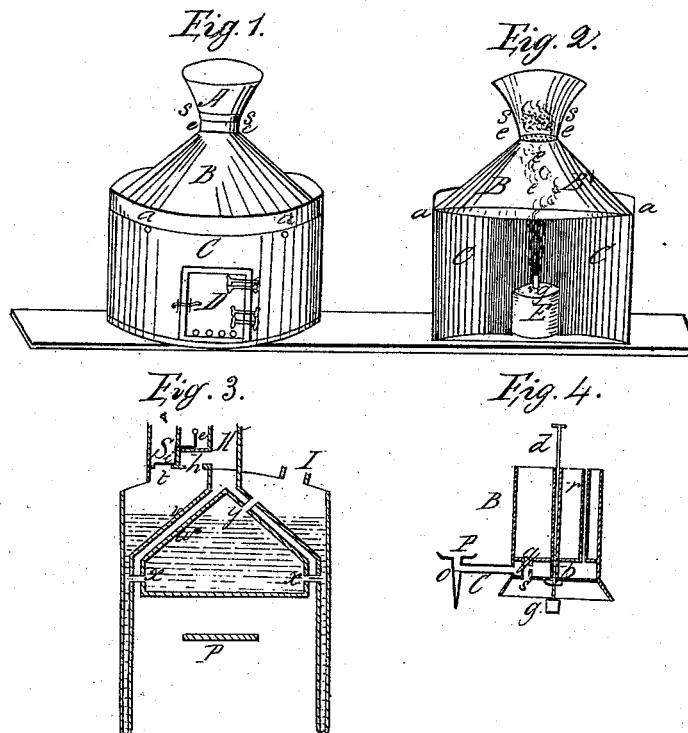


A. C. HAINES.

Vapor Bath.

No. 3,846.

Patented Dec. 4, 1844.



UNITED STATES PATENT OFFICE.

A. C. HAINES, OF PLATTSBURGH, NEW JERSEY.

APPARATUS FOR VAPOR-BATHS.

Specification of Letters Patent No. 3,846, dated December 4, 1844.

To all whom it may concern:

Be it known that I, ALFORD C. HAINES, of Plattsburgh, in the county of Burlington and State of New Jersey, have invented a new and useful apparatus for generating vapor to give compound medicated vapor-baths of alcohol and water; and I do hereby declare the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents the apparatus in perspective. This apparatus may be constructed of tin, brass or copper; except the coil in B, which should be made of copper as it is the best conductor of heat.

A, represents the part which contains the herbs for medicating the bath. It is of a funnel shape, and large enough to hold half a pint.

At S S there is a plate which is soldered in transversely; filled with small holes to let the vapor arise through the herbs for medicating the bath.

B, represents the part of the apparatus which contains the water for vaporization. It is in the shape of a truncated cone. The top surface is 2 inches in diameter. This top is perforated with small holes, which top or plate, prevents the water contained in B, from expanding beyond or over it unless in the state of vapor, as explained in the operation. The base of this conical vessel is eight inches in diameter, or nearly, made so as to fit into C. From the center of the base to the center of the truncated apex, 4 inches. It should contain one quart of water.

The part *a, a*, is a rim raised around the base of B, to prevent any water which may condense on the surface of it, from running off the apparatus. *e, e*, is a rim to hold A on it securely.

The part marked C, is of a cylindrical shape eight inches in diameter and the same or nearly in height. It serves to support the part B.

D, represents the door through which the lamp E, is introduced. 50

Fig. 2 represents a perpendicular section of the apparatus, showing the copper tube or coil C, C, C, two feet long, $\frac{1}{2}$ an inch in diameter, through which the flame from the lamp passes. It likewise shows the lamp E, in its proper place. It is of a circular form, two inches high, and three inches in diameter. *g* is the tube for the wick. It should be two inches long and one quarter of an inch in diameter. 60

Operation of the apparatus explained.—One quart of water is poured into the part B, as shown in the drawing marked 1. The lamp is trimmed with common cotton wick, and 1 or 2 oz. of alcohol sp. gr. 0.835. It is placed under the part B, so as the flame can pass through the copper coil C, C, C, shown in Fig. 2. Owing to the extension surface given to the heat ebullition is soon produced and as the bubbles rise, one on top of another until those on top, or those which were formed first rise to the plate, placed across the apparatus at *i, e*, where they are bursted and the vapor rises through the second plate S, S, to the herbs contained in it. 75

This apparatus is placed under the chair in which the patient is seated, surrounded with a blanket, or quilt.

What I claim is— 80

The mode herein described of constructing my vapor apparatus, that is to say, the water vessel or boiler having a top perforated with numerous small holes, and passing through it a copper coil, and combining with the same the vessel with a perforated bottom for holding the herbs for medicating the bath, the whole being constructed, and operating substantially as described. 85

ALFORD C. HAINES.

Witnesses:

THOMAS TAYLOR,
THOS. A. LAZELER.