Dec. 23, 1924. 1,520,050

J. E. BLOUNT

ELECTRIC HUMIDIFIER AND DEODORIZER

Filed Dec. 1, 1923 2 Sheets-Sheet 1

Fig. 1.

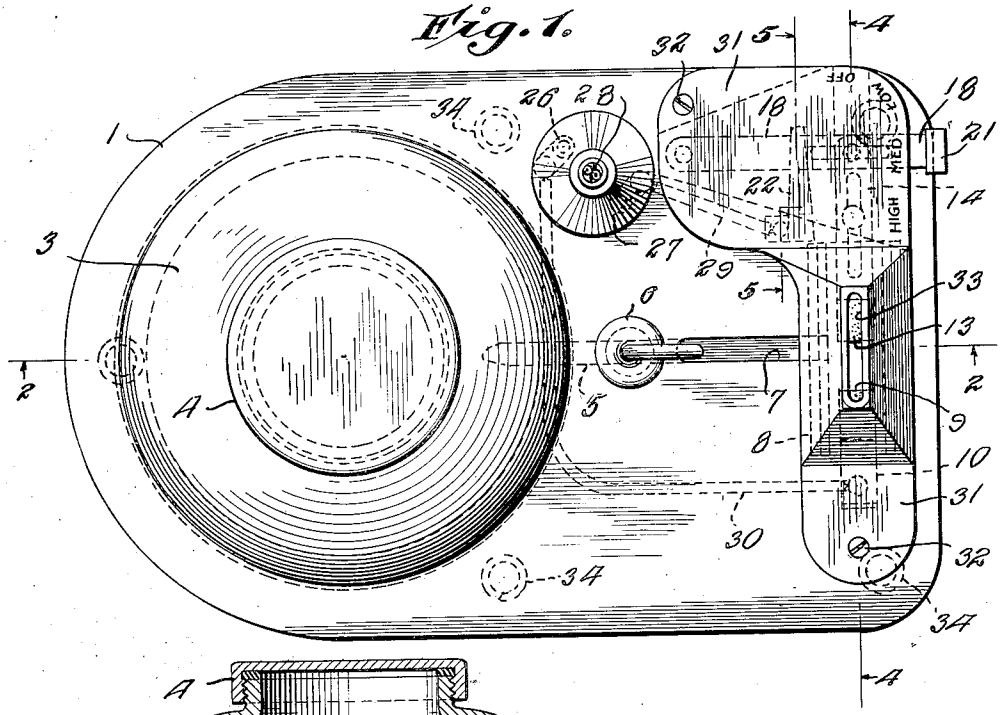
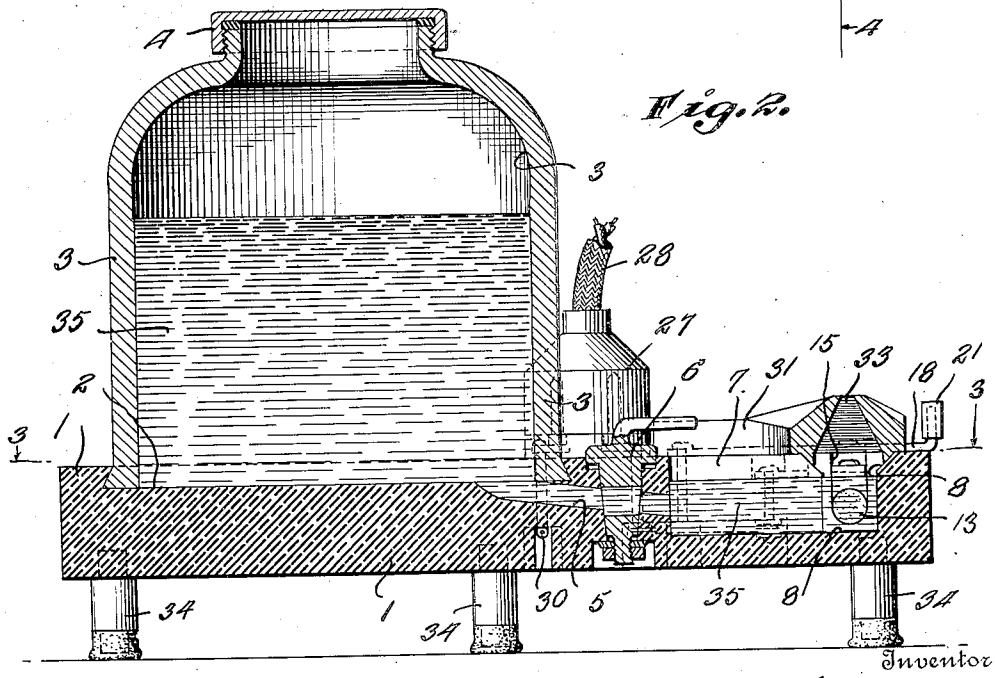


