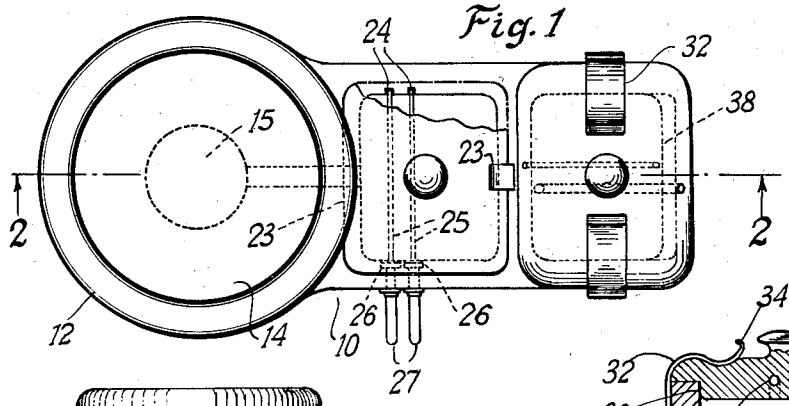
June 26, 1945. S. PARGMAN 2,379,034

AUTOMATIC ELECTRIC VAPORIZER

Filed May 6, 1944

Fig. 1



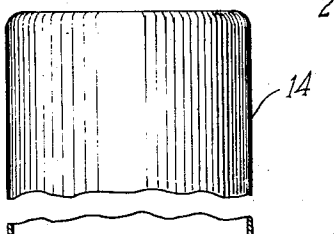


Fig. 2

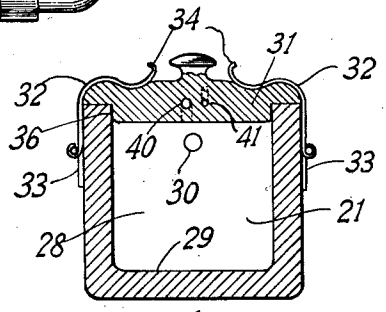


Fig. 5

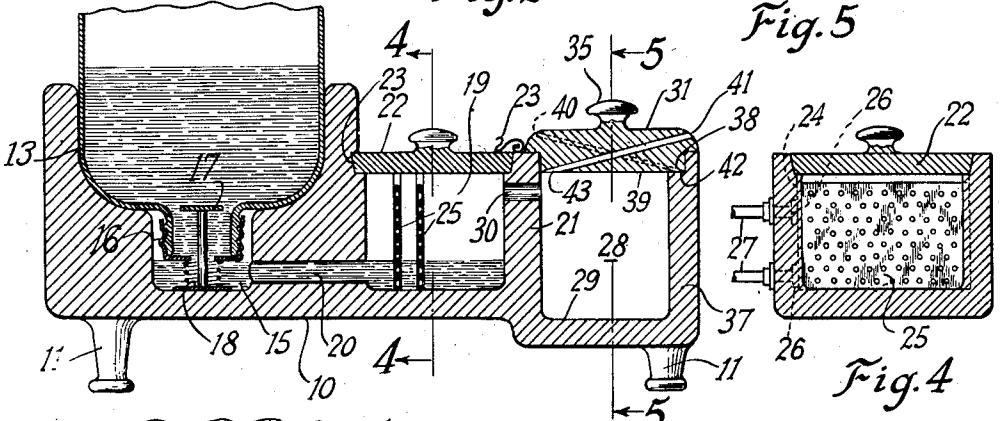


Fig. 4

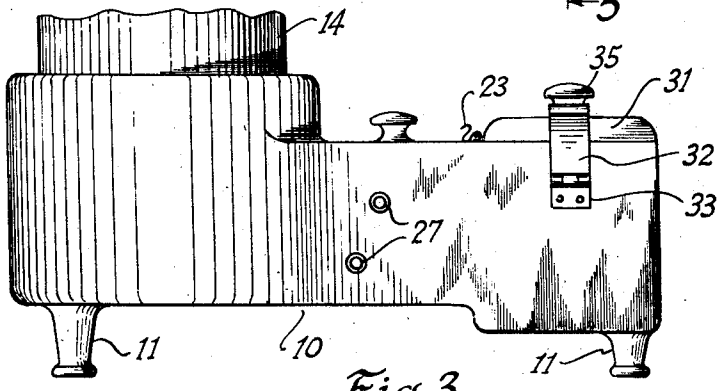


Fig. 3

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AUTOMATIC ELECTRIC VAPORIZER

Sydney Pargman, Paterson, N. J.

