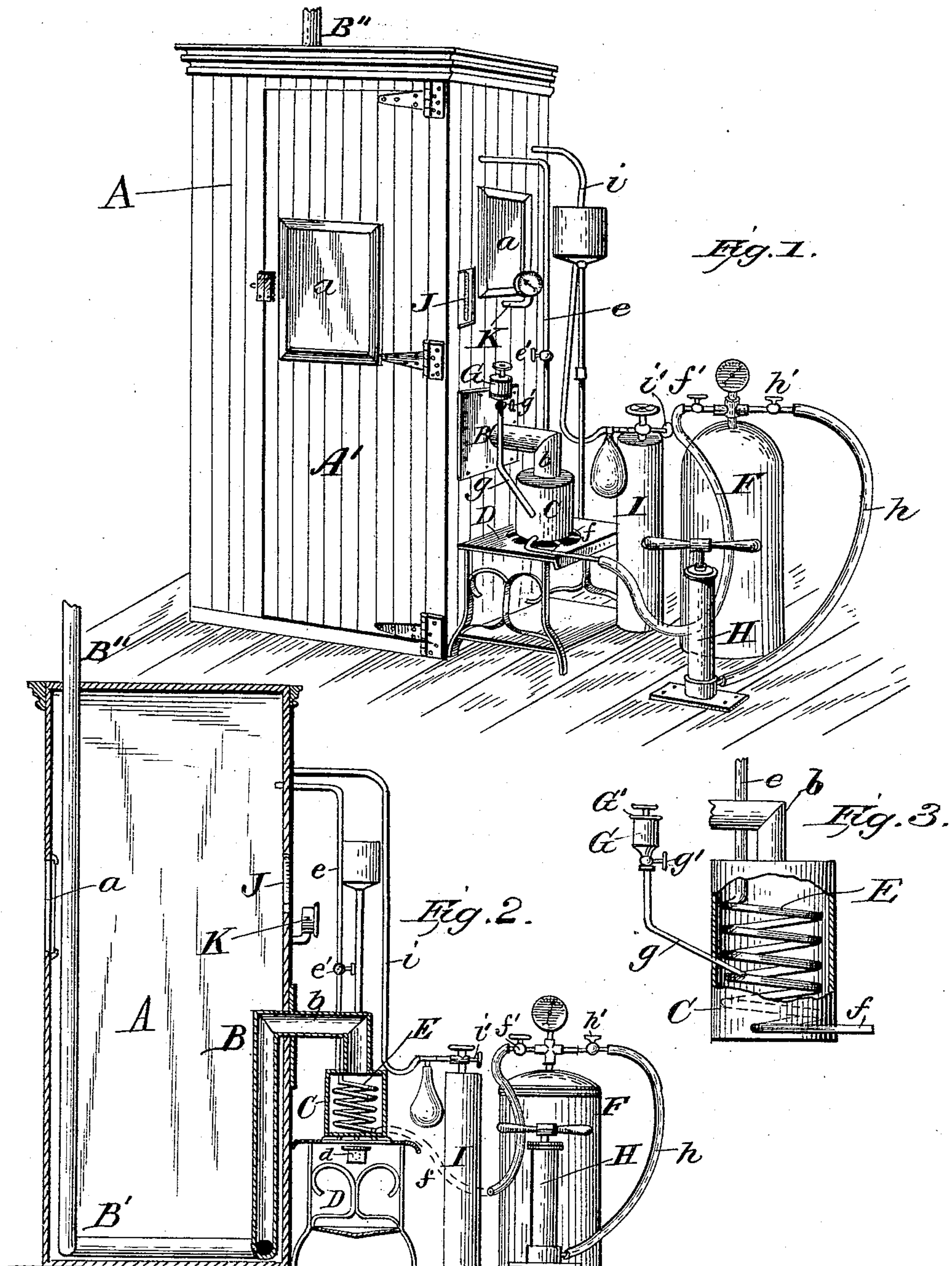


(No Model.)

R. E. LEE.
INHALING CABINET.

No. 529,279.

Patented Nov. 13, 1894.



WITNESSES:
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UNITED STATES PATENT OFFICE,

ROBERT E. LEE, OF BOSWELL, INDIANA.

INHALING-CABINET.

SPECIFICATION forming part of Letters Patent No. 529,279, dated November 13, 1894.

Application filed May 10, 1894. Serial No. 510,707. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. LEE, a citizen of the United States, and a resident of Boswell, in the county of Benton and State of Indiana, have invented certain new and useful Improvements in Apparatus for Administering Medicaments by Inhalation and Absorption; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved apparatus, as the same appears ready for use. Fig. 2 is a sectional view of the cabinet forming part of the same, on a vertical plane through its middle; and Fig. 3 is a detail view of the combined heating and volatilizing device also forming part of my apparatus, with a portion of the exterior drum or casing broken away to show the interior of the volatilizing-coil.