Fig. 2.



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Fig. 3.

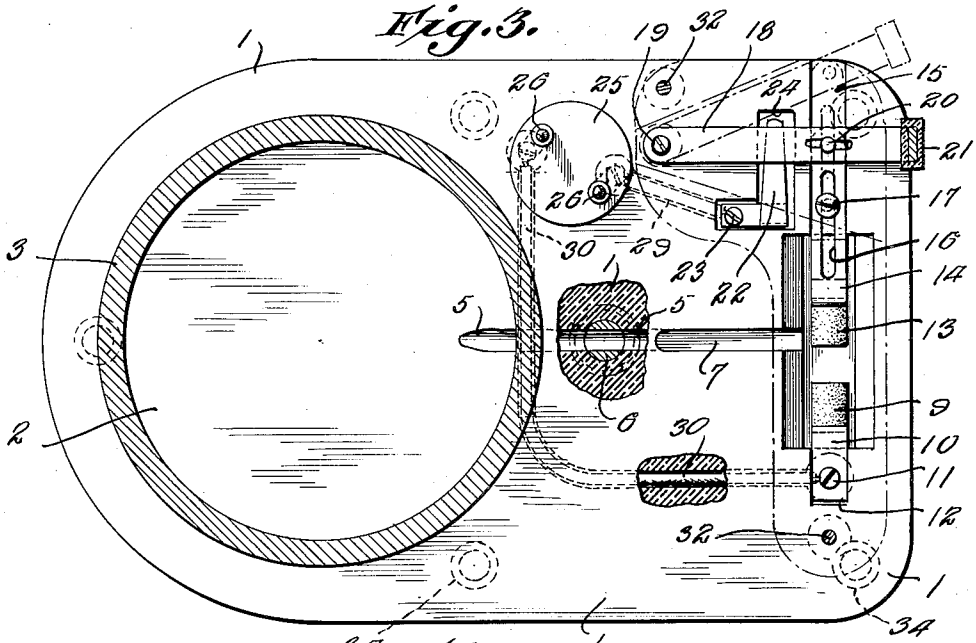
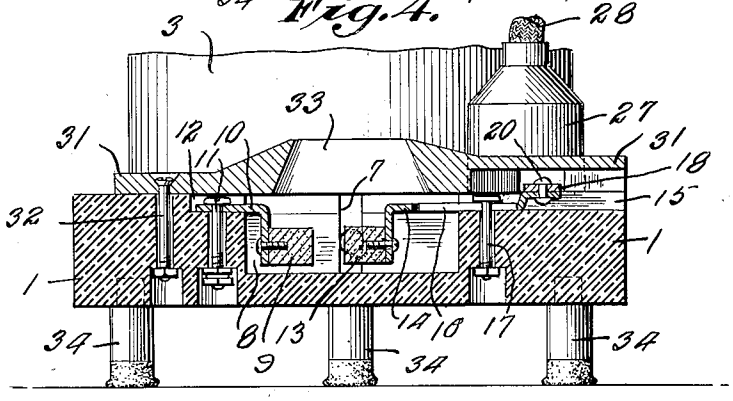


Fig. 4.