Application May 6, 1944, Serial No. 534,510

5 Claims. (Cl. 21—119)

This invention relates to automatic electric vaporisers for the inhalation of a medicated vapor in the treatment of colds or other similar ailments, and aims to provide a novel, efficient, fool-proof and inexpensive device which may be utilized by any one with a minimum of skill or directions.

A further object is the provision of a novel construction and arrangement of the electrodes whereby the usual steam pressure between the electrodes is relieved thereby permitting a greater water contact with the electrodes.

Another object is the provision of a novel cover having two nozzles of different diameters for the medicated steam output, provided with means whereby either outlet may be used as desired to the exclusion of the other.

Still another object is the provision of such a device utilizing a low water level so that quick starting is attained owing to the small volume of water to be heated, and a water supply for automatically supplying fresh water to the same level as the water evaporates, the device converting the water to steam to the last drop.

Other features are that the device comprises a completely closed or sealed unit which may nevertheless be readily cleaned and which may be manufactured in a compact and small unit, which is at the same time self-cleaning.

The above and other objects will become apparent in the description below, in which characters of reference refer to like-numbered parts on the accompanying drawing. It is to be noted that the drawing is intended for the purpose of illustration only, and that it is neither intended nor desired to limit the invention necessarily to the precise details of construction shown, excepting insofar as they may be deemed essential to the invention.

Referring briefly to the drawing,

Fig. 1 is a plan view of the device.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a side elevational view of the device.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 2.

Referring in detail to the drawing, the numeral 10 indicates a housing supported on legs 11 and having at one end 12 a well or recess 13 scooped out to provide a holder and seat for an inverted bottle 14. The center of the recess 13 is cut out to provide a well 15 to receive the neck of the bottle, with the mouth of the bottle held a short distance above the floor of the well 15. A well known type of cap 16 is secured to the bottle and is provided with a spring actuated sealing cap 17 which is automatically opened when the bottle is inverted and pressed against a support by contact of the seat 18 thereof with the floor of the well.

Forward of the recess 13 a chamber 19 is formed, and a channel 20 connects the well 15 therewith. A wall 21 closes the front of the chamber 19, and a removable cover 22 closes the top thereof. A recess is formed in the housing into which one edge of the cover 22 may be inserted, and the opposite edge is yieldably locked down by a hand grip spring 23 anchored on the wall 21. Any other closing means could be provided for this cover, or the cover could in fact be sealed right onto the housing after the electrodes have been put in place, as set forth below, if desired. Moreover, if desired, a gasket could be set under the cover.

In the opposed side walls of the chamber 19, a pair of spaced vertical slots 24 are provided, whereby the electrodes 25 are inserted thereinto by sliding them down from the top. On one of these side walls a contact button or any other convenient electrical contact 26 is secured in the wall and projects into the slot 24, one being provided in each slot, the two being arranged in staggered fashion. Contact posts or terminals 27 are secured to the buttons 26 and project through the housing, their staggered arrangement permitting of the attachment of an electric socket, leading from a source of electricity, thereto.

At the forward end of the housing a chamber 28 is formed, whose floor 29 is at a lower level than the floor of the chamber 19 to provide a receptacle at the bottom thereof in which the medicament, not shown, is placed. A vent 30 at the top extends through the wall 30.

A cover 31 is provided for the chamber 28, and to hold the same securely thereon a pair of opposed spring locking fingers 32 extend over the top of the chamber and are anchored at 33 in the side walls of the housing. Simply lifting the hand grips 34 releases the cover 31 so that it may be lifted by its handle 35. Of course any other suitable means may be provided to releasably lock this cover in place. As shown the cover is rectangular in outline, but it may obviously be circular, elliptical, or of any other shape as may be desired.