Like letters of reference designate corresponding parts in all the figures.

This invention relates to apparatus for administering medicaments in volatile form to patients by absorption and inhalation, and it consists in the detailed and specific construction and combination of parts of an apparatus of that type as will be hereinafter more fully described and claimed.

On the accompanying drawings, the reference-letter A denotes a cabinet or closet, made of wood or other suitable material, so as to be practically air-tight, and of such size that it will admit a person either in a standing or sitting posture. This cabinet is provided with a tightly-fitting door A', and one or more glass windows, *a a*. On one side, the wall of the cabinet is apertured for the insertion of a heating-pipe or flue B, the outer end of which is connected by an elbow *b* with the heating-drum C, placed over the burner *d* of a gasoline stove D, or any other suitable and convenient form of heating-apparatus. The flue B, after entering the cabinet, is bent in a downward direction to the floor of the same, then carried horizontally along the floor on two or

more sides, as shown at B', and finally bent upright into a vertical position and carried up along the inside wall of the cabinet and out through the top or roof, as shown at B''; thus permitting the heated air and gases from the burner *d* and drum C to escape after they have given off their heat on their passage through the heating-flue B, B', B''. Inside of the heating-drum C, and above the burner *d*, is located a coil of pipe or "worm" E, the uppermost coil of which terminates in a pipe *e*, which passes out through the top of the drum, and, being bent at a right angle at its upper end, enters the wall of the cabinet so as to open up into the interior of the same. To the lowermost coil of the worm E is attached another pipe *f*, which connects it with the compressed-air reservoir F. Stop-cocks, *e'* and *f'*, are provided on pipes *e* and *f* to regulate, or entirely cut off, the flow of air through them; and the worm E is connected, by a third pipe *g*, also provided with a stop-cock *g'*, with a receiver G, having a closely-fitting removable cover G', and adapted to contain suitable medicaments or therapeutic agents. The compressed-air receiver or reservoir F is connected by a pipe *h*, having a valve or stop-cock *h'*, with an air-pump, H, of any approved construction, by means of which the receiver F may be replenished with atmospheric air and its pressure regulated.

Suitably located in proximity to the air-tight cabinet is another receiver I, containing pure oxygen, and connected to the interior of the cabinet by a tube *i*, provided with a valve or stop-cock *i'* by means of which the flow of oxygen from the receiver into the cabinet may be regulated at will.

From the foregoing description, taken in connection with the drawings, the manner of using this apparatus will be readily understood. The burner *d* of the stove or heater having been lighted, the heated air and hot gaseous products of combustion generated within the heating-drum C will pass through the bent flue B, B', B'', so as to thoroughly heat and dry the air within the cabinet, the air-tight door of which is kept closed. The therapeutic agent to be used in the medication of the case about to be treated is then

deposited (preferably in fluid form) in the receiver G, the valve g' of which is so adjusted that the contents of the receiver will trickle slowly through pipe g into the heated coil E, by the heat of which it is vaporized or volatilized. At this point, the volatilized medicament meets the properly regulated current of compressed atmospheric air, which enters the lower end of the worm from the air-receiver F, and is carried with this air up through the upper part of worm E, where the commingled volatilized medicament and atmospheric air is further mixed, dried and heated, through pipe e and into the closed air-tight cabinet, in which the patient under treatment has been placed.

In order to vitalize the air within the cabinet, a current of pure oxygen may be turned on, when desired, by means of the oxygen-receiver I and pipe i ; the amount of oxygen let into the cabinet being regulated by the stop-cock i' . A suitably-constructed thermometer J, and also a pressure-gage K of any approved construction, are connected with the interior of the cabinet, so as to register the exact temperature and air-pressure to which the patient undergoing treatment is subjected, so that the flow of air and amount of heat may be easily and instantly regulated from without to suit the requirements of any given case.

Having thus described my invention, I

claim and desire to secure by Letters Patent of the United States—

1. The herein-described apparatus for administering medicaments by inhalation and absorption, comprising the air-tight cabinet A, in combination with the heater D having the drum C provided with an interior worm E; receiver G connected with said worm; compressed-air receiver F; air-pump H; oxygen-reservoir I; connecting-pipes e, f, g, h and i , provided with suitable regulating-valves; and hot-air flue B, B', B''; when constructed and combined to operate substantially in the manner and for the purpose shown and set forth.

2. In apparatus for administering medicaments by inhalation and absorption, the combination with the air-tight cabinet A and heating-apparatus D, of the worm E; medicine-receiver G connected to the worm by pipe g ; discharge-pipe e ; and compressed-air receiver F connected to the lower end of the worm; substantially as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ROBERT E. LEE.

Witnesses:

I. B. EBERLY,

H. E. WINDMILLER.