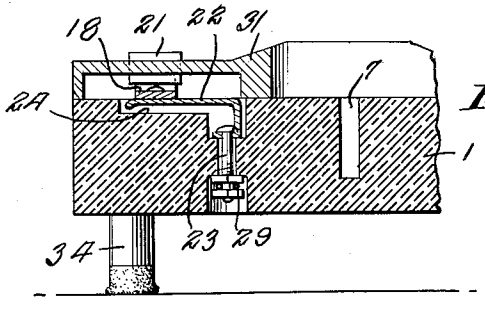


Fig. 5

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UNITED STATES PATENT OFFICE.

JOHN ERNEST BLOUNT, OF LOUISVILLE, KENTUCKY.

ELECTRIC HUMIDIFIER AND DEODORIZER.

Application filed December 1, 1923. Serial No. 678,038.

To all whom it may concern:

Be it known that I, JOHN ERNEST BLOUNT, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Electric Humidifier and Deodorizer, of which the following is a specification.

The object of my invention is to provide an improved electric humidifier and deodorizer which may be used for the purpose of moistening cigars and other tobacco, or any other articles desired; and to provide a device which is adapted to create humidity in any room or place where humidity is desired. It is also an object of my invention to provide a device suitable for use to deodorize and disinfect by creating humidious odors of any desired germicide or insecticide, and which also is adapted for use in sick rooms for the treatment of patients by creating humidious odors that will be comforting and healing to patients in cases of pulmonary and similar diseases. It is the object of my invention to provide a device having many improvements over the structure disclosed in my prior Patent 1,424,979.

I attain these and other objects of my invention by the mechanism illustrated in the accompanying drawing, in which:—

Figure 1 is a top plan view of my invention;

Fig. 2 is a longitudinal vertical section on line 2—2 of Fig. 1;

Fig. 3 is a horizontal section on line 3—3 of Fig. 2;

Fig. 4 is a transverse section on line 4—4 of Fig. 1; and

Fig. 5 is a detail sectional view on line 5—5 of Fig. 1.

Like numerals indicate like parts in each of the several views.

Referring to the accompanying drawings, I provide a base 1 of insulating material having a circular well 2 in which is mounted an inverted cup-shaped fluid reservoir 3 having a suitable air-tight removable cover 4. I provide an outlet passage 5 from well 2 to the boiling compartment 8 which is on a lower plane than the bottom of well 2. I provide a suitable valve 6 mounted in the path of outlet passage 5. I also provide an open channel 7 from passage 5 to the compartment 8, as shown in Figs. 1 and 2.

Referring to Fig. 3, I provide a stationary electrode 9 mounted on holder 10 which is secured by member 11 in groove 12 of the base 1. Opposite to and spaced from electrode 9 I provide an electrode 13 mounted on the movable holder 14 which is slidable in groove 15. Member 14 is provided with a longitudinal slot 16 through which is inserted screw 17 to limit the sliding movement of holder 14. I provide a control lever 18 pivotally connected at 20 to movable electrode holder 14, as shown in Fig. 4. Control lever 18 is pivotally mounted at 19 and is provided with a suitable insulating handle 21.

As shown in Fig. 5, I provide a suitable socket 24 in base 1, in which socket is mounted contact brush 22 secured by binding post 23, contact brush 22 lying in the path of movement of control lever 18.

Referring to Figs. 4 and 3, 28 indicates a suitable source of current leading to plug 27 and socket 25. I provide suitable contact post 26, as shown in Fig. 3, and a lead wire 29 extending from positive post 26 to contact brush binding post 23. 30 designates a lead wire from negative post 26 to binding post 11.

I provide a suitable cover 31 for compartment 8 and covering exposed contacts, said cover being secured in place by screws 32. Cover 31 is provided with a recessed and beveled outlet 33.

