

In testimony whereof I hereunto affix my signature.

JOSEPH ROBINSON.