The lower edge of the cover 31 is provided with a peripheral right-angle cut-back 36, and the front wall 37 of the housing is provided with a

complementary cut-out to form a shoulder 38 on which one edge of the bottom surface 39 of the cover rests. On the two sides of a vertical longitudinal plane through the cover and the longitudinal center line of the housing, a pair of spaced diagonal channels 40 and 41, extending in opposite directions from the bottom surface 39 to the upper exposed surface of the cover, are provided, the upper extremities of which serve as nozzles. The channel 40 is of smaller diameter than the channel 41. Their lower extremities 42 and 43, respectively, are situated close to the edge of the surface 39 so that when either of their lower extremities rests over the shoulder 38 that channel will be cut off from communication with the chamber 28, as is apparent.

The electrodes 25 are formed of rectangular perforated sheets. When the bottle 14, filled with water, is inverted and set into the recess 13, its valve 17 will open and permit water to flow into the well 15 and chamber 19 to a level equal to that of the distance of the mouth of the bottle above the floor of the well 15. With an electric socket applied to the terminals 27, current will flow between the electrodes through the water therebetween, and this water will be heated rapidly to form steam. The perforations in the electrodes will prevent steam pressure from forming between the electrodes, as above-mentioned. Steam will pass through the vent 30 into the chamber 28, where it will mix with the medicament, not shown, in the bottom of the latter chamber and emit a mixture of steam and medicament through the unobstructed nozzle 41 (Fig. 2). If it is desired to have a finer stream of medicated steam emitted, the cover is reversed so that the nozzle 40 will be in front and the nozzle 41 will have its lower end closed against the shoulder 38. The device can obviously be used continuously without requiring any attention other than to see that there is water in the bottle 14, since the water level can never fall too low, nor can it ever be raised too high.

Obviously, modifications in form and structure may be made without departing from the spirit and scope of the invention.

I claim:

1. A device of the class described comprising in combination a housing having a bottle receiving recess therein open at the top, said recess having a well extending downward therefrom, said well having a floor, said recess being adapted to receive an inverted open bottle containing a liquid the neck thereof in said well and the mouth thereof positioned a distance above said floor, a chamber formed in said housing forward of said recess and having a floor at substantially the same level as said well floor, a channel through said housing between said well and said chamber, said chamber having spaced electrodes therein, a second chamber formed in said housing and having a cover thereon, said cover having a nozzle therein communicating with said second chamber, said housing having a raised vent channel therein between said chambers, said second chamber being adapted to have a medicament deposited therein.

2. A device of the class described comprising a housing a water supply well, means for maintaining constant the level of water in said well, a chamber formed in said housing adjacent said well, said housing having a channel extending between said well and said chamber, said chamber having spaced electrodes therein, a second chamber formed in said housing and having a cover thereon, said cover having a nozzle therein communicating with said second chamber, said housing having a raised vent channel between said chambers, said second chamber being adapted to have a medicament deposited therein.

3. In an electric vaporizer comprising a housing having a chamber therein provided with electrodes, said chamber having water therein adapted to be heated electrically through said electrodes, a second chamber in said housing adapted to contain a medicament, said housing having a raised channel communicating between said chambers, said second chamber having a removable cover thereon, said cover and said chamber having means thereon for seating said cover on said second chamber in two relatively spaced positions with respect to each other, said cover having a pair of spaced diagonal channels extending therethrough, said means on said second chamber closing one of said channels with said cover positioned thereon in one of said two positions and leaving the other of said channels open.

4. A housing having a chamber formed therein open at the top, a cover for said chamber and means for releasably securing said cover thereon, the upper edge of said housing surrounding said chamber having a shoulder therein, said cover having a channel therethrough having the lower end thereof positioned adjacent one edge of the underside of said cover, said cover being seatable on said chamber with said channel extremity seated on said shoulder, said cover also being seatable on said chamber after rotation of said cover through an arc with said channel extremity free of said shoulder.

5. The device set forth in claim 4, said cover having a second channel therethrough having the lower end thereof positioned adjacent another edge of the underside of said cover, said second channel with said cover in said first-named position being clear of said shoulder, said second channel with said cover seated in said position after said rotation seating on said shoulder.

SYDNEY PARGMAN.