I also provide base 1 with legs 34, as shown in Fig. 2, for protecting any object on which the apparatus is placed. The fluid contents of the apparatus is designated 35, and may be either water or a suitable disinfecting fluid.

To operate the device, the valve 6 is rotated to a position to close the outlet 5; cover 4 is removed, and the reservoir 3 is filled with the desired amount of water or disinfecting fluid. The cover is replaced on the reservoir and the valve 6 opened, allowing the water to flow through passages 5 and 7 to the boiling or heating compartment 8. The connecting plug is inserted to connect the apparatus with electric current. Control lever 18 is moved from its "off" to its "on" position, causing it to contact with brush 22. Electric current passing from the positive to the negative electrodes 9 and 13 causes the water or other fluid in chamber 8 to heat and evaporate, creating humidity or humiditious odors, de-

pending on the fluid utilized in the apparatus.

The air pressure on the fluid in chambers 8 and 7 causes it to be maintained at a constant predetermined level by reason of the vacuum in the reservoir above the level of the water in that chamber. Cover 14 must remain on, sealing the reservoir, in order that the device may operate as described.

Electrodes 13 and 9 are so arranged that they cannot come into contact with each other, but electrode 13 may be moved to the desired distance from electrode 9 by means of the control lever 18 to regulate the amount of heat or humidity which the apparatus will produce. The electric current is automatically cut off when the water or other fluid has entirely boiled away.

What I claim is:—

1. In an electric humidifier and deodorizer, the combination of a recessed base, a fluid-containing reservoir mounted in a recessed portion of said base, an air-tight cover removably mounted on the aforesaid reservoir to provide convenient means for filling same, the base having a heating compartment spaced from said reservoir, the base having a passage communicating from the interior of the reservoir to the heating compartment, a manually controlled valve interposed in said passage, and electrodes extending into the well and spaced apart to form a suitable gap.

2. In combination with the apparatus described in claim 1, a manually controlled lever operatively connected with one of the electrodes for adjusting its position relative to the other electrode.

3. In an electric humidifier and deodorizer, the combination of a recessed base, a fluid-containing reservoir mounted in one recessed portion of said base, a removable air-tight cover mounted on said reservoir, the base having a second fluid-containing compartment spaced from the reservoir, a channel communicating between said chambers, a manually operable valve in said chamber, electrodes extending in the water-heating compartment spaced apart to form a suitable gap, a swingable control lever with which one of said electrodes is operatively connected, and means for limiting the movement of the aforesaid lever and electrode.

4. In an electric humidifier and deodorizer, the combination of a recessed base of non-conducting material, a relatively large reservoir mounted in said base, said reservoir having a removable cover, a passage in the base opening out of the interior of said reservoir, a valve in the path of said passage, a heating compartment formed in the base into which said passage from the reservoir discharges, electrodes positioned in said heating compartment, one of said electrodes being stationary, a manually operable lever operatively connecting with one of said electrodes, means for limiting the range of movement of said lever from a position in which the electrode is spaced slightly apart from the stationary electrode to a position sufficiently distant to prevent the passage of electric current, an electric conduit including a brush member positioned in the path of movement of said control lever, a second electric conduit electrically connected with the stationary electrode, and means for electrically connecting each of said conduits with a suitable source of current.

5. In an electric humidifier and deodorizer, the combination of a recessed base of non-conducting material, legs supporting said base in an elevated position, the base having a well, a relatively large reservoir mounted on said well, a removable air-tight cover for the aforesaid reservoir, an outlet passage through the base from said reservoir, a fluid-heating chamber into which said outlet passage opens, a manually operable valve in the path of said passage, electrodes mounted in the heating compartment, one of said electrodes being stationary, the other electrode being adjustable, a control lever operatively connected with the adjustable electrode, a contact brush lying in the path of said control lever, an electric conduit extending from said brush to a connecting plug, a second electric conduit extending from the other electrode to said connecting plug, an apertured cover attached to the base and positioned to protect the electrodes and exposed conduits, substantially as illustrated.

JOHN ERNEST BLOUNT.